From the Outskirts to Downtown:
Taxes, Land Use & Value in 3 Southern Tier Communities

A virtual presentation by
Joe Minicozzi AICP | Urban3
October 29, 2020 at 6 PM

Hosted by
Workforce Housing Coalition of the Greater Seacoast
Regional Economic Development Center
Nashua Regional Planning Commission

NHHFA.org/events
Our thanks to all the communities that supported this study.
Case Study: Economic MRI®

Asheville, North Carolina
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.”
In God we trust; everyone else, bring data.

Mayor Michael Bloomberg
Asheville’s de facto motto was:

“That will never work here - don’t even try.”
Asheville CBD Taxable Value

- 1991: $104M
- 2000: $350M
- 2007: $552M
- 2010: $665M
- 2013: $648M

The graph shows a notable renovation period between 2000 and 2007.
DON’T TRUST THIS GROUP OF LYING POLITICIANS!

The great river grab has begun! Don’t be fooled by these charlatans!

This corrupt group needs to resign along with their AARRC river committee.

Help us fight! AshevilleRiverGate.com
What is a City?
What is a City?
Incorporate (inˈkôrəˌrät)
VERB
Constitute (a company, city, or other organization) as a legal corporation.

Source: Oxford Dictionary
“The United States is the largest corporation in the world.”

Joe Biden
United States Vice President
Late Show: 12/6/2016
Life is a game.  
Money is how we keep score.  

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

-Ted Turner
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 of over 3500% in 15 years

The lot is less than 1/5 acre
Asheville Walmart

$20,000,000 Tax Value

Downtown

$11,000,000 Tax Value
<table>
<thead>
<tr>
<th>Property</th>
<th>Tax Value</th>
<th>Land Consumed (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asheville Walmart</td>
<td>$20,000,000</td>
<td>34</td>
</tr>
<tr>
<td>Downtown</td>
<td>$11,000,000</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Charles Terrell, CMI
Walmart
Director of Property Tax

International Association of Assessing Officers
80th International Conference
Sacramento, CA
August 26, 2014
Walmart = House Cat
Scary Math
How do you compare cars?

- **Toyota Prius**: 571 miles per tank
- **Ford F150 Lariat LTD**: 648 miles per tank
- **Rolls-Royce Phantom Drophead**: 380 miles per tank
- **1955 BMW Isetta**: 245 miles per tank
- **Bugatti Veyron SS**: 390 miles per tank
How do you compare cars?

1. Ford F150 Lariat LTD
   648 miles per tank

2. Toyota Prius
   571 miles per tank

3. Bugatti Veyron SS
   390 miles per tank

4. Rolls-Royce Phantom Drophead
   380 miles per tank

5. 1955 BMW Isetta
   245 miles per tank
How do you compare cars?

- **Toyota Prius**
  - 51/48 mpg

- **Bugatti Veyron SS**
  - 8/14 mpg

- **Rolls-Royce Phantom Drophead**
  - 11/18 mpg

- **Ford F150 Lariat LTD**
  - 13/18 mpg

- **1955 BMW Isetta**
  - 50/70 mpg
How do you compare cars?

1. 1955 BMW Isetta
   50/70 mpg

2. Toyota Prius
   51/48 mpg

3. Ford F150 Lariat LTD
   13/18 mpg

4. Rolls-Royce Phantom Drophead
   11/18 mpg

5. Bugatti Veyron SS
   8/14 mpg
County Property Taxes/Acre

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

- Residential
- Commercial
- Mixed-Use

- County S-F: $1.00
- City S-F: $5.50
- Walmart: $6.70
- Mall or strip: $9.30
- Mixed-Use (2 Story): $47.80
- Mixed-Use (3 Story): $95.00
- Mixed-Use (6 Story): $274.00
Fiber architecture of the brain.
Measured from diffusion spectral imaging (DSI).

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

- up-down
- left-right
- anterior-posterior
Economic MRI™

Value Productivity
Hennepin County, MN
Case Study: Economic MRI®
2016

Asheville,
North Carolina
Biltmore Estate

Taxable Value per Acre
Buncombe County, NC

Value Per Acre ($)
- Not Taxable
- < 170,000
- 170,001 - 420,000
- 420,001 - 760,000
- 760,001 - 1.2M
- 1.2M - 2M
- 2M - 3.5M
- 3.5M - 6.2M
- 6.2M - 12M
- 12M - 20M
- > 20M
WELL
ISN'T THAT SPATIAL
Case Study: Economic MRI®
2020

New Hampshire
New Hampshire Property Taxes

For Dummies

Market Value \times \text{Taxable Value} = \text{Tax Bill}

This is how NC’s system works.
New Hampshire Property Taxes

FOR DUMMIES

Assessed Value - Exemptions = Taxable Value

Local Tax Rate \( \times \) Taxable Value = Tax Bill

\( \frac{(\text{Needed Budget} - \text{Non-property tax revenue})}{\text{City Assessed Value}} \)

This is how NH’s system works.

*The city tax rate is established by the State.*
New Hampshire Property Taxes for Dummies

Assessed Value = $600k

- Commercial: 2.332%
- Residential: 2.332%
New Hampshire Property Taxes

For Dummies

Assessed Value = $600k

Dover Tax Rate

Commercial

$13,992

Residential

$13,992
New Hampshire Property Taxes

FOR DUMMIES

Assessed Value = $600k

Commercial

Residential

Strafford County Tax Rate

0.13%

0.13%
New Hampshire Property Taxes

**FOR DUMMIES**

Assessed Value = $600k

Strafford County Tax Rate

- Commercial: $780
- Residential: $780
Value Per Acre
New Hampshire

Missing Data Accounts for 5.25% of Total Land Area

Source: New Hampshire Department of Revenue Administration 2019
Missing Data: the property is there and paying taxes but isn’t mapped. Significantly rural and undeveloped.

Source: New Hampshire Department of Revenue Administration 2019

Missing Data Accounts for 5.25% of Total Land Area
Value Per Acre
New Hampshire

Source: New Hampshire Department of Revenue Administration 2019
Taxable Area
New Hampshire

Total Area

78% Taxable
22% Non Taxable

Source: New Hampshire Department of Revenue Administration 2019
Case Study: Economic MRI®

NH Sample

Upper Valley
- Hanover
- Lebanon
- Claremont

Southwest Region
- Keene
- Peterborough

Seacoast
- Laconia
- Concord
- Rochester
- Dover
- Portsmouth
- Exeter
- Manchester
- Pelham
- Hudson
- Nashua

Central Corridor
- Berlin

Southern Tier
Case Study: Economic MRI®

Southern Tier

Manchester
Pelham
Hudson
Nashua
Case Study: Economic MRI®
2020

Nashua
Value Per Acre
Nashua

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
New Hampshire

Area
- 90%
- 10%

Value
- 75%
- 25%

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
Nashua

Area
- City: 3%
- County: 97%

Value
- City: 18%
- County: 82%

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
Downtown Nashua

Area
- 0.7%
- 99.3%

Value
- 2.5%
- 97.5%

Source: New Hampshire Department of Revenue Administration 2019
Total Area

20% Nontaxable
80% Taxable

Source: New Hampshire Department of Revenue Administration 2019
Land Use Types

Local samples of buildings and development types
Nashua Examples
Land Use Productivity

Single-family
Avg. VPA: $0.55 M

Avg. VPA: $539,622
Source: New Hampshire Department of Revenue Administration 2019
Nashua Examples

Land Use Productivity

Single-family
Avg. VPA: $0.55 M

Multi-family
Avg. VPA: $1.7 M

Avg. VPA: $539,622

Source: New Hampshire Department of Revenue Administration 2019
Avg. VPA: $539,622
Source: New Hampshire Department of Revenue Administration 2019

Single-family
Avg. VPA: $0.55 M

Multi-family
Avg. VPA: $1.7 M

Commercial
VPA: $1.3 M

Source: New Hampshire Department of Revenue Administration 2019
Nashua Examples
Land Use Productivity

Avg. VPA: $539,622
Source: New Hampshire Department of Revenue Administration 2019

Single-family
Avg. VPA: $0.55 M

Multi-family
Avg. VPA: $1.7 M

Commercial
VPA: $1.3 M

Mixed-use
VPA: $10 M

Avg. VPA: $539,622

Source: New Hampshire Department of Revenue Administration 2019
Nashua Examples
Land Use Productivity

- Single-family
  Avg. VPA: $0.55 M

- Multi-family
  Avg. VPA: $1.7 M

- Mixed-use
  VPA: $10 M

- Commercial
  VPA: $1.3 M

- Peak VPA
  VPA: $12.9 M

Source: New Hampshire Department of Revenue Administration 2019
Nashua Examples
Land Use Productivity

- Single-family
  Avg. VPA: $0.55 M
- Commercial
  Avg. VPA: $1.3 M
- Mixed-use
  VPA: $10 M
- Peak VPA
  VPA: $12.9 M
- Multi-family
  Avg. VPA: $1.7 M
Productivity

Geospatial Analysis
Nashua Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

City Avg. VPA
$0.54 M

*Not Perfectly to Scale
Nashua Profile
Land Use Productivity

Single-family Avg. VPA
$0.55 M

City Avg. VPA
$0.54 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Nashua Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

Commercial VPA
$1.3 M

Single-family Avg. VPA
$0.55 M

City Avg. VPA
$0.54 M

*Not Perfectly to Scale
Mixed-use VPA
$10 M

Multi-family Avg. VPA
$1.75 M

Commercial VPA
$1.3 M

Single-family Avg. VPA
$0.55 M

City Avg. VPA
$0.54 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale*
Peak VPA: $12.9 M
Mixed-use VPA: $10 M
Multi-family Avg. VPA: $1.75 M
Commercial VPA: $1.3 M
Single-family Avg. VPA: $0.55 M
City Avg. VPA: $0.54 M

Source: New Hampshire Department of Revenue Administration 2019
*Not Perfectly to Scale
Value Per Acre Profile
Hillsborough Co, NH

Manchester
$68M Value/Acre

Nashua
$13M Value/Acre

Peterborough
$12M Value/Acre

2019
89,000 pop.
113,000 pop.
6,000 pop.

Source: NH DRA and City of Manchester
Regional Comparison
Manchester, NH

Source: NH DRA and City of Manchester
Case Study: Economic MRI®
2020

Hudson
Value Per Acre
Hillsborough County

Manchester
Nashua
Hudson

Taxable Value per Acre ($)
- 0
- 50,000
- 90,001 - 100,000
- 100,001 - 200,000
- 200,001 - 500,000
- 500,001 - 1,000,000
- 1,000,001 - 1,500,000
- 1,500,001 - 2,000,000
- 2,000,001 - 5,000,000
- 5,000,001 - 10,000,000
- 8,000,001 - 12,000,000
- 12,000,001 - 18,000,000
- 18,000,001 - 28,000,000
- > 28,000,000
- Missing Data

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
Hudson

Area
- City: 3%
- County: 97%

Value
- City: 6%
- County: 94%

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
Downtown Hudson

Area

0.2%
99.8%

DTown
City

Value

0.8%
99.2%

Source: New Hampshire Department of Revenue Administration 2019
Area

- Downtown Hudson: 0.01%
- County: 99.99%

Value

- Downtown Hudson: 0.05%
- County: 99.95%

Source: New Hampshire Department of Revenue Administration 2019

1:7.5

It's here, I promise
Land Use Types

Local samples of buildings and development types
Avg. VPA: $165,357

Source: New Hampshire Department of Revenue Administration 2019
Hudson Examples
Land Use Productivity

Avg. VPA: $0.46 M

Source: New Hampshire Department of Revenue Administration 2019
Hudson Examples
Land Use Productivity

Avg. VPA: $165,357

Source: New Hampshire Department of Revenue Administration 2019

Single-family
Avg. VPA: $0.46 M

Multi-family
Avg. VPA: $1.8 M
Hudson Examples
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019
Hudson Examples
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

<table>
<thead>
<tr>
<th>Land Use</th>
<th>VPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family</td>
<td>$0.46 M</td>
</tr>
<tr>
<td>Multi-family</td>
<td>$1.8 M</td>
</tr>
<tr>
<td>Commercial</td>
<td>$0.66 M</td>
</tr>
<tr>
<td>Mixed-use</td>
<td>$XX</td>
</tr>
</tbody>
</table>

Avg. VPA: $165,357
Avg. VPA: $165,357

Source: New Hampshire Department of Revenue Administration 2019

Hudson Examples
Land Use Productivity

Peak VPA
VPA: $2.69 M

Multi-family
Avg. VPA: $1.8 M

Commercial
VPA: $0.66 M

Single-family
Avg. VPA: $0.46 M

Mixed-use
VPA: $XX

Avg. VPA: $165,357
Hudson Examples
Land Use Productivity

Peak VPA
VPA: $2.69 M

Multi-family
Avg. VPA: $1.8 M

Single-family
Avg. VPA: $0.46 M

Commercial
VPA: $0.66 M

Mixed-use
VPA: $ XX

Hudson

Benson Park

Merrimack River
Productivity

Geospatial Analysis
Hudson Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Hudson Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

City Avg. VPA
$0.17 M

*Not Perfectly to Scale
Hudson Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Hudson Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Multi-family Avg. VPA
$1.8 M

Commercial VPA
$0.66 M

Single-family Avg. VPA
$0.46 M

City Avg. VPA
$0.17 M

Source: New Hampshire Department of Revenue Administration 2019
Mixed-use VPA
$XX M

Multi-family Avg. VPA
$1.8 M

Commercial VPA
$0.66 M

Single-family Avg. VPA
$0.46 M

City Avg. VPA
$0.17 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale*
Peak VPA
$2.6 M

Mixed-use VPA
$XX M

Multi-family Avg. VPA
$1.8 M

Commercial VPA
$0.66 M

Single-family Avg. VPA
$0.46 M

City Avg. VPA
$0.17 M

Source: New Hampshire Department of Revenue Administration 2019 *Not Perfectly to Scale
Case Study: Economic MRI®
2020

Pelham
Value Per Acre
Pelham

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre
Downtown Pelham

Area
99.6%
99.6%
0.4%
0.4%

Value
99.2%
99.2%
0.8%
0.8%

Source: New Hampshire Department of Revenue Administration 2019
Value Per Acre

Downtown Pelham

Area

- 0.01% DTown
- 99.99% County

Value

- 0.03% DTown
- 99.97% County

Source: New Hampshire Department of Revenue Administration 2019
Land Use Types

Local samples of buildings and development types
Avg. VPA: $121,607

Source: New Hampshire Department of Revenue Administration 2019

Pelham Examples
Land Use Productivity
Avg. VPA: $121,607

Source: New Hampshire Department of Revenue Administration 2019

Single-family
Avg. VPA: $0.27 M

Pelham Examples
Land Use Productivity
Pelham Examples
Land Use Productivity

Single-family
Avg. VPA: $0.27 M

Multi-family
Avg. VPA: $0.45 M

Source: New Hampshire Department of Revenue Administration 2019
Avg. VPA: $121,607
Pelham Examples
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

Avg. VPA: $121,607

Single-family
Avg. VPA: $0.27 M

Multi-family
Avg. VPA: $0.45 M

Commercial
VPA: $0.5 M

Avg. VPA: $121,607
Pelham Examples
Land Use Productivity

Mixed-use
VPA: $XX

Single-family
Avg. VPA: $0.27 M

Multi-family
Avg. VPA: $0.45 M

Commercial
VPA: $0.5 M

Avg. VPA: $121,607

Source: New Hampshire Department of Revenue Administration 2019
Avg. VPA: $121,607

Source: New Hampshire Department of Revenue Administration 2019
Pelham Examples
Land Use Productivity

Single-family
Avg. VPA: $0.27 M

Multi-family
Avg. VPA: $0.45 M

Peak VPA
VPA: $3.6 M

Commercial
VPA: $0.5 M

Mixed-use
VPA: $XX
Productivity

Geospatial Analysis
Pelham Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019
*Not Perfectly to Scale
Pelham Profile
Land Use Productivity

City Avg. VPA
$0.12 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Pelham Profile
Land Use Productivity

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale

Single-family Avg. VPA
$0.27 M

City Avg. VPA
$0.12 M
Pelham Profile
Land Use Productivity

- Multi-family Avg. VPA: $0.45 M
- Single-family Avg. VPA: $0.27 M
- City Avg. VPA: $0.12 M

Source: New Hampshire Department of Revenue Administration 2019
Source: New Hampshire Department of Revenue Administration 2019

City Avg. VPA
$0.12 M

Single-family Avg. VPA
$0.27 M

Multi-family Avg. VPA
$0.45 M

Commercial VPA
$0.5 M
Mixed-use VPA
$XX M

Commercial VPA
$0.5 M

Multi-family Avg. VPA
$0.45 M

Single-family Avg. VPA
$0.27 M

City Avg. VPA
$0.12 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale*
Peak VPA $3.6 M

Mixed-use VPA $XX M

Commercial VPA $0.5 M

Multi-family Avg. VPA $0.45 M

Single-family Avg. VPA $0.27 M

City Avg. VPA $0.12 M

Source: New Hampshire Department of Revenue Administration 2019

*Not Perfectly to Scale
Comparing Communities

15 municipalities from across New Hampshire
<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>Peterborough</td>
<td>6,284</td>
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<tr>
<td>Berlin</td>
<td>10,200</td>
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<tr>
<td>Hanover</td>
<td>11,500</td>
</tr>
<tr>
<td>Claremont</td>
<td>12,967</td>
</tr>
<tr>
<td>Lebanon</td>
<td>13,602</td>
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<tr>
<td>Pelham</td>
<td>14,049</td>
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<tr>
<td>Exeter</td>
<td>14,306</td>
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<tr>
<td>Laconia</td>
<td>16,492</td>
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<td>Portsmouth</td>
<td>21,896</td>
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<td>Keene</td>
<td>23,056</td>
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<tr>
<td>Hudson</td>
<td>24,467</td>
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<tr>
<td>Rochester</td>
<td>31,366</td>
</tr>
<tr>
<td>Dover</td>
<td>31,771</td>
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<tr>
<td>Concord</td>
<td>43,412</td>
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<tr>
<td>Nashua</td>
<td>89,246</td>
</tr>
<tr>
<td>Manchester</td>
<td>112,525</td>
</tr>
</tbody>
</table>

Source: New Hampshire Department of Revenue Administration 2019
Comparisons
Total Area (acres)

Source: New Hampshire Department of Revenue Administration 2019
### Comparisons

**Density**

Source: New Hampshire Department of Revenue Administration 2019
Source: New Hampshire Department of Revenue Administration 2019
Source: New Hampshire Department of Revenue Administration 2019
Comparisons
Taxable & Non-Taxable

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Taxable Value</th>
<th>Nontaxable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claremont</td>
<td>100</td>
<td>0</td>
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<tr>
<td>Berlin</td>
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<td>0</td>
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<td>Peterborough</td>
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<td>0</td>
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<tr>
<td>Exeter</td>
<td>100</td>
<td>0</td>
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<td>0</td>
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<td>Nashua</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: New Hampshire Department of Revenue Administration 2019
Comparisons
Total Value

Source: New Hampshire Department of Revenue Administration 2019
Comparisons
Average Value/Acre

Source: New Hampshire Department of Revenue Administration 2019
Comparisons
Downtown to City Ratio

Source: New Hampshire Department of Revenue Administration 2019
County Property Taxes/Acre

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

- Residential
- Commercial
- Mixed-Use

$0

$1.00  $5.50  $6.70  $9.30  $47.80  $95.00  $274.00

County S-F  City S-F  Walmart  Mall or strip  Mixed-Use (2 Story)  Mixed-Use (3 Story)  Mixed-Use (6 Story)
Property Value/Acre

Ratio Difference of New Hampshire Sample Set

- Residential
- Commercial
- Mixed-Use

- City S-F: $684,869
- Commercial Box: $1,167,688
- City M-F: $2,068,112
- Mixed-Use (Average): $8,219,248
- Mixed-Use (Peak Value/Acre): $16,328,957

Joseph Minicozzi, AICP

Property Value/Acre
Peer Clusters

Similar characteristics of places & learning from each other.
### Peer Groups: Southern Tier

**Source:** New Hampshire Department of Revenue Administration 2019

<table>
<thead>
<tr>
<th></th>
<th>Nashua</th>
<th>Hudson</th>
<th>Pelham</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>89,246</td>
<td>24,467</td>
<td>12,967</td>
</tr>
<tr>
<td>DTN. Ratio</td>
<td>1:4</td>
<td>1:4</td>
<td>1:2</td>
</tr>
<tr>
<td>Avg. VPA</td>
<td>$539,622</td>
<td>$165,357</td>
<td>$121,607</td>
</tr>
<tr>
<td>Peak VPA</td>
<td>$12,915,100</td>
<td>$2,690,571</td>
<td>$3,610,967</td>
</tr>
<tr>
<td>Peer Groups</td>
<td>Academic Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------</td>
<td></td>
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<td>Population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11,500</td>
<td>23,056</td>
<td>14,306</td>
<td></td>
</tr>
<tr>
<td>Non Tax %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td>16%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Avg. VPA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,083</td>
<td>$103,944</td>
<td>$197,142</td>
<td></td>
</tr>
<tr>
<td>Peak VPA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$37,827,184</td>
<td>$14,050,950</td>
<td>$13,578,189</td>
<td></td>
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</table>
**Peer Groups**

Potential Core Focus

<table>
<thead>
<tr>
<th></th>
<th>Hudson</th>
<th>Pelham</th>
<th>Laconia</th>
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<tbody>
<tr>
<td>Population</td>
<td>24,467</td>
<td>14,049</td>
<td>16,492</td>
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<tr>
<td>Avg. VPA</td>
<td>$165,357</td>
<td>$121,607</td>
<td>$173,092</td>
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<tr>
<td>Peak VPA</td>
<td>$2,690,571</td>
<td>$3,610,967</td>
<td>$10,897,320</td>
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</table>

Source: New Hampshire Department of Revenue Administration 2019
<table>
<thead>
<tr>
<th></th>
<th>Claremont</th>
<th>Lebanon</th>
<th>Peterborough</th>
<th>Berlin</th>
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<tbody>
<tr>
<td>Population</td>
<td>12,967</td>
<td>13,602</td>
<td>6,284</td>
<td>10,200</td>
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<td>Avg. VPA</td>
<td>$28,311</td>
<td>$90,500</td>
<td>$38,904</td>
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<td>Peak VPA</td>
<td>$2,606,428</td>
<td>$14,427,351</td>
<td>$12,205,874</td>
<td>$2,537,768</td>
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## Peer Groups
### Large Cities

**Source:** New Hampshire Department of Revenue Administration 2019

<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>Avg. VPA</th>
<th>Peak VPA</th>
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<tbody>
<tr>
<td>Concord</td>
<td>43,412</td>
<td>$153,833</td>
<td>$45,923,043</td>
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<tr>
<td>Manchester</td>
<td>112,525</td>
<td>$687,321</td>
<td>$67,720,654</td>
</tr>
<tr>
<td>Nashua</td>
<td>89,246</td>
<td>$539,622</td>
<td>$12,915,100</td>
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</tbody>
</table>
Lesson:

Historic Value
Case Study: Economic MRI®, Value Capture Analysis
2015

Charleston, South Carolina
Beaches tuned out
Built ca: 1686

Revolutionary

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

Walmart
$866,760 value per acre
Pre-1776 Taxable Value Per Acre
Charleston, SC MSA
Pre-1776 Tax Productivity
Charleston, SC MSA

<table>
<thead>
<tr>
<th></th>
<th>&gt; 1776</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acres</td>
<td>20.95</td>
</tr>
<tr>
<td>Value</td>
<td>$344M</td>
</tr>
<tr>
<td>Value/Acre</td>
<td>$16,440,700</td>
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<tr>
<td>County Taxes 2015</td>
<td>$631,000</td>
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Pre-1776 Tax Productivity
Charleston, SC MSA

Walmart (at Tanger)
$866,760 value per acre
Born: 2005

Detail Map

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## Walmart (at Tanger)

$866,760 value per acre  
Born: 2005

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<tr>
<td>Acres</td>
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<tr>
<td>Value</td>
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<td>$344M</td>
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<tr>
<td>Value/Acre</td>
<td>$866,760</td>
<td>$16,440,700</td>
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<tr>
<td>County Taxes 2015</td>
<td>$47,000</td>
<td><strong>$631,000</strong></td>
</tr>
</tbody>
</table>

Pre-1776 Tax Productivity  
Charleston, SC MSA

Detail Map
### Walmart at Tanger

$866,760 value per acre

**Born: 2005**

<table>
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</table>
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

Source: New Hampshire Department of Revenue Administration 2019

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

The Value of Urban Design
Case Study: Economic MRI®
2020

Derry
1. Derry
2. Humphrey Rd/Main Street & Route 28B
### Building Details:

<table>
<thead>
<tr>
<th></th>
<th>Siragusa</th>
<th>Butterfield</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Building Footprint (Acres)</strong></td>
<td>1.92</td>
<td>2.13</td>
</tr>
<tr>
<td><strong>Parking Acres</strong></td>
<td>2.65</td>
<td>5.95</td>
</tr>
<tr>
<td><strong>Building:Parking Ratio</strong></td>
<td>1 : 1.4</td>
<td>1 : 2.8</td>
</tr>
</tbody>
</table>
Manchester, New Hampshire
Land Use Analysis
Manchester, NH
Land Use Analysis
Manchester, NH

City of Manchester

- Parking
- Buildings
- Other
- Roads

5-minute walk
What is Parking?
Measuring space
Average Building 998 sq.ft.

Average Parking (1.5 spaces) 585 sq.ft.
What is Parking?
Measuring Manchester space

$90/square foot
What is Parking?
Measuring Manchester space

* (75X) - Data from Assessment data on Pearl Street parking lot

$90/square foot

$1.20/square foot*

-$20/square foot
<table>
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</tr>
<tr>
<td><strong>Value Per Acre</strong></td>
<td>$4.6M</td>
<td>$2.5M</td>
</tr>
</tbody>
</table>
Lesson:

What are you carrying?
Case Study: Economic MRI®, Fiscal MRI®, Policy Analytics
2014 - 2019

Lancaster, California
LANCASTER: 953 MILES
Road Construction and Reconstruction
Lancaster, CA

Year Built

Rebuild
Roads (Total Square Feet)

Road Construction and Reconstruction
Lancaster, CA

Year

Roads (Total Square Feet)
0 3,500,000 7,000,000 10,500,000 14,000,000

Rebuild
Road Built (SF)
What Roads Can You Sustain?

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

Road Obligation*

$50M
(-$25M Shortfall)

Sustainable
Unsustainable

Source: City of Lancaster

*Based on 50 year useful life
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
OK. So now what?
What you can do:

1. Do more analytics.
MARKET FORCES
Hillsborough Co, NH

Land Value Per Acre

Source: NH DRA and City of Manchester
Land Value Per Acre
Manchester, NH

Source: NH DRA and City of Manchester
What you can do:

2. Learn from your neighbors
Value Per Acre
New Hampshire

Source: New Hampshire Department of Revenue Administration 2019
## Peer Groups
### Different Samples

<table>
<thead>
<tr>
<th></th>
<th>Hanover</th>
<th>Portsmouth</th>
<th>Exeter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td>11,500</td>
<td>21,896</td>
<td>14,306</td>
</tr>
<tr>
<td><strong>% Non-Tax</strong></td>
<td>11%</td>
<td>18%</td>
<td>32%</td>
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<td><strong>Avg. VPA</strong></td>
<td>$100,083</td>
<td>$557,719</td>
<td>$197,142</td>
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<tr>
<td><strong>Peak VPA</strong></td>
<td>$37,827,184</td>
<td>$51,157,466</td>
<td>$13,578,189</td>
</tr>
</tbody>
</table>
What you can do:

3. Maintain/Recreate Historic Value
Circa: 1905

- Pierce Block
  - VPA: $40 M
- 6 Market
  - VPA: $5 M
- 9 Market
  - VPA: $34.9 M
- 10 Market
  - VPA: $30.5 M
- National Mechanics Bank
  - VPA: $29.3 M
Value Per Acre
High Yield Buildings

Source: New Hampshire Department of Revenue Administration

Portsmouth, long term success.

Taxable Value per Acre ($)

Portsmouth
Mixed-use
VPA: $29.3 M

Source: New Hampshire Department of Revenue Administration 2019
What you can do:

4. Adapt
Value Per Acre
High Yield Buildings

Multi-family
VPA: $1.9 M

Mixed-use
VPA: $9.6 M

Peak VPA
VPA: $15.3 M

Source: New Hampshire Department of Revenue Administration
What you can do:

5. Realize that Parking is Subsidized.
What is Parking?
Measuring Manchester space

* (75X) - Data from Assessment data on Pearl Street parking lot

$90/square foot

$1.20/square foot*

-$20 / square foot

-$20 / square foot
What you can do:

6. Build for Productivity
Value Per Acre
Commercial

Sample average: $970,000 value/acre

Source: New Hampshire Department of Revenue Administration 2019
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
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VPA: $9.6 M

Berlin
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Peterborough
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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

Source: New Hampshire Department of Revenue Administration 2019
What you can do:

7. Patterns of Costs
Asset Management
15-20 years

$85,000
$85,000
$35,000
Asset Management

In 20 years you’ll need another $205,000
Asset Management
Originally Built 1920s-1940s
Neighborhood Costs
South Bend, IN

Originally Built 1970s
Roads

Neighborhood Costs
South Bend, IN

Originally Built 1970s

Yearly Costs

$75,161
Neighborhood Costs
South Bend, IN

Originally Built 1970s

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Roads</th>
<th>Water Pipes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Yearly Costs</td>
<td>$75,161</td>
<td>$11,675</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>Roads</td>
<td>Water Pipes</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>Yearly Costs</td>
<td>$75,161</td>
<td>$11,675</td>
</tr>
</tbody>
</table>

Originally Built 1970s

Urban3
Roads | Water Pipes | Storm & Sewer Pipes
---|---|---
$75,161 | $11,675 | $35,176

Neighborhood Costs
South Bend, IN
Originally Built 1970s
Roads | Water Pipes | Storm & Sewer Pipes | Annual Total
---|---|---|---
$75,161 | $11,675 | $35,176 | $122,012

10% of Annual Neighborhood Property Taxes: $21,079

Originally Built 1970s

South Bend, IN

Neighborhood Costs

Originally Built 1970s

10% of Annual Neighborhood Property Taxes: $21,079
Originally Built 1920s-1940s
Originally Built 1920s-1940s
Originally Built 1920s-1940s

South Bend, IN

Infrastructure
- Roads
- Water Pipe
- Combined Sewer
- Seperated Sewer
- Storm Water

Neighborhood Yearly Costs $38,465

Roads
<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Roads</th>
<th>Water Pipes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Yearly Costs</td>
<td>$38,465</td>
<td>$12,154</td>
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Originally Built 1920s-1940s

Neighborhood Costs
South Bend, IN
Originally Built 1920s-1940s

Neighborhood Costs
South Bend, IN

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Roads</th>
<th>Water Pipes</th>
<th>Storm &amp; Sewer Pipes</th>
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<tbody>
<tr>
<td>Neighborhood Yearly Costs</td>
<td>$38,465</td>
<td>$12,154</td>
<td>$28,362</td>
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</table>
### Originally Built 1920s-1940s

#### Neighborhood Costs
South Bend, IN

<table>
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10% of Annual Neighborhood Property Taxes: $21,965
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<tr>
<th></th>
<th>Originally Built 1920s-1940s</th>
<th>Originally Built 1970s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lots</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>Road Cost</td>
<td>$38,465</td>
<td>$75,161</td>
</tr>
<tr>
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<td>$12,154</td>
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<tr>
<td>Annual Total Costs</td>
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<td>Deficit</td>
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*South Bend, IN*

Originally Built 1970s

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<tr>
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<tr>
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## Neighborhood Costs
**South Bend, IN**

### Originally Built 1920s-1940s

<table>
<thead>
<tr>
<th></th>
<th>1920-1940s</th>
<th>1970s</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Lots</td>
<td>88</td>
<td>88</td>
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<td>Road Cost</td>
<td>$38,465</td>
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</table>
What you can do:

8. Measure What You Own
111,000 people

535 miles* of road

25.4 feet of road per person
9. Consider the Tax System
Question:

What is an appropriate tax?
Proponent of the “single tax” on land.

Henry George
Author of Progress and Poverty (1879)
1839-97
by Elizabeth Marie Phillips

FAMOUS ORIGINATOR OF GAMES
Geoaccounting™
I bought a boat
Just put your happy little numbers on a map. Don’t worry about mistakes.
Read this book!
DO THE MATH
DO THE MATH
From the Outskirts to Downtown: Taxes, Land Use & Value in Upper Valley Communities

A virtual presentation by Joe Minicozzi AICP | Urban3
October 29, 2020 at 11 AM

Hosted by Vital Communities | Claremont | Hanover | Lebanon

NEW HAMPSHIRE HOUSING
NHHFA.org/events