Perhaps of all regions in America, Buffalo Niagara has experienced a unique and illustrative history in urban planning and architecture. At one time, Buffalo was the eighth most populous city in the nation. Given its strategic location at the halfway point between New York and Chicago and at terminus of the Erie Canal, it became the gateway to the Great Lakes and the seat of American industrial power. Proximity to Niagara Falls also gave Buffalo an abundance of electrical power, so much that the city dubbed itself “The City of Light.” The legacy of the resulting wealth and might is clearly evident in the region’s magnificent architecture, which emerged as some of the first in the American style. Beyond the architecture, notable designers such as Frederick Law Olmsted, Calvert Vaux, and Joseph Ellicott shaped the landscape and fabric of the city. Olmsted once called Buffalo the “best planned city in the world.”
Given its prominence and changing economic tides, the region was also the testing ground for urban renewal policies that were ultimately unsuccessful. Millions in federal Urban Renewal Program dollars were invested in demolishing large swaths of city blocks, taking with them many of Buffalo’s significant historic buildings. While the intent of these maneuvers were to draw a middle-class population and business investment to the Buffalo Niagara region, many of these blocks were never redeveloped at the same scale of what was lost.

However, the Buffalo Niagara region’s close relationship with planning policy and its impacts has imbued its citizens with a heightened awareness of these issues and an aspirational drive to repair their community. We performed this study to cultivate a deeper economic understanding of the Buffalo Niagara region, with a focused unpacking and visualizing of the economic picture of central cities in the region. Through the examination of area trends comes the surfacing of new opportunities as well as illumination on where to best focus investment and energy.

**FACT:**

There are over 1,500 different tax codes in Erie County.*

Between tax assessment regulations, special incentive programs, tax delinquency issues, and overlapping special districts Buffalo Niagara has a more complex tax system than other communities we have studied. Tax complexity can be beneficial as it allows greater flexibility towards things like economic incentives, but it can also create problems. New York State is fairly unique in that tax assessments are conducted at the township or city level, but there is no single standard level at which properties are assessed. This means that communities make up the difference by charging different tax rates. Furthermore, it requires assessments to be taken at the municipal, county, and state level. Another issue worth mentioning is that the presence of special tax arrangements and incentive programs such as PILOTs alter the present value of some buildings.

**A PILOT** is a Payment In Lieu Of Taxes made to compensate a local government for tax revenue that it loses due to the nature of ownership or use of a particular piece of real property. Typically, a PILOT is used as an incentive to spur economic development.

* Fact from Erie County Office of Real Property Tax Services
PURPOSE OF ANALYSIS

Urban3’s work on tax production and value per acre fits into that of One Region Forward’s other measurements of the built environment such as employment, demographics, and infrastructure.

This study is important to understanding how our communities are financed. Property taxes are the backbone of local government revenue. What we choose to build or allow to be built in our communities has a direct impact on our ability to repair roads, provide quality education, and pay our bills. This is particularly critical in the Buffalo Niagara region because of recent population loss and disinvestment.

Urban3’s methodology combined traditional metrics, such as employment data, with analytics centered on land-use efficiency. Land is a finite commodity; thus how it is divided and used is crucial. Each land parcel is different, so a key issue in any land analysis is making the study relative in an “apples to apples” way. Just as different cars have differently-sized gas tanks, we use the gasoline as the measuring stick of efficiency, not the tank. In other words, we use “miles per gallon”, not “miles per tank” to make a relative comparison of cars and trucks. Using a “per acre” metric for land helps better understand the potency of one parcel against not only its neighbor, but also the entire city and county.

PROPERTY TAX PRODUCTION

The map below depicts Total Taxable Value, which is how we typically think about development and tax production. This presents a somewhat ambiguous relationship between development and value and tells us little about efficiency. Larger parcels and big projects simply tend to be worth more overall than smaller projects.

However, when we normalize tax value (as shown in the map above) to account for the space each project consumes, a much clearer pattern emerges. Tax potency closely follows patterns of historic development and greater intensity of land use. This is why we see higher value per acre concentrated in center city areas.
The greatest intensity of real estate tax production is clearly visible from the 3D model (below) in the core of downtown Buffalo. This value peak shrinks as development density declines and uses become more separated farther out from the center. Moving north from downtown, the Elmwood, Allentown, and Delaware Park neighborhoods form a stable area of tax potency. The other historic city and town centers for each respective Township or City also form smaller value peaks and ranges throughout the metropolis.

As part of our analysis, we look at the amount and distribution of non-taxable property in a community. This tends to be most important in downtown areas where each non-taxable development is a lost opportunity. Given its role as the historic government center, Buffalo has a great deal of non-taxable land, but is comparable to other downtowns in the nation. In addition to non-taxable land, we investigated the impact of special tax arrangements and PILOT properties. As a whole these arrangements have a negligible impact on the region, but important because they tend to skew the value reported for numerous high profile buildings. A large portion of Niagara Falls’ land area is consumed by the non-taxable Seneca Niagara Casino. While it doesn’t generate taxes, it’s also not fair to call it a non-revenue producing development.
In addition to property taxes, retail tax production is a critical component of local municipal finance. Retail taxes are also a strong indicator of activity and vitality. Retail tax data is released at the zip code level, but when we compare the efficiency of both property and sales taxes a clear pattern emerges.

The pattern of retail tax production in the Buffalo Niagara region is consistent with other communities in that the downtown area is the most efficient producer of retail sales. Again, zip codes such as Amherst’s that correspond to major retail centers generate greater retail sales overall, but not when we account for the space consumed. In value per acre terms, the downtown zip codes are more constrained to areas of consistent development, and the development itself is generally that of a pattern that maximizes its use of space which generates the retail tax density.

One caveat worth mentioning is that businesses with multiple locations may not have been distributed properly. The striking similarity of the efficiency pattern to other communities largely supersedes this, however.
Urban3’s analysis demonstrates the economic importance of the density and design intrinsic to architectural heritage. The Buffalo Niagara region possesses a great wealth of beautiful and important architectural treasures. Beyond the value these buildings create today is their legacy of revenue production over the course of their existence. The United Office Building, for example, is one of the most efficient producers of real estate tax in the region and it has been creating that value for over a century. When we think about tax production we should keep in mind the durability and longevity of our development decisions.

### Legacy Building Value

Urban3’s analysis demonstrates the economic importance of the density and design intrinsic to architectural heritage. The Buffalo Niagara region possesses a great wealth of beautiful and important architectural treasures. Beyond the value these buildings create today is their legacy of revenue production over the course of their existence. The United Office Building, for example, is one of the most efficient producers of real estate tax in the region and it has been creating that value for over a century. When we think about tax production we should keep in mind the durability and longevity of our development decisions.

- **Target + Wegman’s on Transit Road**
  - $712,015 Value per Acre

- **Mayfair Lane Residential**
  - $6,580,107 Value per Acre

- **Eastern Hills Mall**
  - $325,825 Value per Acre

- **United Office Building**
  - $25,686,076 Value per Acre

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  - $325,825 Value per Acre

- **United Office Building**
  - $25,686,076 Value per Acre

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### More than 9 times the value in a fraction of the space

0.7 acres of the United Office Building is equal to the entire 102-acre Eastern Hills Mall.
Main Street Urbanism: Surrounding Villages & Townships

This is a regional study and while downtowns and the City of Buffalo deserve special attention as the nexus of tax efficiency, there are some important lessons in the outlying townships and other municipalities. In each case we find smaller versions of this same tax generation pattern. In nearly each township the core of tax production efficiency can be found in its Villages or along main street downtowns. Many of these communities have experienced rapid growth and have run out of opportunities for horizontal expansion. Communities with vibrant centers such as Hamburg have particularly visible value spikes. Even smaller towns like Lewiston have spikes apparent in their downtowns. This presents an important lesson and opportunity for the suburban townships, especially ones that have nearly built out their low-density capacity: these places in particular should focus on building up and enhancing their economic engines for the benefit of their entire community.

Density Pays Off

The chart (left) indexes all property types shown to a ratio where county single family use is equal to one dollar. In other words, for every $1 of value per acre a house in Erie County has, a house in Buffalo is producing $3 of value per acre and the average mall is producing $7 dollars per acre. It is notable that a six-story mixed use building in an urban setting is 36 times more valuable than a house in the county or more than 5 times the potency of a mall. The 20-story Guaranty building in downtown Buffalo is an astounding 136 times more valuable than a house. Clearly, small parcels can still reflect high value per acre when developed with multiple stories of space, ideally mixed use.

Value per Acre by Property Type
If County Single Family = $1/acre

- Residential
- Commercial
- Mixed Use

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OPPORTUNITIES

In-Place Transit Infrastructure

Buffalo already possesses a fixed rail transportation system that is more extensive and advanced than many rapidly growing Sunbelt cities, such as Charlotte, North Carolina. In fact, many cities are just now turning to Transit Oriented Development (TOD) as a means for bolstering economic activity. For Buffalo, existing transit represents an opportunity to attract development investment and support the existing transit infrastructure without significant new funding.

A TALE OF TWO TRANSITS

As Buffalo expanded over time, development sprawled both away from downtown and across individual parcels, as strip malls and single family residential replaced denser property types. Buffalo’s historic transit corridor (above left) is centered on the downtown area and generates nearly three times the value per acre than the more suburban auto-oriented commercial development along Transit Road (above right). Even though much less area of the historic transit corridor is taxable, it still produces a higher total value in less space as well as a higher value per acre. Additionally, its scale makes it much more walkable and its density allows it to offer more goods and services without consuming as much land as its Transit Road counterpart.

<table>
<thead>
<tr>
<th></th>
<th>Transit-Transit Buffer</th>
<th>Transit-Auto Buffer</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Value</strong></td>
<td>$919,503,065</td>
<td>$766,492,189</td>
</tr>
<tr>
<td><strong>% Taxable</strong></td>
<td>39%</td>
<td>81%</td>
</tr>
<tr>
<td><strong>Net Value/Acre</strong></td>
<td>$1,040,778</td>
<td>$347,556</td>
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</tbody>
</table>
Most of Buffalo Niagara’s historically significant buildings continue to outperform many newer properties on a value per acre basis. These structures were built to last, and they have been producing wealth for their communities over an extensive period of time.

By filling up the upper floors of existing historic buildings and by rehabilitating vacant buildings tremendous value can be captured. Buffalo Niagara has tremendous potential to unlock new value by taking advantage of its wealth of under utilized historic buildings. By assisting this process, Buffalo Niagara’s economic incentive programs can effectively build local wealth while preserving historic assets. Aside from the more prominent high profile structures there are great opportunities to pursue rehabilitation in the neighborhoods. The government can have a role in applying modest investments in things like street improvements, façade grants, or lending facilitation to revitalize run-down, but intact small scale urban environment. In many cases, the biggest impediment to restoring historic property is not economic, but legal. Have you investigated your codes and ordinances to see if they are making productive development impossible? Revising code, as Buffalo recently has, to remove things like minimum parking standards can create value without any real investment.
An overarching theme in the Buffalo Niagara region is the issue of vacancy, demolition, and continued land consumption. This topic has been discussed at great length, particularly by One Region Forward, and is not the focus of this study; nonetheless, the matter is critical to the narrative and context of the region’s development. Simply, Buffalo Niagara continues to sanction development that does not make financial sense. Despite stagnant population growth, the region’s municipalities have continued expanding outward, developing rural land and installing new costly infrastructure. Meanwhile vacancy, tax delinquency, and demolition continue to be a mounting problem. As the region spreads out, it spreads thin - making it more crucial to identify development types and urban design considerations that produce the greatest wealth for the region.
Buffalo’s population growth began to slow in the early 1900s, and its population peaked just after World War II at 580,132 people. Since, the city has experienced negative growth as residents flock to the suburbs, surrounding cities, or other states. Despite this, the development of greenfield, or previously undeveloped, sites has continued. In some decades new development added (in hundreds of square feet) outnumbered the growth in residents ten to one.
One unfortunate but key chapter in Buffalo Niagara’s development narrative was the upheaval and loss of value suffered in the age of urban renewal. It is a testament to architectural legacy of the region that even as so many important buildings were lost there remains an amazing cache of structures. Nonetheless, the scars of urban renewal and demolition are evident in the tax efficiency pattern and remain a challenge the community must strive to overcome.

Buffalo Niagara’s history is an illustrative chapter in the narrative of America’s industrial rise and fall. Its strategic location, rich agricultural land, and its water resources made it prosperous, but the work of inspired designers like Olmsted and Sullivan made it a great city. There are strong signs, however, that prosperity is returning. Returning street traffic to pedestrian malls, such as Main St. in Buffalo, has become an almost symbolic signal that revitalization has taken hold. Infill projects are filling in vacant urban land, and neighborhoods severed by urban renewal projects are being reconnected. The outlying communities are also experiencing new life and building greater wealth. As they have grown and expanded outward, their centers are beginning to reflect newer more urban-scale development. “The Best Planned City” has a legacy of architectural splendor, an advanced transit system, and the motivation to recover.
Here the size of each circle indicates its city's relative total tax production. The colors and sizes of the wedges reveal how that value is created. While Amherst and Buffalo generate about the same amount of tax revenue, Buffalo generates much more of its income from property worth more than $1 million per acre.

The orbs on the left side of each bar represent the proportion of land invested in each tax efficiency category; orbs on the right explain the proportion of value created by this land. This gives us a "genetic marker" for development distribution. We see that there is much non-taxable land, but also tiny amounts of purple land area that generates huge amounts of revenue. We also see that, at the level of Niagara County, there is a tremendous amount of rural land.
As indicated by the chart above, there is a direct correlation between value per acre and density. Pockets of greater density, like downtown Buffalo, and areas surrounding mass transit stops produce greater revenue than typical big-box commercial development such as that found on Transit Road.
APPENDIX: Heart Monitor

- **Tonawanda, NY**
  - Pop: 73,557
  - 17 Sq. Mi.
  - % Land
  - Mean VPA = $480,489

- **Amherst, NY**
  - Pop: 122,356
  - 53.3 Sq. Mi.
  - % Land
  - Mean VPA = $410,539

- **Cheektowaga, NY**
  - Pop: 88,226
  - 25 Sq. Mi.
  - % Land
  - Mean VPA = $368,476

- **Hamburg, NY**
  - Pop: 56,336
  - 38 Sq. Mi.
  - % Land
  - Mean VPA = $194,996