

Moving One Region Forward

One Region Forward (1RF) is a broad-based, collaborative effort to promote more sustainable forms of development in Erie and Niagara counties. Under the guidance of the 1RF Steering Committee, together with nearly three years of research, community engagement, partnership building and planning by over 5,000 citizens and more than 700 local organizations, the region's first federally recognized Regional Plan for Sustainable Development (RPSD), One Region Forward: A New Way to Plan for Buffalo Niagara, was developed and adopted in 2015.



The plan serves as a practical roadmap for improving mobility, promoting more efficient land use patterns, strengthening our basic infrastructure, growing a 21st century economy, ensuring broad access to healthy food, protecting housing and neighborhoods, and preparing the region's response to the challenge of global climate change. It also supports the larger work being done across the planet through the implementation of the global sustainable development goals as adopted and ratified through the United Nations and member countries.

The 1RF Implementation Council was established as a collaborative. informal body to continue the work of the 1RF Steering Committee, and was tasked with advancing the ideas that came out of the 1RF planning efforts. Meetings have been held quarterly since 2015, allowing members to exchange information about their activities and other opportunities related to 1RF. In 2017, with input from regional stakeholders, the Implementation Council developed a strategic plan that identifies their mission statement, goals and objectives, and potential activities.

This report provides an update on the progress of 1RF's 5 Big Ideas. Using available data, these indicators help identify areas of success—as well as remaining challenges—in order to help focus efforts going forward.

1RF IMPLEMENTATION COUNCIL MEMBERS

Greater Buffalo Niagara Regional Transportation Council (co-chair)

University at Buffalo Regional Institute (co-chair)

City of Buffalo

City of Niagara Falls

Niagara County Department of Economic Development

Erie County Department of Environment and Planning

Niagara Frontier Transportation Authority

Buffalo Niagara Waterkeeper

University at Buffalo Office of Sustainability

New York State Department of Transportation

Buffalo Niagara Partnership

OUR VALUES TELL US WHERE WE WANT TO GO



OUR IDEAS OFFER MANY WAYS WE CAN GET THERE



CONTINUING THE WORK THAT THOUSANDS HAVE BEEN A PART OF IN BUILDING THE FUTURE OF PLANNING TOGETHER



About the Indicators

This report card measures Buffalo Niagara's progress on the indicators included in One Region Forward's Regional Plan for Sustainable Development A New Way to Plan for Buffalo Niagara (2015, pgs. 117-125). Collectively, these metrics help gauge if the region is making progress towards the community-shaped vision outlined in the plan.

Indicators measure performance for the Buffalo Niagara metropolitan region as a whole. Though progress on many of the metrics are driven by actions at the local level, looking at what the data says about regional performance offers an objective way for us to continue the conversation about the future we seek to create for Buffalo Niagara.

The numbers are not the only way to measure progress, and moving the needle on many of the indicators may take years, if not decades. But as we continue to build a sustainable, resilient, prosperous and opportunity-rich future, a periodic review of the data helps identify areas of success—as well as remaining challenges—in order to help focus efforts going forward.

Reading the Indicators

Across the 20 indicators, an updated metric is presented in comparison to the benchmark presented in the plan.

When the data shows an indicator is moving in the right direction, a green circle is provided in the legend above the reported figure. For indicators where data shows we're moving in the wrong direction, a gray circle is provided.

MAKING PROGRESS



PROGRESS TO BE MADE



Because there is always a story behind the data, we've provided more detail and context about nuances to the data, or what might be driving the trend for each metric.

For details on methodology and data sources, see "Data Sources and Notes" at the end of the report.

SUMMARY OF FINDINGS	WHERE WE		
	WANT TO GO	MAKING PROGRESS	PROGRESS TO BE MADE
Land Use and Development			
Are we concentrating new development where we already have infrastructure?	1		1
Are we focusing job growth around our main streets, downtowns and former industrial areas?	1	1	
Are we conserving natural, open spaces?	1	1	
Are we increasing public access to our waterfronts?	1	1	
Is our regional economy becoming more competitive?	1	1	
Are we keeping the finances of local governments in balance?	1	1	
Transportation and Mobility			
Are we reducing the miles we travel in cars?	4		1
Are more workers commuting via alternative modes of transportation?	1		1
Are we building new homes and job centers that are connected by public transit?	1		1
Are we becoming more bike-friendly?	1	1	
Housing and Neighborhoods			
Are we reducing the number of vacant homes and businesses in our region?	1		1
Is the new housing we build walkable to services and amenities?	1		1
Are we less burdened by the costs of housing and transportation?	1	•	
Are we reducing concentrated poverty?	1		1
Food Access and Justice			
Are we preserving our farmland?	1		₩
Are we growing our agricultural economy?	1	1	
Are we increasing access to healthy food for those most in need?	4	U	
Climate Change Action			
Are we conserving energy in our buildings?	1	1	
Are we increasing generation of renewable energy?	1	1	
Are we planning for climate change?	1	1	

Land Use and Development

Land use patterns change slowly, but they do change. In recent years, Buffalo Niagara has seen economic development grow in targeted places - our downtowns, main streets, and former industrial areas. We are also seeing increased public access to our waterways, aided by a range of projects across the two counties. These positive signs are countered by continued residential development in areas not serviced by infrastructure. Though this sprawling development appears to be slowing, its continued prevalence exacerbates the hollowing of our urban core, creating more infrastructure to maintain, and posing challenges to municipal budgets.



Are we concentrating new development where we already have infrastructuré?

We'll be making progress if we increase the share of development serviced by existing infrastructure.

WHFRF WF

PROGRESS WANT TO GO TO BE MADE







Are we focusing job growth around our main streets, downtowns and former industrial areas?

We'll be making progress if we increase the share of jobs in strategic locations.

WHERE WE WANT TO GO



MAKING **PROGRESS**



We'll be making progress if we increase the amount of conserved open space.

WHERE WE WANT TO GO TO BE MADE

Are we conserving

natural, open spaces?

PROGRESS





% of all developed land within the urbanized area and serviced by a sewer district

2016

32.0% 27.8%

2011

PERCENTAGE **POINT** DECREASE

% of all regional jobs in downtowns, Brownfield Opportunity Areas, or near main streets

2015 2011

26% 27% PERCENTAGE POINT **INCREASE**

Number of square miles of open space conserved from development

2012 2016 110.9 111.6

SQUARE MILES

BEHIND THE NUMBERS

Since 2010, around 7,000 structures (mostly residential) were built in Buffalo Niagara. Though most (59%) of these new structures are within the urbanized area, those built outside of the urbanized area consume a lot more land. Hence, this metric has declined since 2011. This metric only tells part of the story, as it only measures new development and does not capture re-use of formerly vacant buildings in urbanized areas.

BEHIND THE NUMBERS

While the number of jobs across the region increased by around 3% from 2011 to 2015, the number of jobs in downtowns, main streets and former industrial areas increased by more than 12%. Much of this increase is from growing job centers like the Buffalo Niagara Medical Campus. Overall, job density in these target areas increased slightly from 4.2 jobs per acre in 2011 to 4.3 jobs per acre in 2015.

BEHIND THE NUMBERS

Through the use of conservation easements, nature preserves and other legal protections, the area of land protected from development increased slightly over the last few years. This work has been led by organizations like the WNY Land Conservancy, the Niagara River Land Trust, and the Nature Conservancy.



Are we increasing public access to our waterfronts?



Is our regional economy becoming more competitive?



Are we keeping the finances of local governments in balance?

We'll be making progress if we **increase** the amount of shoreline with public access.

WHFRF WF WANT TO GO

MAKING **PROGRESS**



We'll be making progress if we increase the number of firms in the region.

WHERE WE WANT TO GO



MAKING

PROGRESS

We'll be making progress if our total governmental revenues and

costs are in balance.

WHERE WE WANT TO GO

MAKING **PROGRESS**





Number of linear miles of shoreline with public access

2011 2016 97.6 104.8

LINEAR MILES

Number of firms located in the region

2013 2016 29,222

28,128

1,094 **FIRMS**

Total revenues compared to total costs for all local governments

2015

+0.6%

2012

+0.2%

0.4% PERCENTAGE POINT **INCREASE**

BEHIND THE NUMBERS

Additions to the Erie Canalway Trail, the Shoreline Trail, Canalside and the Union Ship Canal have opened up even more local waterways to the public. Enhancements along these waterfronts, including signage, recreational opportunities and amenities for bicyclists and pedestrians, have also improved the quality of public waterfront access in the region.

BEHIND THE NUMBERS

While regional employment increased by 2.5% from 2013 to 2016, the number of firms in the region grew by a larger share – nearly 4%. This is because new firms in the region tend to employ fewer people than more established businesses. Other positive signs of economic progress include an 8.4% increase in regional average wages from 2013 to 2016 - slightly higher than the increase in national average wages.

BEHIND THE NUMBERS

Government revenues have increased by 13.3% to \$4.49 billion, more than the increase in expenditures, which grew by 12.9% to \$4.46 billion. In both 2012 and 2015, 36 of the region's 65 municipal and county governments had revenues that exceeded expenditures. More than half of all local governments saw improvements in cost to revenue ratios from 2012 to 2015. Rising property values and NYS's property tax cap are potential contributors to this trend.

Transportation and Mobility

Creating more options for how people get around the region is critical to building a sustainable Buffalo Niagara. Our region is adding bike lanes and ramping up bike sharing services. Urban and suburban communities are adopting complete streets policies to improve road safety and access for all users. New technologies offer unprecedented opportunities to re-imagine the way people move about the region. Despite these promising trends, transitioning from a largely automobile-dependent region to one that more fully supports diverse travel modes will take a long time and we have yet to see the indicators around automobile usage decline.



Are we reducing the miles we travel in cars?



Are more workers commuting via alternative modes of transportation?

We'll be making progress if we **decrease** the daily miles we travel by car. WHERE WE PROGRESS WANT TO GO TO BE MADE





Daily vehicle miles traveled per person

2011 201618.3 19.5

1.2
DAILY VEHICLE MILES
MORE

We'll be making progress if we **increase** the share of workers commuting via alternative modes of transportation.

WHERE WE PROGRESS WANT TO GO TO BE MADE





% of the region's workers commuting via alternative modes of transportation

2010 2016

17.2%

-0.8%
PERCENTAGE POINT
DECREASE

BEHIND THE NUMBERS

While the region's population remained relatively constant from 2011 to 2016, the number of miles driven on the region's roads continued to increase. Although these miles also include travel by visitors – transportation planners point to a link between regional vehicle miles traveled and the rise and fall of the Canadian dollar. Additionally, households in our region are more likely to have multiple vehicles today than in 2011.

BEHIND THE NUMBERS

18.0%

The number of workers in the region increased since 2010, but the number of commuters driving alone to work increased by even more. A closer look at the data shows a decrease in commuting by public transit or walking, but an increase in commuting via bicycle and carpool, and more people working from home. One possible driver in this trend is the decrease in gas prices, which were, on average, 31 cents lower per gallon in NYS in 2016, compared to 2010. It is also worth noting that this metric only measures how people get to work, and does not account to a potential increase in alternative modes of travel for other purposes, like getting to the store, or for recreation.



Are we building new homes and job centers that are connected by public transit?



Are we becoming more bike-friendly?

We'll be making progress if we **increase** the share of homes and jobs accessible to transit.

WHERE WE PROGRESS WANT TO GO TO BE MADE





% of the region's homes and jobs within areas accessible to transit stops with frequent service

2011 2015 HOMES 26% 25% JOBS 36% 31% -1%
-5%
PERCENTAGE POINT
DECREASE

We'll be making progress if we **increase** the amount of land dedicated to bike travel. WHERE WE WANT TO GO MAKING PROGRESS





Number of linear miles of dedicated bike paths, shared bike lanes and multi-use/recreational trails

2014 2016298 431

133
LINEAR MILES
MORE

BEHIND THE NUMBERS

Since 2011, our region has built new homes and created new jobs, but most of these are not within walking distance of a transit stop with frequent service. Although we added thousands of jobs and homes in areas within walking distance of metro and bus stops with frequent service, jobs and homes increased even more in outlying areas.

BEHIND THE NUMBERS

Many efforts have led to a big increase in the miles of bike lanes, routes and trails across the region. Some examples include the conversion of Robert Moses Parkway in Niagara Falls, enhancements to the Shoreline Trail along the Niagara River, and additions to the Erie Canalway Trail. The adoption of the Buffalo Bicycle Master Plan and the work of local organizations have led to more bike lanes on city streets.

Housing and Neighborhoods

Creating and maintaining quality housing and great neighborhoods are central to making Buffalo Niagara better for everyone. Our homes and neighborhoods influence our health and shape our access to opportunities. Our region has strong housing resources and a variety of great neighborhoods, but many communities in inner cities and first-ring suburbs face challenges around affordability, job accessibility, and vacancy and abandonment. These communities are exploring a variety of strategies, including public art, community land trusts, green retrofits, and historic preservation to redevelop neighborhoods in more equitable and sustainable ways.



Are we reducing the number of vacant homes and businesses in our region?



Is the housing we build walkable to services and amenities?

We'll be making progress if we **decrease** the number of vacant residential and commercial properties.

WHERE WE PROGRESS WANT TO GO TO BE MADE





Number of residential and commercial vacancies

2013 2016
RESIDENTIAL 23,924 24,548

COMMERCIAL 5,796 5,875

2.6% 1.4% PERCENTAGE INCREASE We'll be making progress if we **increase** the share of homes in walkable places.

WHERE WE PROGRESS WANT TO GO TO BE MADE





% of homes within walking distance to a main street, downtown or transit corridor

2010 2016 **45.0% 44.7%**

-0.3%
PERCENTAGE POINT
DECREASE

BEHIND THE NUMBERS

Between 2013 and 2016, the region saw a slight uptick in addresses deemed "undeliverable" by the US Postal Service. A closer look at the numbers show that short-term vacancies (those identified as vacant for less than a year) drove this trend, as the number of addresses sitting vacant for more than a year declined. This suggests that while rehabilitation and demolition of older buildings are bending the curve of vacancy in the region, new vacant buildings continue to appear in our residential and commercial areas.

BEHIND THE NUMBERS

Of the 4,300 new homes built in the region since 2010, about 450, or 10%, have been built within walking distance to a main street, downtown or transit corridor. This represents progress – by comparison, just 7% of homes built during the 2000s were within these areas. However, the overall share of homes near downtowns, main streets and transit corridors declined since more homes were built on open lots in suburban and rural areas. This metric does not include any of the new housing units recently created through the rehabilitation and reuse of older structures in downtowns and other walkable places.



Are we less burdened by the costs of housing and transportation?



Are we reducing concentrated poverty?

We'll be making progress if we **decrease** the share of household income spent on housing and transportation.

WHERE WE WANT TO GO

MAKING **PROGRESS**





% of household income spent on housing and transportation costs

2014 2017

48%

-5.0% PERCENTAGE POINT **DECREASE**

We'll be making progress if we **decrease** the share of residents living in neighborhoods with concentrated poverty.

WHERE WE WANT TO GO TO BE MADE

PROGRESS





% of the region's residents living in neighborhoods with a poverty rate of 20% or higher

2012 2016

23.8% 24.8% PERCENTAGE POINT **INCREASE**

BEHIND THE NUMBERS

53%

The median household in the region spends about 27% of income on housing and another 20% on transportation, leaving more than half of income for other expenses. This represents an improvement over recent years as similar data from 2014 showed that average housing and transportation costs accounted for over half of the regional median household income. Part of this improvement is due to the concurrent increase in median household income which grew faster than inflation over recent years.

BEHIND THE NUMBERS

While poverty can be found in every part of our region, nearly 9 out of 10 residents living in a neighborhood with concentrated poverty lives in one of the region's cities - particularly in Buffalo where 72% of the region's impoverished residents living in areas of concentrated poverty reside. As we strive to build a region where all have equitable access to jobs, good schools, amenities, and the many great things the region has to offer, we need to invest in making distressed neighborhoods places of opportunity while supporting policies that enable low-income people to secure housing they can afford in existing opportunity areas.

Food Access and Justice

Food is a building block of regional sustainability. How we grow, process and distribute food has profound implications for land use, economic development, energy and environmental quality. Our region continues to lose agricultural land, but at a slower pace than in recent decades. Small urban farms and community gardens can be found within urban areas and farmers markets are active across the region. But many small growers lack access to infrastructure and markets and some residents do not live within close proximity of a healthy food outlet. Future plans and policies can improve awareness and funding for food systems planning to ensure healthy food, viable farms, and a prosperous Buffalo Niagara.



Are we dedicating land to farming?



Are we growing our agricultural economy?

We'll be making progress if we **increase** the amount of land dedicated to farming. WHERE WE PROGRESS WANT TO GO TO BE MADE





Number of square miles of land dedicated to farming

2011 2016312.2 310.3

-1.9
SQUARE MILES
LESS

We'll be making progress if we **increase** wages for jobs in food production and manufacturing.

WHERE WE WANT TO GO MAKING PROGRESS





Total annual wages for jobs in food production and manufacturing (in millions of dollars)

2013 2016

\$301 \$306

\$5.2 MILLION DOLLARS MORE

BEHIND THE NUMBERS

The region has lost some farmland over the last few years, but the pace of farmland loss is decreasing compared to previous decades. Most of this farmland loss has occurred in outlying rural areas, particularly in eastern parts of Erie and Niagara counties, where many former agricultural lots have been converted to residential or are now classified as vacant land. However, this metric does not capture all areas used for food production, only parcels classified as agricultural for tax assessment purposes. More urban farms, community gardens and other innovative growing operations have launched over the last few years.

BEHIND THE NUMBERS

The region's food production sector saw growth in total employment, the number of businesses and average wages since 2013. Average wages in food manufacturing also increased, but employment in the sector is down almost 7%. There are fewer food manufacturing businesses in the region overall, but new businesses have opened, particularly in the region's cities and first-ring suburbs. New agricultural firms are generally small and tend to be located in rural towns throughout the region. Overall, the expansion of this industry created \$5.2 million more in total wages in 2016 compared to 2013.



Are we increasing access to healthy food for those most in

We'll be making progress if we **decrease** the number of households that can't easily access a supermarket. WHERE WE WANT TO GO MAKING PROGRESS





Number of households without a vehicle and beyond walking distance to a supermarket

2011

2015

55,954 54,626

-1,328
HOUSEHOLDS
LESS

BEHIND THE NUMBERS

Since 2011, the region has had a net increase of 16 supermarkets as new locations have opened and existing retailers have expanded to serve a wide variety of fresh foods. New supermarkets are located in densely populated urban and suburban areas within walking distance of many homes. Meanwhile, fewer of the region's households lack access to a personal vehicle. The region also now has more transportation options, like ride-sharing; more healthy food options, like healthy corner stores and mobile markets; and plans to build more supermarkets in underserved areas, all of which can help improve access to healthy foods in the future.

Climate Change Action

Our region's commitment to mitigate and prepare for the impacts of climate change has made notable strides in recent years. Building and retrofitting structures with energy efficient tactics is becoming more common place. Renewable energy generation remains a unique strength of Buffalo Niagara, which only continues to grow. Further, communities across our region are integrating climate change considerations into how they plan and govern. Though there is much more to do, indicators suggest Buffalo Niagara is moving in the right direction as it acts on climate change.



Are we conserving energy in our buildings?



Are we increasing generation of renewable energy?

We'll be making progress if we **increase** the square footage of LEED-Certified projects.

WHERE WE WANT TO GO

MAKING PROGRESS





Total square footage of LEED-Certified projects in the region (in millions)

2014 2017 **3.942 6.114**

2.172
MILLION SQUARE FEET MORE

We'll be making progress if we **increase** the share of locally-generated energy from renewable sources.

WHERE WE WANT TO GO MAKING PROGRESS





% of all locally-generated energy that comes from renewable sources

2012 2016

84.7% 92.7%

8.0%
PERCENTAGE POINT
INCREASE

BEHIND THE NUMBERS

Between 2000 and 2014, the region had completed 487 LEED activities. By 2017, the region had completed 740 LEED activities, an increase of 253 in just three years. LEED-Certified activities include commercial interior build-outs, retrofits of existing buildings, new green construction, engagement in an ongoing performance monitoring program, and other tangible actions and commitments to sustainability.

BEHIND THE NUMBERS

Of the region's 16 power-producing facilities, 10 plants produced a total of 22,462,779 megawatt hours of renewable energy in 2016. Hydro-power generated at Niagara Falls is by far the greatest contributor to our region's generation of renewable energy. However, the growth in renewable energy generation since 2012 has been driven by the debut or increased production of several solar or wind generating facilities, as well as the decommissioning or decreased generation of energy from regional coal power plants.



Are we planning for climate change?

We'll be making progress if we **increase** the number of Climate Smart Communities. WHERE WE WANT TO GO MAKING PROGRESS





Number of Climate Smart Communities in the region

2014 2017

9 11

2 COMMUNITIES MORE

BEHIND THE NUMBERS

Across Erie and Niagara counties, municipalities large and small are looking at ways to better prepare for the impacts of climate change. As part of its commitment to One Region Forward, the UB Regional Institute is providing technical assistance to communities who want to participate in NYS's Climate Smart Communities (CSC) program. In addition to the 11 communities who have taken the pledge, at least 3 more are looking closely at the program in 2018. Buffalo Niagara municipalities that have taken the CSC Pledge include: County of Erie, Town of Amherst, Town of Brant, Town of Evans, Village of East Aurora, Village of Lancaster, Village of Springville, Town of Lewiston, Town of Porter, Town of Royalton, and Town of Somerset.

Data Sources and Notes

Land Use and Development

Developed land within the urbanized area and serviced by a sewer district: UBRI analysis of parcel data (Erie County Dept. of Environment and Planning, 2012, 2016; Niagara County Dept. of Economic Development, 2011, 2016); Urbanized Land Area (U.S. Census Bureau, 2010); sewer district boundaries (various county and municipal sources, ca. 2013). This indicator represents the total proportion of all developed land area (parcels not classified as vacant, agricultural or environmentally-protected land) that falls within urbanized areas and sewer districts. The 2015 report misrepresented this metric as the % of developed land outside of urbanized areas with sewer service, but was corrected for this update.

Jobs in downtowns, Brownfield Opportunity Areas, or near main streets: UBRI analysis of data from the U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES), Workplace Area Characteristics, 2011, 2015; Brownfield Opportunity Areas (NYS Dept. of State, 2012); Downtowns (various sources, 2012); "Main Streets" Boundaries (defined by local stakeholders, 2012). Using GIS software, census block-level employment data was clipped to the shapes of Brownfield Opportunity Areas, downtowns, and within a ¼ mile buffer of main streets. The share of regional jobs within these areas was estimated by multiplying job density per block by the area of clipped blocks and dividing by the total number regional jobs.

Open space conserved from development: UBRI analysis of parcel data (Erie County Dept. of Environment and Planning, 2012, 2016; Niagara County Dept. of Economic Development, 2011, 2016); conserved lands (Western New York Land Conservancy, 2013, 2017; National Conservation Easement Database, 2012, 2017; US Geological Survey, National Gap Analysis Project, Protected Areas Database (PAD-US), 2016); public recreation lands (NYS Dept. of Environmental Conservation, New York State Public Land Boundaries) and wetlands (NYS Dept. of Environmental Conservation, Regulatory Wetlands Boundaries, 2012 and 2017). Using GIS software, these datasets were combined and used to calculate the total area of conserved land. This indicator estimates the total area of land in the region with legal protections or formal restrictions from being developed. This includes all land parcels classified as a public park, conservation area, wildlife preservation, or other protected natural area with development restrictions, in addition to land held in conservation easements and wetlands regulated by New York State. The figure excludes land within the adjacent Tuscarora, Tonawanda and Cattaraugus nations. The baseline figure reported in the 2015 plan measured a different indicator which represented the total area of land that is undeveloped (according to tax assessment data) and natural (according to land cover data), including farmland and vacant parcels that do not have legal protections. The baseline number was adjusted to fit this new definition.

Shoreline with public access: UBRI analysis of parcel data (Erie County Dept. of Environment and Planning, 2012, 2016; Niagara County Dept. of Economic Development, 2011, 2016); bike lanes and multi-use trails (Greater Buffalo Niagara Regional Transportation Council (GBNRTC), 2014, 2017); and U.S. Geological Survey, National Hydrography Dataset (2012, 2017). Using GIS software, all public open spaces, marinas and protected lands were selected from parcel data by property class code. Those intersecting any major water body (listed on NYS Dept. of State's "List of Coastal Waterbodies and Designated Inland Waterways," 2012) were identified, and the total length of waterways along these parcels

was calculated. Dedicated bike lanes and multi-use/recreational trails (from GBNRTC, 2014 and 2017) along these water bodies were added to the calculation of publicly accessible shorelines. The baseline number in the 2015 report was updated to include bikeways and multi-use trails. Final results were inspected and edited using satellite imagery.

Firms: NYS Dept. of Labor, Quarterly Census of Employment and Wages (Annual Averages 2013, 2016). This indicator represents the total number of business establishments in the region. For firms operating at more than one location, each individual establishment is counted, unless the payrolls are jointly maintained.

Total revenues compared to total costs for all local governments: UBRI analysis of NYS Office of the State Comptroller, Local Government Financial Data for Fiscal Year 2011 and Fiscal Year 2015 (2012, 2016). This indicator represents total expenditures (including debt payments and other uses) for all municipal and county governments divided by total revenues (including state and federal aid) for all local governments. Negative values are used when costs exceed revenues. This data source is updated on a quarterly basis for five years after initial release. The baseline number has been adjusted based on updated data, and future indicator updates should adjust figures for previous years.

Transportation and Mobility

Daily vehicle miles traveled per person: UBRI analysis of Vehicle Miles Traveled (VMT) data from Greater Buffalo Niagara Regional Transportation Council (2011, 2016) and U.S. Census Bureau, American Community Survey 1-Year Estimates (2011, 2016). This indicator represents the total regional vehicle miles traveled divided by the total regional population. The regional VMT figure used for the original calculation has been adjusted, resulting in an update of the baseline figure from the 2015 report.

Workers commuting via alternative modes of transportation: U.S. Census Bureau, American Community Survey 1-Year Estimates, "Means of Transportation to Work for Workers 16 Years and Over" (2010, 2016). Alternative modes include carpooling, public transportation, motorcycling, biking, walking, other means, and working from home.

Homes and jobs within areas accessible to transit stops with frequent service: UBRI analysis of parcel data (Erie County Dept. of Environment and Planning, 2012, 2016; Niagara County Dept. of Economic Development, 2011, 2016); employment data (U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (LODES), Workplace Area Characteristics, 2011, 2015); housing data (U.S. Census Bureau, Population and Housing Unit Counts by Block, 2010; Cornell Program for Applied Demographics and U.S. Census Bureau, Local Update Census Addresses (LUCA), 2017); Bus and Metro Rail Stops (Niagara Frontier Transportation Authority, 2012). Using GIS software, areas within ½ mile of a NFTA Bus or Metro Rail stop with frequent service (where average waits between bus arrivals is 15 minutes or less during peak weekday travel hours of 6-9am and 3-6pm, based on 2012 service) were delineated. The % of the region's residents and jobs within these areas was estimated using GIS data on population and jobs at the census block level. Housing data was limited to the extent of areas classified as residential by parcel data before calculating the housing density (units per acre) for each census block. Similarly, block-level employment data was limited to non-residential areas (using parcel data) before calculating job density (jobs per acre) per block. The % of each census block that fell within one half-mile of NFTA Bus or Metro Rail stops with

frequent service was multiplied by the calculated housing and job densities to estimate the number of people and jobs in areas accessible to transit stops with frequent service.

Dedicated bike paths, shared bike lanes and multi-use/recreational trails: UBRI analysis of data from Greater Buffalo Niagara Regional Transportation Council (2014, 2017). This indicator represents the length, in miles, of all dedicated bike lanes, shared bike paths and multi-use/recreational trails, calculated using GIS software. Data on bike lanes, paths and trails used for the baseline calculation have since improved, resulting in an update of the original figure from the 2015 report.

Housing and Neighborhoods

Residential and commercial vacancies: U.S. Dept. of Housing and Urban Development, U.S. Postal Service Vacancy Data (2013, 2016). This indicator represents the total number of residential and commercial addresses determined "undeliverable" for 90 days or longer by the U.S.P.S. Data are for the final quarter of the year being measured.

Homes within walking distance to a main street, downtown or transit corridor: UBRI analysis of parcel data (Erie County Dept. of Environment and Planning, 2016; Niagara County Dept. of Economic Development, 2016); address points (NYS GIS Program Office, Street and Address Maintenance Program, 2017); employment data (U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (LODES), 2011); housing data (U.S. Census Bureau, Housing Unit Counts by Block, 2010); Downtowns (various sources, 2012); "Main Streets" (local stakeholders, 2012); transit stops (Niagara Frontier Transportation Authority, 2012). This indicator represents the % of homes located within ½ mile of walkable communities (or areas with more than 8 housing units per acre and 2 jobs per acre), downtowns, main streets and transit stops with frequent service (where average waits between bus arrivals is 15 minutes or less during peak weekday travel hours of 6-9am and 3-6pm, based on 2012 service). Residential parcels were selected by property class codes and year built. Address points within these parcels were selected and used to find the total number of homes within the designated areas. The baseline number was updated based on new methods (the incorporation of address point data) and to show the share of all homes within these areas, rather than the share built since 2000.

Household income spent on housing and transportation costs: U.S. Dept. of Housing and Urban Development and U.S. Dept. of Transportation, Location Affordability Index (2014); Center for Neighborhood Technology (CNT), Housing and Transportation Affordability Index (2015). This indicator represents the share of the regional median household income spent on housing and transportation costs, according to the Location Affordability Index. Since the Location Affordability Index has not been updated, CNT's Housing and Transportation Affordability Index was used to update the indicator for this report, which is based on a similar methodology.

Residents living in neighborhoods with concentrated poverty: UBRI analysis of data from U.S. Census Bureau, American Community Survey 5-Year Estimates, "Ratio of Income to Poverty Level" (2008-2012, 2012-2016). This indicator estimates the share of the region's population living in areas of concentrated poverty by dividing the total population of all census tracts in the region with a poverty rate of 20% or more by the regional population. Census tract 91.1 in Erie County (UB North Campus) was excluded from this calculation; due to the student population, the tract has over 5,800 residents, but poverty status was only determined for 13 (8 of which were in poverty).

Land dedicated to farming: UBRI analysis of Parcel Data (Erie County Dept. of Environment and Planning, 2012 and 2017; Niagara County Dept. of Economic Development, 2011 and 2016). GIS software, was used to sum the total land area of all parcels classified as agricultural for tax purposes. The baseline number in the 2015 plan was updated as it included farmland from the U.S. Dept. of Agriculture's Natural Resources Conservation Service, Common Land Unit data, which is now unavailable.

Total wages for jobs in food production and manufacturing:
UBRI analysis of data from NYS Dept. of Labor, Quarterly Census of
Employment and Wages (Annual Averages 2013, 2016). The baseline
number reported in the 2015 plan was adjusted for inflation from
2013 to 2016 U.S. dollars using the U.S. Bureau of Labor Statistics
Consumer Price Index (CPI) Inflation Calculator. This indicator
represents total wages of all jobs covered by unemployment insurance
in these sectors: "Crop Production" (NAICS 111), "Animal Production"
(NAICS 112), and "Food Manufacturing" (NAICS 311).

Households without a vehicle and beyond walking distance to a supermarket: UBRI analysis of data from ReferenceUSA, U.S. Businesses Database (2012, 2016); U.S. Census Bureau, American Community Survey 5-Year Estimates (2007-2011, 2011-2015); and parcel data (Erie County, 2012, 2016; Niagara County, 2011, 2016). Supermarkets and grocery stores were identified from ReferenceUSA by NAICS code and employment level (50 or more). Census data was limited to residential areas (using parcel data) before calculating the per-acre density of no-vehicle households for each block group. Densities were multiplied by the % of each block group that fell beyond 0.4 miles walk of a supermarket (using ArcGIS Network Analyst) to estimate the number of households without a vehicle and beyond walking distance to a supermarket.

Climate Change Action

LEED-Certified projects: U.S. Green Building Council, Green Building Information Gateway (2014, 2017). This indicator represents the total square footage of all LEED-Certified activities, including commercial interior build-outs, building retrofits, new green construction, engagement in an ongoing performance monitoring program, and other tangible actions and commitments to sustainability.

Locally-generated energy from renewable sources: UBRI analysis of data from U.S. Dept. of Energy, Energy Information Administration (2012, 2016). This indicator represents total energy production from renewable sources (wind, solar, geothermal and hydroelectric) for all commercial energy providers divided by total energy production for all facilities in the region.

Climate Smart Communities: NYS Dept. of Environmental Conservation, List of Climate Smart Communities (2014, 2017). This indicator represents the number of municipalities and counties that have passed the New York State Climate Smart Communities Pledge as a municipal resolution.

The following indicator was not updated due to data unavailability:

New development on environmentally-sensitive areas: This indicator requires updated land cover data from U.S. Geological Survey, which has not yet been released.



Change takes time, and the numbers only tells us so much

Progress, especially on a regional scale, takes time, and the bigger picture of regional progress is more nuanced than can be represented in a single update or by a set of numbers. Although there is no single measurement that can capture the full essence of progress in the region, indicators gauge collective regional trends resulting from strategies and implementations enacted in the last several years.

While there is value in understanding trends, numbers do not tell us the whole story of progress. Programs or policies that support the vision of One Region Forward may have been implemented since 2015, but data may not reflect the impacts of those decisions. These actions still constitute progress, even if their effects have yet to be measured.



Measuring the region's progress moving forward

As the region evolves, data sources are also likely to change; some data may become obsolete or unavailable, while new data provide fresh insights into our region. Future report cards must remain flexible, reflecting these shifts. Indicators that cannot be updated due to changing data availability may be removed, while new indicators may be added to coincide with changing priorities or novel data sources. Future report cards may not occur annually, since change often takes longer than a year to show noticeable affects reflected in data, and data sources do not always update on an annual cycle.



Encouraging progress through strategies and local actions

The One Region Forward plan offers dozens of strategies and actions that can drive progress across these indicators. Developed by +100 stakeholders and subject matter experts from across Buffalo Niagara, these recommendations can be taken on by various regional actors – city, town, village, and county governments; local nonprofits; community partnerships; and even local citizens. As we reflect on our region's progress across these indicators, it is also important that we reflect on these recommendations to identify how we can continue to make investments and decisions that advance the values of One Region Forward.



oneregionforward.org

One Region Forward is supported by an information rich, interactive website. A tool unto itself, the site documents and facilitates the broad base of community engagement and learning for the initiative, features best practices locally and from around the world, catalogs tools and resources for implementation, offers online mapping resources, and shows how citizens, communities, businesses, and others from across Buffalo Niagara are defining sustainability for the region.

One Region Forward was launched as part of the Partnership for Sustainable Communities, a Federal interagency initiative between the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and the U.S. Environmental Protection Agency.

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