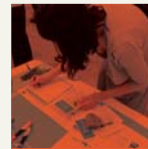





A NEW WAY TO PLAN FOR BUFFALO NIAGARA



FEBRUARY 2015
One Region Forward Final Plan





The parties that shaped this plan do not, individually, have the power and authority to direct actions beyond their distinct borders or missions. With that in mind, this document is designed as a **tool to measure progress against shared community values** and recognizes that there are multiple approaches to achieve the regional performance to which we aspire.

The work that provided the basis for this publication was supported by a U.S. Department of Housing and Urban Development (HUD) Sustainable Communities Regional Planning Grant. The author and publisher are solely responsible for the accuracy of the statements and interpretations contained in the publication. Such interpretations do not necessarily reflect the views of the Federal Government.



Support for this effort was provided by a \$2 million grant from the Federal Department of Housing and Urban Development through its Partnership for Sustainable Communities, an interagency collaboration also involving the Federal Department of Transportation and the Environmental Protection Agency.

This document will help the region coordinate how it invests federal, state and local dollars and will give Buffalo Niagara priority status for funding opportunities today and into the future.

One Region Forward Steering Committee

A cross-sectional partnership of public, private, and nonprofit organizations providing project oversight throughout the 3-year planning and engagement process. Greater Buffalo-Niagara Regional Transportation Council (GBNRTC), Niagara Frontier Transportation Authority (NFTA), New York State Department of Transportation (NYSDOT), Erie County, Niagara County, City of Buffalo, City of Niagara Falls, Association of Erie County Governments, Niagara County Supervisors Association, University at Buffalo Regional Institute and Urban Design Project (UBRI/UDP), Daemen College Center for Sustainable Communities and Civic Engagement (CSCCE), VOICE Buffalo, Local Initiatives Support Corporation Buffalo (LISC), Western New York Environmental Alliance (WNYEA), Buffalo Niagara Riverkeeper, The John R. Oishei Foundation, Buffalo Niagara Medical Campus (BNMC), Belmont Housing Resources for WNY, Inc. (Belmont), Buffalo Niagara Partnership (BNP), Empire State Development, New York State Department of State, Division of Smart Growth, and Niagara Falls Housing Authority.

Project leadership providing program administration, management, and governance oversight.

Greater Buffalo-Niagara Regional Transportation Council

Project leadership providing program administration, management, and governance oversight.



Niagara Frontier Transportation Authority

Fiscal administrator ensuring project meets the fiscal and administrative requirements of the Sustainable Communities Regional Planning program.



School of Architecture and Planning, University at Buffalo

Regional Sustainability Team conducting the research, planning, community engagement, writing and technical analysis for One Region Forward.



School of Architecture and Planning
UB Regional Institute

Buffalo Niagara Partnership

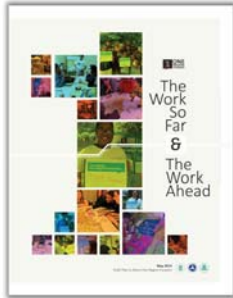
Overseeing private sector engagement programming to bring business stakeholders into the planning process.



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Additional Resources and Documents



The Work So Far & The Work Ahead

First Draft Report for One Region Forward

Released in July 2014 for public feedback and input, “The Work So Far & The Work Ahead” was the first major public report of One Region Forward. The document details dozens of strategies and actions developed by our Working Team subject matter experts as well as other research and community engagement findings. While a building block for the final plan, this document also is a resource that includes greater contextual detail on One Region Forward and the region.



Growing Together

Food Access and Justice Strategy Document

Growing Together offers further detail on recommended strategies and information regarding food access and food justice for Buffalo Niagara. It echoes community concerns over weaknesses in the region’s food system and seeks to make fresh food more equitably accessible, to ensure that sustainable food production remains a viable career, and to strengthen the connections between the region’s food producers and residents. The document was created by a team from the University at Buffalo School of Architecture and Planning’s Food Systems Planning and Healthy Communities Lab, led by Dr. Samina Raja.



Resilient Buffalo Niagara

Climate Change Strategy Document

Resilient Buffalo Niagara is a research-driven strategy document that offers guidance on how the region can better prepare for the predictable -- and many unpredictable -- impacts of climate change here in Buffalo Niagara. It focuses on building community resilience to minimize losses from climatic changes, and at the same time support sustainable development of the region. Faculty and students from the University at Buffalo School of Architecture and Planning authored this document under the direction of Dr. Himanshu Grover.



Complete Communities for a Changing Region

Housing and Neighborhoods Strategy Document

Complete Communities is a planning and policy document that provides greater detail on housing-related recommendations and outlines best practices to consider in Buffalo Niagara. The document embodies the principles of One Region Forward by fostering neighborhoods that are great places to live while providing housing choices for a changing population – choices that are affordable, accessible, well-served, energy efficient, and suited to the needs of a diversity of residents. The plan was created by UB Regional Institute in partnership with Make Communities, LLC.



Fair Housing Equity Assessment

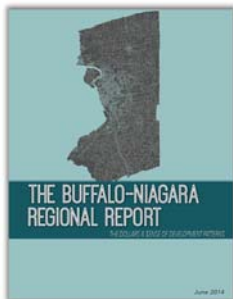
A team of equity stakeholders worked with One Region Forward to craft the Fair Housing Equity Assessment (FHEA), a document intended to advise how issues of equity and opportunity should be considered comprehensively in regional decision-making. The Fair Housing Equity Assessment examines the roots of Buffalo-Niagara’s racial, ethnic and geographic segregation and exclusion, obstacles to solving these issues, and strategies for overcoming these barriers through One Region Forward’s regional planning process. The research, analysis and community engagement around the FHEA have helped shape the focus of equity and opportunity that are woven through many of this plan’s implementation strategies. UB Regional Institute authored this document in partnership with Make Communities, LLC.



1RF Citizen Planning School Idea Summit Booklet

One Region Forward and the UB School of Architecture and Planning celebrated the first year of the Citizen Planning School and the “Champions for Change” program at the Idea Summit on October 4, 2014. This booklet features the work of the “Champions for Change” and how these dedicated citizen planners are working to advance sustainable development in their own communities.

The Idea Summit was a fun, celebratory event that featured the work of the first class of Citizen Planners and Champions for Change, explored what it means to translate ideas into action, and provided opportunities for community members to network with local experts, the citizen planners, funders and other attendees.



THE DOLLARS & SENSE OF DEVELOPMENT PATTERNS

The Buffalo Niagara Regional Report

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 a driving consideration for One Region Forward. To help understand how productive various forms of development in Buffalo Niagara are regarding tax production, the Buffalo Niagara Partnership invited Joe Minicozzi and Urban3 to perform this study for our region. It looks at the tax production and value per acre of various geographies – downtowns, village centers, shopping malls, main streets, suburban strip corridors, and others, to demonstrate that when land consumption is considered, sustainable forms of development are often the best bet for the local tax base and revenue stream.



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.



A NEW WAY TO PLAN FOR BUFFALO NIAGARA

What You'll Find Inside

This document represents the culmination of three years of research, community engagement, partnership building and planning under the banner of One Region Forward.

Within the pages of this plan, you will find the major research findings of what the data tells us about where the region is today and expressions of thousands of citizen voices on the direction people in the region want to see Buffalo Niagara go. Proposed strategies and actions, built by a team of 100+ subject matter experts, are detailed and provide the basic framework for moving the region toward a more sustainable, resilient, prosperous and opportunity-rich future. Finally, the plan sets out a path to measure and guide implementation.



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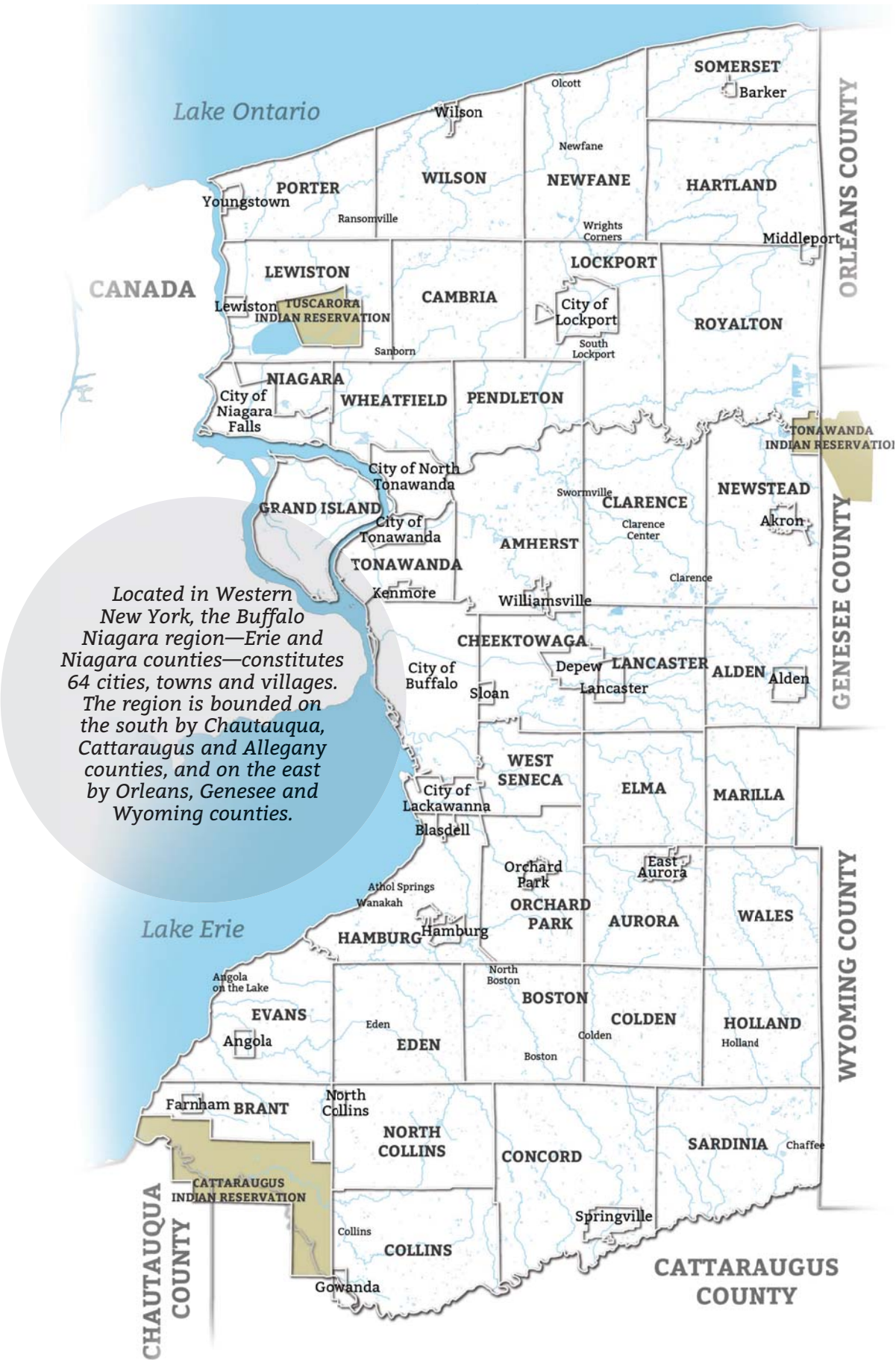
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Located in Western New York, the Buffalo Niagara region—Erie and Niagara counties—constitutes 64 cities, towns and villages. The region is bounded on the south by Chautauqua, Cattaraugus and Allegany counties, and on the east by Orleans, Genesee and Wyoming counties.

WHERE WE ARE MATTERS

The Buffalo Niagara region is defined by its unique geographic location. It lays at the confluence of two Great Lakes, linked by one of the wonders of the natural world, the Niagara River and Falls. It occupies a strategic position on the US-Canadian border and on the southern edge of a bi-national region of nearly 9 million people. Its geographic proximity to the Midwest and Northeast make it 500 miles from 41 percent of the US population.



The region is also defined by its natural and human-made assets, its landscape and climate, its cultural heritage, and its people. International renowned Niagara Falls is undoubtedly the region's most recognizable asset, but Buffalo Niagara is abundant in key resources such as incomparable art and architecture, a rich history as a center of manufacturing, prime agricultural land, and natural assets ideal for active and passive outdoor recreation. Diversity is embedded in who we are and where we've been. We see it in our many ethnic festivals, the influence of the Seneca Nation of Indians on our heritage and future, and in the important contributions our region has made to both the Abolitionist and Civil Rights movements. Great colleges and universities provide a foundation for a growing knowledge economy. The growth potential of key industry sectors such as advanced manufacturing, health and life sciences, and professional services has begun to stabilize the economy. Other livability indicators such as unique neighborhoods and affordability make the region an attractive place to run a business, start a career or raise a family.

Woven throughout the planning framework are two critical issues that define where we've been and where we want to go – our relationship to our fresh water resources and our desire to grow our economy in a way that is more equitable and locally rooted. One Region Forward is not an economic development plan. Buffalo Niagara already has one in the "Strategy for Prosperity" created by the Western New York Regional Economic Development Council. Nor is it a plan to restore and protect our local waterways, as this is being addressed through local planning and clean-up efforts led by Buffalo Niagara Riverkeeper. But the plan for moving One Region Forward was developed with our economic sustainability and dependence on fresh water squarely in





mind. It is intended to be a resource to guide the coordination of land use and transportation across the region in a way that supports our economic goals and the value water has to Buffalo Niagara. In other words, these issues – water and equity - are not addressed head-on throughout this plan; but rather they are embedded deeply in each of the five focus areas of One Region Forward—designed to always either directly or indirectly have a positive impact on these two issues.

Shared prosperity and opportunity for all

Our society is riven by increasing inequality – in opportunity and conditions – and thus, so too is our region. Of all the aforementioned great things our region has to offer, many in our region lack access to decent affordable housing, have limited options for getting around, inhabit environments that are unsafe or unhealthy, find it hard to find and purchase fresh, healthy food and lack access to quality health care, education and employment. This is not just a burden on them. The degradation and disuse of this precious human capital is a burden on everyone, not just because of the cost of maintaining an increasingly threadbare “social safety net,” but also because of the contribution to our commonwealth that they do not make. As we consider the future of our region, we must keep in mind that a more equitable society is in the self-interest of all and our decision making must reflect our aspirations for a more equitable and opportunity filled region.

An economy that is forward looking and creates wealth locally

Working to build community wealth is another promise we make to each other. Whether we are producing goods and services for sale, building the places where we will make a life, or raising the next generation of citizens, we owe it to each other to ensure that the fruits of our labor stay here. Growing local and buying local are fundamental values for our work. Creating jobs that stay here and growing wealth that stays here are also fundamental commitments that are woven throughout this plan.

Water has shaped our past and will shape our future

A great deal of North America’s fresh surface water flows past our region’s front door. Buffalo and Niagara Falls were settled because of the access to and abundance of fresh water. The Niagara River, its eleven major tributaries, and the Erie Canal have shaped the development and growth of our region for almost two centuries. Hydropower, a key natural resource that fueled our industrial past remains an asset to our economy.

Strategies to protect our waterways such as implementing green stormwater management, protecting and rebuilding wetlands, reducing agricultural and nutrient run-off into waterways, and prioritizing universal access to and along all waterways are critical to each of our five focus areas. Investing in strategies, policies and regulations that identify and prioritize measurable improvements in water quality, access, and ecosystem health will create opportunities to transform the image of our region from that of a “rust belt” city to one rooted in its blue economy, enabling and catalyzing revitalization through the restoration of the health and integrity of our freshwater systems. In an ever changing world, water will only grow in importance to Buffalo Niagara, and strategies that protect and leverage our water resources are critical to moving One Region Forward.

A new story for Buffalo Niagara

Buffalo Niagara is writing a new story about itself – a story about how an old “rust belt” region is retooling itself in the 21st century to meet the real challenge of how to live more sustainably in an era of economic change, demographic upheaval and environmental uncertainty.

It is a story of old places but new people, fresh ideas, and new ways for working together to use our land more wisely, get around more efficiently, create great places to live, ensure a healthy food supply, and meet the challenges of climate change and a transforming energy economy.

We are also familiar with the story of how soldiers returning from the wars got in their cars and moved their families to the suburbs on federally financed highways to homes with federally guaranteed mortgages. We know how Tonawanda and Cheektowaga and the Town of Niagara, later Amherst, Hamburg, Pendleton and other communities grew as the populations of Buffalo and Niagara Falls dwindled. We also know how in the post-industrial era starting in the early 1970s the population of the entire region – not just the cities – began to shrink.

We are all too familiar with the old story of Buffalo Niagara – how the Erie Canal and later the railroads turned a fur-trading outpost into a great commercial center; how iron and coal and hydro-electricity turned the region into an industrial giant; and, sadly, how the post-industrial era shuttered the plants, laid off the workers, sent people away, and left places to decay.

These stories are true, more or less. There is even some truth to the oft-repeated litany about mistakes we have made as a community – highways that blocked waterfronts, historic buildings demolished, public facilities mis-located.

But maybe – just maybe – these stories aren’t so relevant anymore to what we as a regional community need to do next. History can be a teacher, but it can also blind us to the possibilities of the future. This plan reflects the resolve of thousands who contributed to its creation to learn from the past, but to lean forward into the future.

Demographic transformation.

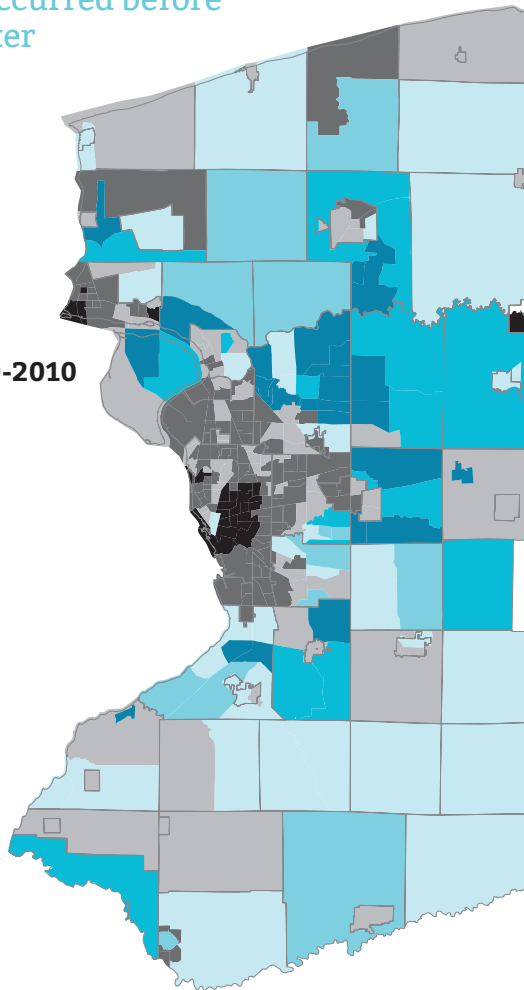
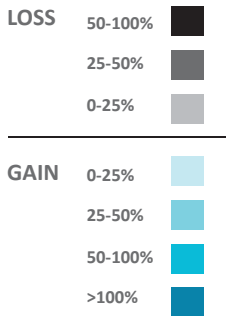
It is undeniable that Buffalo Niagara as a region has lost population continuously over the past 40 years or more. We reached our peak population of more than 1.3 million at the census of 1970. By 2010 that figure had dropped to 1,135,509ⁱ. However, it is worth noting that half of the total decline occurred during the 1970s and three quarters of the decline before 1990 – almost a quarter century agoⁱⁱ. Indeed, recent population estimates suggest that Buffalo Niagara may have actually grown slightly since the 2010 censusⁱⁱⁱ.

Like the national population overall and most regions in the country, our population is older; partly because people are living longer; partly because people are having fewer children. Yet, recent evidence suggests that Buffalo Niagara’s growth in the 20 to 34 year age group actually exceeds the national average^{iv}. We also see an influx of immigrants from around the world with new energy to contribute to the region’s revival.

Our population has declined, but three quarters of the loss occurred before 1990 – almost a quarter century ago. Recent estimates suggest we have grown since 2010.

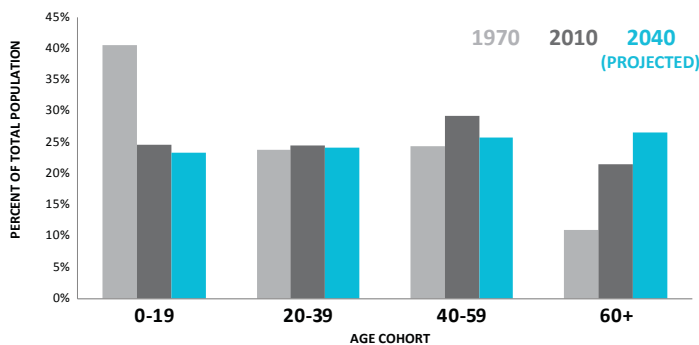
Population Change, 1970-2010

PERCENTAGE CHANGE IN POPULATION BY CENSUS TRACT



Source: US Census, 1970 and 2010; Logan, Xu & Stults, 2012, Longitudinal Tract Database.

Percent of Population by Age, 1970, 2010 and 2040



Source: U.S. Census, 1970 and 2010; Cornell Program for Applied Demographics, "New York Population Projection Data by County, 2010-2040", 2011.

It's partial, preliminary evidence that things might be changing, and that our population decline is by now an old, old story. Maybe it's time to make some room in our imaginations for a new one.

Economic change.

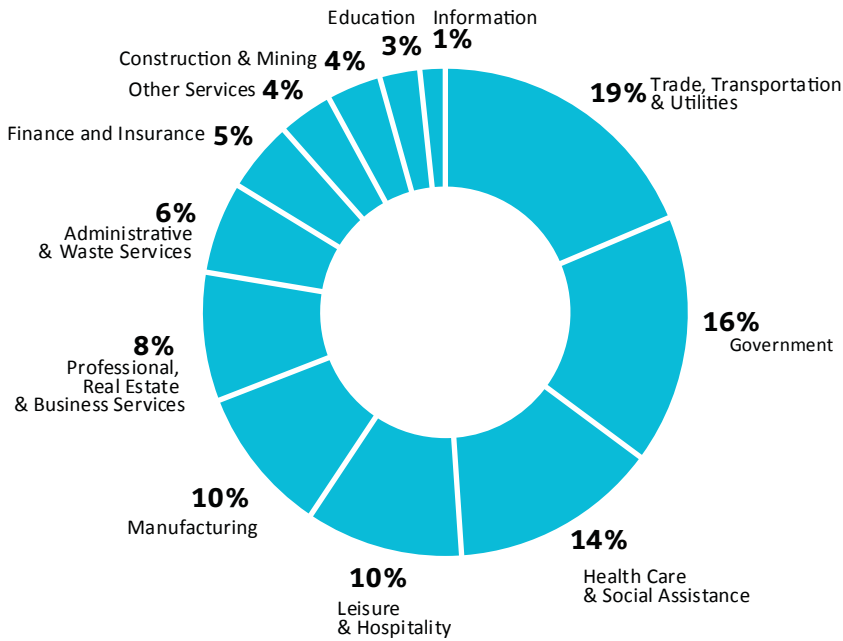
It is also undeniable that Buffalo Niagara has been through wrenching economic contraction and change. The manufacturing economy that dominated the region through the first three quarters of the 20th century has been transformed. In 1970, one of every three jobs in Buffalo Niagara was in manufacturing. Today it is only one in ten. Meanwhile, the share of jobs in health care, education, finance and professional services has more than doubled^v. The factory jobs have largely gone away, and our regional economy is more like the nation as a whole and more balanced than ever before.

The prospects for the future are better than in a very long time. Buffalo Niagara enjoys an unprecedented consensus among business, political and community leaders about how to pursue our regional prosperity. We have a new way of working together in the Western New York Regional Economic Development Council (WNYREDC). And we have a clear strategy that emphasizes our strengths in health and life sciences, advanced manufacturing and tourism and focuses investments in workforce development, entrepreneurship, and "smart growth."

Stories in the paper about companies picking up and leaving have been replaced with stories about companies starting up, adding jobs, and investing in facilities. The word-of-mouth about young people pulling up stakes and moving elsewhere to find opportunity are more

than balanced by stories about native Buffalonians coming home to make their futures. There remains very large pockets of entrenched and concentrated poverty in our community. But there is more opportunity now that might be shared.

Employment by Sector



Source: New York State Department of Labor, Quarterly Census of Employment and Wages, 2012.

Jobs in health care, education, finance and professional services have more than doubled. The factory jobs have largely gone away, but our regional economy is more like the nation as a whole and more balanced than ever before.

The industrial legacy.

Our industrial past has left us with a legacy of damaged land, discarded buildings, and poisoned water. Buffalo Niagara has an extraordinary concentration of the wasted industrial assets known as “brownfields.” However, we have also been working steadily to reclaim these assets, cleaning up our land and waterways and finding new uses for old buildings. Two high-tech companies from California are preparing to move into a new building on the former site of the Republic Steel plant in South Buffalo. The reinvention of the Remington Rand building into the mixed-use “Remington Lofts” has been a catalyst in revitalizing North Tonawanda’s waterfront along the Erie Canal. The pending redevelopment of the third Trico Building on the Buffalo Niagara Medical Campus doesn’t seem so unusual after the reuse of two others like it or the emergence of Larkinville.

The remains of the industrial era look more like opportunities than ever before. We understand more clearly, too, just how central our water resources will be to the future of our community and economy. We are cleaning up our waterways, safeguarding our watersheds and addressing the problems of storm water management. Even more, we are

learning how important water and environment can be to the future of a “blue/green economy.”

We still mourn the loss of the region’s architectural treasures – Frank Lloyd Wright’s Larkin Administration Building, the old Erie County Savings Bank, the Buffalo Public Library and the Niagara Falls Museum. But the fact is that we have saved more of our great architecture than we have lost – Sullivan’s Guaranty Building, Wright’s Martin House complex, Richardson’s magisterial Buffalo State Hospital, the old Customs House and the United Office Building in Niagara Falls – contributing not only to our quality of life but our strength as a visitor destination. With the important continuation of state preservation tax credits on top of federal tax credits more successes like the restoration of the Hotel Lafayette are in the offing.

Old industrial facilities and former office buildings are being transformed into apartments and condos. City housing prices are rising. Young do-it-yourselfers are renovating old homes in neighborhoods we thought were lost.

Change in Population and Urbanized Land Area, 1970-2010



Source: U.S. Census Bureau, 1970 and 2010.

The challenge of sprawl.

The challenge of sprawl remains to be met. Throughout the 20th century and especially since the widespread adoption of the automobile after 1920, Buffalo Niagara grew outward. Until 1970 our sprawl was pushed by growth. After 1970 we suffered from sprawl without growth. During four decades of population decline the urbanized area in Buffalo Niagara grew by 166 square miles^{vi}. We now drive more than twice as much as we did in 1970^{vii}. We are much less likely to take transit, ride a bike or walk^{viii}. And the cost to taxpayers of providing public infrastructure and public services continues to rise^{ix}.

The basic problem is that our dependence on the automobile led us to create an urban pattern that can only be served well by the automobile. Low density housing, shops and offices in seas of parking, discontinuous street systems, roads and highways hostile to pedestrians, all mean it is harder and harder to get around by walking, bicycle, bus or light rail. With all that, we have seen transit ridership grow modestly since 2004^x and the emergence of a vibrant bicycle culture is visible on the street.

Scientists argue we need to wean ourselves from fossil-fueled vehicles to cut greenhouse gas emissions. Public health experts say this sprawl leads to obesity and other dangerous health outcomes. Economic development specialists suggest we need to work toward greater “spatial efficiency” if we are to fully regain our prosperity. Community activists would point out that an urban region where it is so hard to get around without a car disadvantages everyone, but especially the poor, older adults, and persons with disabilities.

The process of sprawl without growth has also left us with a housing market that is badly distorted. During the period of “sprawl without growth” we built far more housing than we had new households^{xi}. The result was massive housing vacancy, abandonment and demolition in our central cities, a continuous extension of suburban development out into farm country, and more recently a weakening of housing values in our first ring suburbs^{xii}.

Even here, there is hope on the horizon. Some of the most creative work in housing development is taking place in our central cities. Old industrial facilities and former office buildings are being transformed into apartments and condos. City housing prices are rising^{xiii}. Young do-it-yourselfers are renovating old homes in neighborhoods we thought were lost. Homebuilding on the periphery of the region continues, but there is also development at the center.

Sprawl – with or without growth – has put pressure on another crucial element of regional sustainability.

Farms have gone out of business^{xiv} and farmland has been converted to residential uses at an alarming rate^{xv}. In the long run, our regional food security will be determined by how much of our own food we are able to grow right here. That won't be possible if we continue to grow houses where crops once grew.

At the very least, the issue of sprawl is on the public agenda now. The Erie Niagara Regional Framework for Growth put it there in 2006. The Western New York Regional Economic Development Council has highlighted the economic as well as environmental imperative to promote “smart growth.” One Region Forward has worked hard to

advance the conversation. Awareness has grown. All we need is the resolve to act.

What it will take to succeed as a region in the 21st century will not be what it took to succeed in the 19th or 20th century. Of course, it will take jobs, great neighborhoods and housing choices, public investments in transportation infrastructure and urban services, good schools and parks and more, just like it did in the first two centuries of our history. But our challenges today are different.

The idea of sustainability.

Sustainability is an indispensable concept for the 21st century. It draws our attention to the interconnections among our economy, our community and our environment. To achieve the “good life” we need a productive economy. But our economic health is rooted in the health of our environment. And we need both to create real social justice.

The “bottom line” is far less abstract. The economic costs of environmental degradation and climate disruption can be enormous. The costs of mitigating global climate change will be minor when compared with the cost of repairing the damage from extreme storms, floods, and heat waves or the cost of storm proofing our communities. The rewards for making a creative transition to a post-carbon economy will likely be substantial.

We will be a great and successful region if we can repair and reuse the great urban fabric that Ellicott, Olmsted and our awesome waterfronts have given us. Likewise, we will succeed if we can better manage the armature of streets and utilities on which a wealth of housing rests. Success will also require that we continue to make great neighborhoods that give our residents choices about where and how to live.

We will succeed if we can continue to work together to build an economy in an environment of continuous technological and organizational change. We will succeed if we can transform our pattern of urban development to use land more wisely, conserve energy, and leave room to grow the food we will need in a more tumultuous world.

We will succeed if we can take seriously the concept of sustainability in an age of global climate change. We will succeed if we can find a way to meet our own needs without compromising the ability of future generations to meet their needs. That means, in part, planning for and making the difficult transition to a post-carbon energy economy. It also means preparing for the impacts of climate change that are already determined by past emissions of greenhouse gases.

The work ahead.

We have an extraordinary amount of work to do. Yet, we are better prepared to do it now than any other time that many of us can remember. There is a new energy in the people of our region. There is a new attitude. We see it in the willingness of community leaders of all types to work together to meet the future. We saw it in the eagerness with which citizens engaged the work of making this plan. We see it in the momentum of work already under way. And now we see it in a plan that outlines a path to travel and describes a way to move “One Region Forward.”

Sustainability is not a new concept. The Senecas and other Haudenosaunee people have long embraced and promoted a philosophy that incorporates seven generations into its approach to providing for the welfare of its people. This generational approach includes making decisions that take in account the past, the present, and the future.

SEVEN GENERATIONS

THOSE WHO HAVE PASSED

GRANDPARENTS

PARENTS

YOU

CHILDREN

GRANDCHILDREN

THOSE YET TO BE BORN

WHERE WE'RE GOING
ALREADY HAS
TRACTION



Pioneering new ways of planning and working together



This is not a new enterprise. Thousands of citizens in Buffalo Niagara in a variety of organizations – governments, companies, advocacy groups, neighborhood associations and more – have been working on these issues for years. This plan is simply to bring those efforts into sharper focus and make better, faster progress on all that needs to be done.

This plan does not replace any other plans. Indeed, it builds on them. And our careful review and analysis of more than 160 plans by local and regional governments, special purpose agencies, advocacy groups and others, revealed how closely aligned are the values and goals of people throughout our region.

Yet, while we build on the history of planning, we believe One Region Forward represents a new way to plan for Buffalo Niagara. This plan was designed to serve as a decision-making tool. It does not tell anyone what to think or what to do, but rather how to think about serious issues facing our communities and the region as a whole.

It recognizes the importance of building off the collaborations that set the stage for One Region Forward, most notably the Erie and Niagara County led 2006 Framework for Regional Growth. And even more recent, it works to support and leverage the regional planning documents and funding programs of the Western New York Regional Economic Development Council (WNYREDC).

In fact, we already have some very serious resources for action: financial, organizational and otherwise. WNYREDC is focusing state investments toward supporting existing communities, Main Streets, downtowns, and former industrial sites. Governor Cuomo’s Buffalo Billion Investment Development Plan has established a \$30 million fund targeted at transit-oriented development and walkable neighborhood centers. The New York State Energy Research and Development Authority’s Cleaner, Greener Communities program offers significant funding for projects that support regional sustainability. Our Metropolitan Planning Organization, the Greater Buffalo Niagara Regional Transportation Council, is aligning its allocation of state and federal transportation funding along with the tenets of One Region Forward.

Perhaps even more important than the resources aligning for implementation is the incredible partnerships and capacity we have built through this planning process. More than ever before, we are working together towards a common vision for Buffalo Niagara.

The time is now to keep moving forward.

Building on the **history** of planning



DATA THROUGH RESEARCH
examining plans, trends and actions

The Data



160+ PLANS
ACROSS
64 MUNICIPALITIES

Tens of thousands of citizens have guided local plans in our region over many years.

Our Efforts

Completed in 2006, the Framework for Regional Growth is the cornerstone for One Region Forward.



700+ LOCAL ORGANIZATIONS
Working together to guide and shape the plan

Our Values

Community Values Drive Everything

COORDINATED PLANNING

*Values and investments align
Sharing data and collective problem-solving*

Taken together, this work is coordinated with One Region Forward and gives clear direction to the ongoing work.

- A Strategy for Prosperity and The Buffalo Billion
- Strengthening WNY's Safety Net
- WNY Sustainability Plan
- Buffalo Green Code
- Buffalo and Niagara County Brownfield Opportunity Areas

BUILDING ON COLLABORATIVE PROGRESS



→ Building the **future** of planning →

NEW DATA DEVELOPMENT
testing the data with the community, elected officials and the business community



DATA MEASUREMENT
performance metrics to gauge progress in the future



100+
trained through
the Citizen
Planning School

27
workshops
to "map our
future"

50+
presentations
to local
organizations

Tabling at
30+
Community
Events, Fairs
& Festivals

5 Text It
Forward
surveys
900+
responses

5,000+
CITIZENS

Engaged in a multitude of ways to share their vision and add their voice to the conversation

5 BIG
IDEAS

Developed to get us closer to realizing our values

COUNTLESS
NUMBERS

Who can
see the
work
continue



...continue to be expressed,
sharpened and refined by many.

...shape and
inform the ideas
and strategies.

...will
continue to
guide how
we move
forward.

THE
NETWORK

will advance a
coordinated strategic
approach for the future
based on research and
community informed
decision-making.



Buffalo Niagara
2040 Metropolitan
Transportation Plan



We make investment decisions together that align our **values** and are based on objective **data**.

→ Many have been a part of the **network**



A truly citizen-driven process, opportunities for our diverse citizenry to shape One Region Forward was provided at our "Community Congress" sessions. Outreach was designed to engage the broadest possible array of perspectives.

Shaping the vision, mapping our values, and providing feedback on concepts in development.

Community Congresses

Local Government Council

Mayors, supervisors, council members and legislators from our 64 cities, villages, and towns.

Values of many drive the conversation and the planning

THE NETWORK

A Seat for Everyone at the Table

Private Sector Council

Perspectives from business leaders and employers convened by the Buffalo Niagara Partnership.

Working Teams

100+ Subject matter experts and stakeholders

Translating community values into strategies and actions and progress metrics for evaluation.

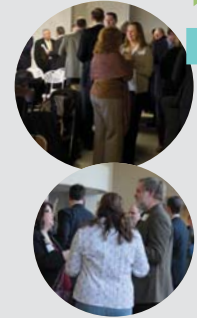
Steering Committee

22 Organizations from across Niagara and Erie represented on the Steering Committee

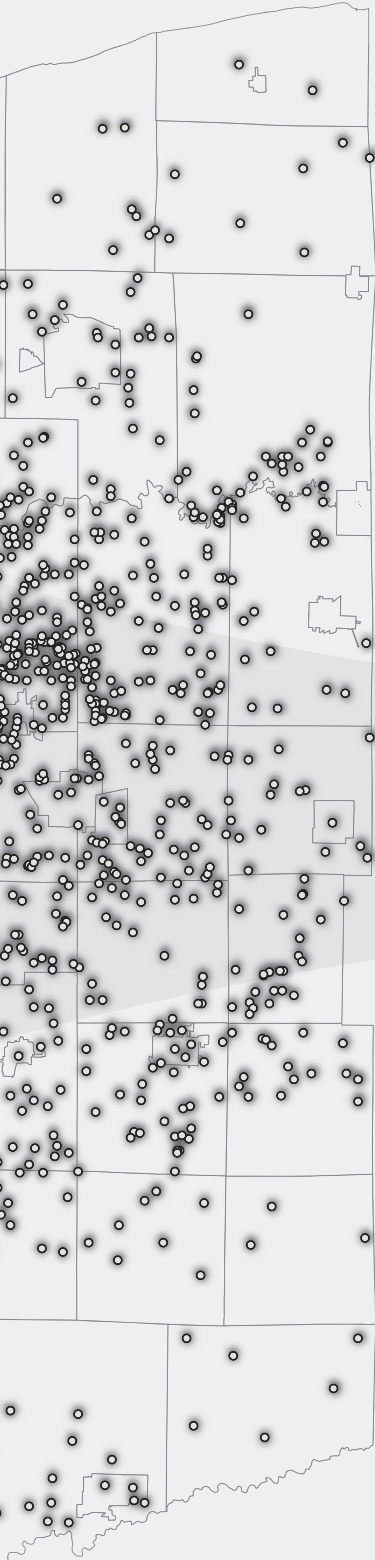
Providing ongoing direction and guidance to ensure the work has broad-based support and representation.

Citizen Planners

Building citizen capacity for grassroots implementation.



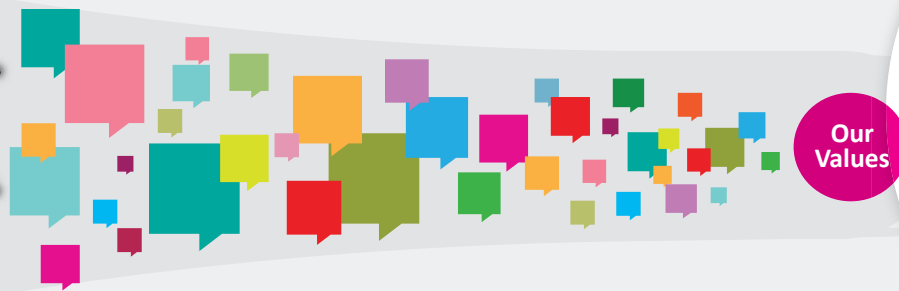
→ **Many** voices from many parts of our region →



Every successful plan is a reflection of the values the community shares.

Buffalo Niagara has been talking about where we want to go as a region for many years. One Region Forward has continued that dialogue, starting with the values embedded in over 160 plans and decades of planning in our region.

It's a great place to start.



Our Values

**OUR VALUES
CONNECT
US**

Many voices from many parts of our region expressed values about...

- OUR ECONOMY**
- OUR INFRASTRUCTURE**
- OUR TRANSPORTATION SYSTEM**
- OUR HOMES AND NEIGHBORHOODS**
- OUR FARMLAND**
- OUR GREEN ENERGY**
- OUR NATURAL RESOURCES**
- OUR HERITAGE**
- OUR PARKS AND RECREATION**
- OUR NEED TO COLLABORATE AND IMPLEMENT**

WHAT DO WE SAY WE VALUE?

OUR VALUES CONNECT US

Our Values

What do 160+ plans tell us about our values?

There is an ongoing public conversation in Buffalo Niagara about where we want to go as a region. The plans we have made in the recent past, and the tens of thousands of citizens who participated in their formation, are an important part of that conversation.

As a starting point for One Region Forward, our research team collected, read, and analyzed more than 160 planning documents from the region, its cities and towns, its neighborhoods and districts. All of these plans contain statements about our vision, values, and goals. We've added these statements up, sorted them into categories, illustrated them in "word clouds" and translated them into draft value statements for public review in early 2013.

The result of that engagement process, which consulted local government leaders, the business community, and the public at large, yielded a revised set of value statements which are outlined to the right.

A Good Place to Start: 10 Broad Values We Share

Build a more competitive, creative, prosperous, broadly shared, locally rooted, and sustainable 21st century regional **economy**.

Manage **infrastructure** strategically, investing in existing areas and maintaining, removing, or extending urban systems to lower costs, improve efficiency and enhance quality of place.

Expand **transportation** options to improve **access** to jobs, services, and recreation; meet the needs of students, seniors, persons with disabilities, and the transit dependent; move goods to market; and promote energy **efficiency** and **safety**.

Repair, renew, redesign and preserve our **housing** stock and to provide healthy, affordable, and efficient **choices** to a changing population in **neighborhoods** that are great places, safe, accessible, well-served and distinctive.

Protect **farmland** and forests, support farmers, promote sustainable farming, encourage urban agriculture, connect farms to local markets, foster value-added processing, cultivate agri-tourism, and ensure access to **healthy**, affordable, locally-sourced **food**.

Use less energy, promote **green energy** through direct incentives, technology development and pricing policy, to reduce greenhouse gas emissions while we prepare to cope with the impacts of climate change.

Restore and protect our water, air, soil, wildlife habitat and other **natural resources** to promote a healthy ecology, economy and community.

Protect and develop cultural, **heritage**, and architectural resources to preserve community identity, enrich daily life, create great places, attract visitors, and build our economy.

Maintain, improve, expand and connect our **parks**, trails and greenways, **waterfronts**, recreation areas, and open spaces for a wide range of users, to protect the environment, attract visitors, and grow the economy.

Foster **collaboration**, coordination, and strong implementation, share information widely, educate broadly, and plan with a **diverse** and engaged public including not-for-profit and community-based organizations, public bodies, and **citizens** in general.

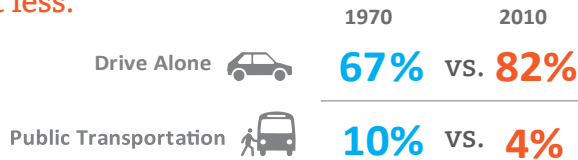
We have less people, but use more land.

CHANGE IN POPULATION AND DEVELOPED LAND, 1970-2010



We commute to work by car more and take transit less.

COMMUTING MODES, 1970 VS 2010

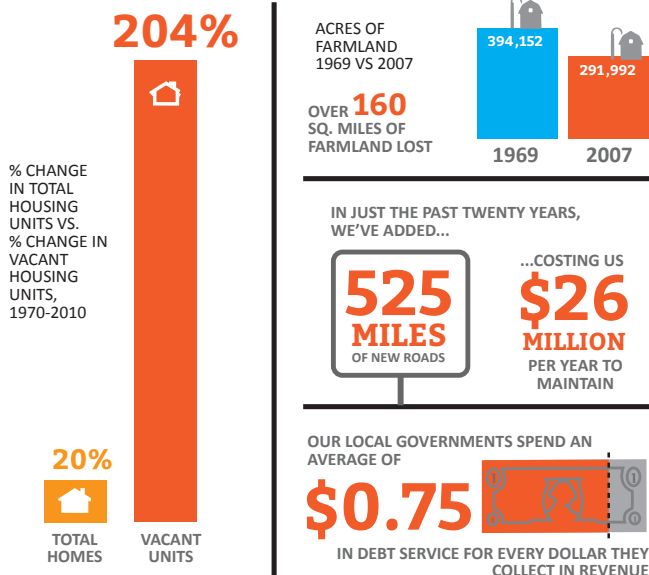


VEHICLE MILES TRAVELLED DAILY PER CAPITA, 1970 VS 2010

We drive more than twice as far.



We build new homes and roads, empty our cities, lose farmland, increase our infrastructure costs and tax burden.



WHAT HAVE WE BEEN DOING?

What's changed over the past 40 years?

Development across our region has continued to spread outward even as our population has shrunk. We've lost nearly 214,000 people over the past forty years, yet we have expanded our development footprint by 166 square miles. This outward development pressure has contributed to the loss of 160 square miles of agricultural land since 1970, as farms give way to residential subdivisions, commercial plazas, and business parks.

This dispersed development pattern has also affected the way we get around. On average, we drive more than twice as many miles a day as we did in 1970. People live further from their jobs, and errands that were once accomplished on foot, now require us to drive. Over 525 miles of new roads have been built in just the past twenty years to serve these far flung developments, costing us an estimated \$26 million each year in maintenance costs. Low density development also makes public transportation a less viable option. Consequently, the number of individuals commuting to work by car has increased significantly since 1970, while the share of commuters relying on public transportation has decreased by more than half.

The region's oldest urban neighborhoods and housing stock were some of the first casualties of sprawl. Since 1970, we built over 150,000 new housing units, far outstripping the formation of new households. This imbalance has contributed to the emptying out of our central cities, with the number of vacant homes tripling over the same period.

See Data Sources and Notes.

WHERE CAN WE GO FROM HERE?



If our actions don't match our **values**, what can we do about it?

We can think about the **land, open space and natural areas** we should **protect** and maintain.



How important is it to protect farms and farmland and preserve natural land and waterways?



We can think about preserving the **character of communities**.



How important is it to maintain the character of the places we like best?



We can think about what **type of places** we create.

DIFFERENT PLACES FOR DIFFERENT PURPOSES



Urban Center

Think of: Downtown areas of big or medium-sized cities



Village Center

Think of: Smaller commerce centers you might see in bustling village Main St. areas, small city downtowns or mixed-use neighborhoods



Traditional Neighborhood

Think of: Neighborhoods with mostly residential streets, homes near each other, and within walking distance to a commercial street with activities, parks and services



Suburban Strip

Think of: Strip malls with retail and other establishments concentrated in areas with large parking lots in front



Office/Industrial

Think of: Low-rise office complexes with limited services on site and large parking lots surrounding buildings



Single Family Residential

Think of: Newer neighborhoods made up of just homes that have attached garages and driveways, large yards, and a sense of privacy

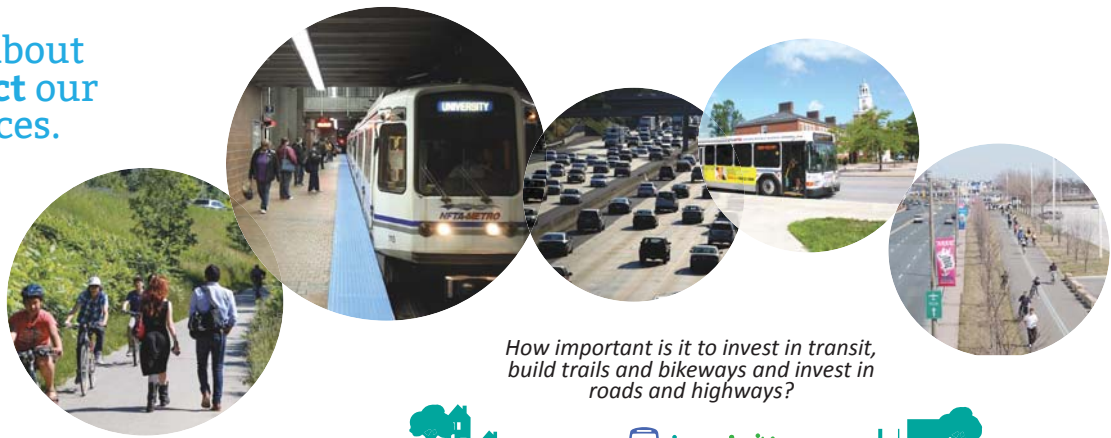


Exurban Residential

Think of: Very large homes far apart from each other, typically in quiet rural areas and far from services, parks or activities



We can think about how we **connect** our people and places.



How important is it to invest in transit, build trails and bikeways and invest in roads and highways?





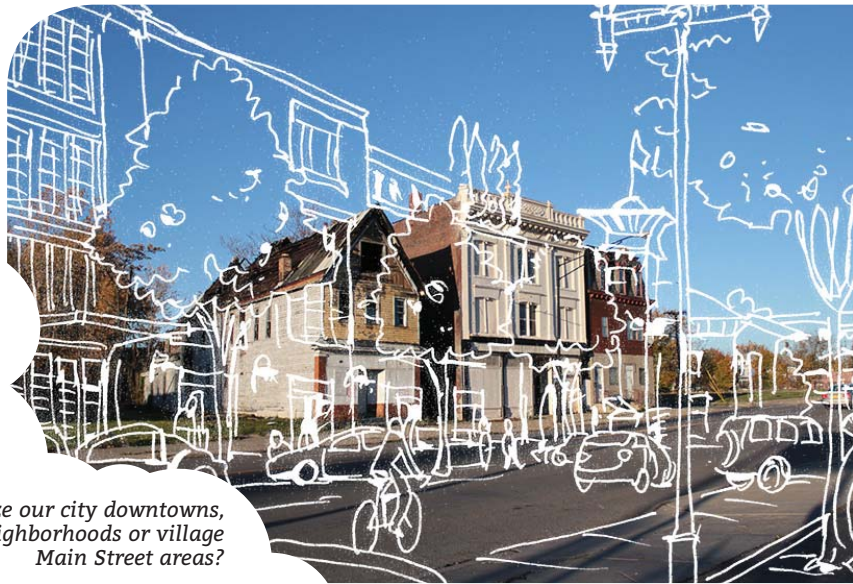
We can think about **how and where** we make those changes.

Should we

REVITALIZE PLACES?

Should we bring new jobs and people to places that are not as bustling as they once were?

Would you revitalize our city downtowns, declining urban neighborhoods or village Main Street areas?

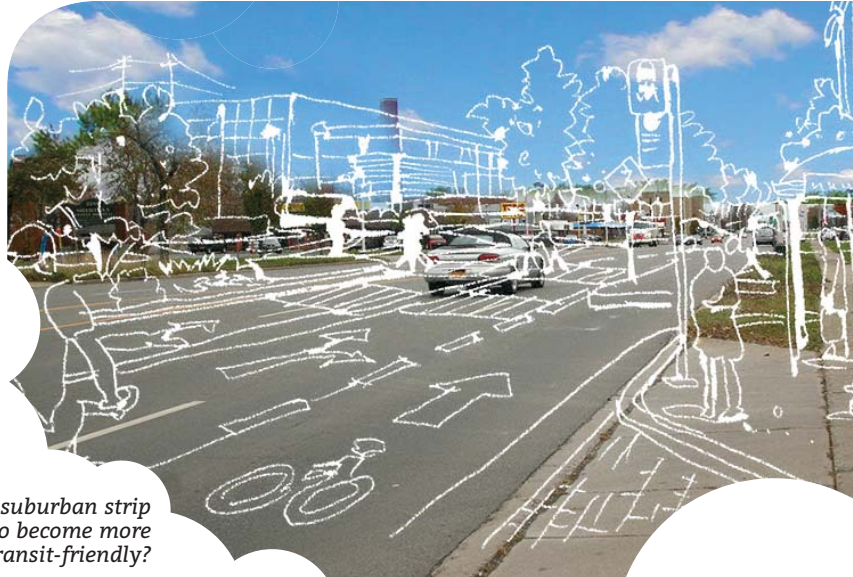


Should we

RE-IMAGINE PLACES?

Should we transform the character of developed places as something different than they are today?

Would you want to see suburban strip areas transformed to become more walkable and transit-friendly?



Should we

CREATE NEW?

Should we focus development on land that is currently undeveloped or vacant?

Would you create a new, mixed-use town center on the rural periphery?





Would you encourage infill housing in neighborhoods suffering from vacancy and abandonment?



Would you want to see suburban strip developments retrofitted to create a more human-scaled environment?



Would you want to see a new residential subdivision built on farmland?

WHAT COULD OUR REGION LOOK LIKE?



Mapping Workshops held all over the region gave citizens a chance to **imagine what our region should look like**. Using a series of markers and “place type” chips, citizens worked in small groups to **discuss shared values** and map the form and location of their ideal scenario for future regional growth and transportation connections.



4 Months
27 Workshops
770 Participants

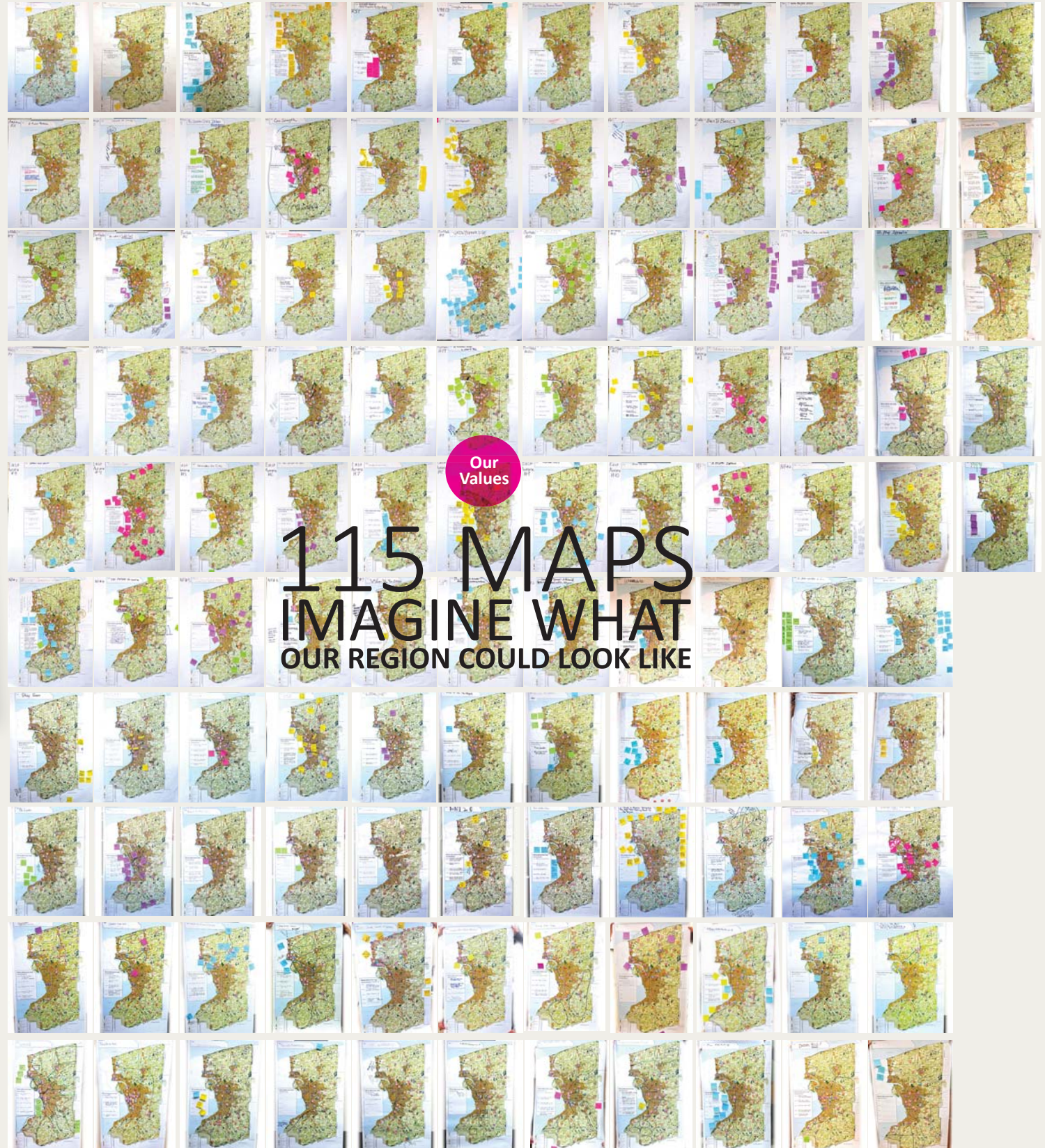
The Workshops were held in...

- church basements
- board rooms
- bar rooms
- historic Main Street theaters
- swanky downtown loft apartments
- suburban living rooms
- rural town halls
- school cafeterias

...with...

- high school students
- college students
- immigrant groups
- private developers
- public housing residents
- block clubs
- nonprofit organizations
- local officials and planning board members

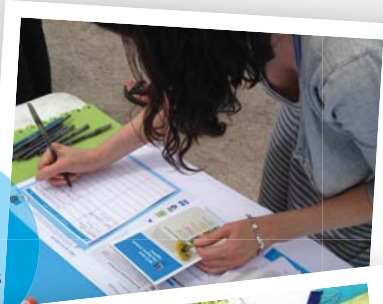
* A detailed list of the 27 workshops can be found in Appendix E: Community Engagement



Our Values

115 MAPS IMAGINE WHAT OUR REGION COULD LOOK LIKE

Tabling at
30+
Community
Events, Fairs
& Festivals



5 Text It
Forward
surveys
900+
responses



50+
presentations
to local
organizations



THE WORK OF THE NETWORK



Our Values

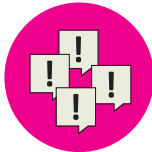
What Should We Keep?

What Should We Change?

How and Where Should We Make Change?

Over 18 months of asking members of our community where we want to go as a region.





HOW SHOULD WE MOVE FORWARD?

We Share Common Priorities

Public participation has been critical in defining common priorities and framing a vision for our region. Whether it was making participation easier through Text It Forward, a text message-based campaign, more accessible through online tools like PhotoVoice, providing a deeper level of engagement with the Citizen Planning School, or getting people to think about principles for a coordinated, regional approach to land use through hands-on mapping workshops, taken together, these engagement efforts have created a truly citizen-driven vision for our region.

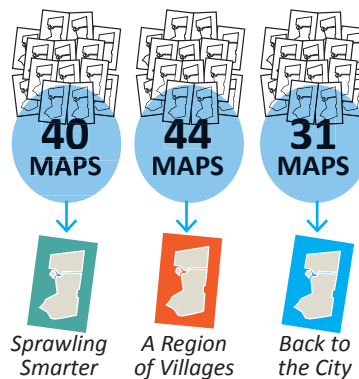
While there were many different visions for our region expressed throughout the public participation process, some **distinct common priorities** developed across the different tools and platforms available for citizen feedback.



WHERE SHOULD WE GO FROM HERE?

Turning 115 maps into Alternative Scenarios for Our Future

Three alternative scenarios were created directly from citizen input at the Mapping Workshops where participants from across the region worked together to map out a future vision for Buffalo Niagara.



Each citizen-created map was unique, but many showed similar tendencies and were used to form these **three alternative scenarios**.



HOW SHOULD WE MOVE FORWARD?

What **115 Maps** and **Months of Community Feedback** Tell Us About Our **Values**



Citizens suggested we should place...

94%

OF NEW JOBS



and

87%

OF NEW HOMES



...in already developed areas of our region.

“We need to be offering more housing type choices especially in our urban centers.”

- Feedback from Private Sector Council member

At least

59 maps

used “protecting farmland” as a guiding principle for future development.

Nearly **1/3 of all maps**

prioritized preserving, revitalizing and repurposing urban neighborhoods.

“Rails-to-trails, particularly for connecting rural areas with other parts of our region, is a strategy we need to pursue.”

- Feedback from Private Sector Council member

Participants placed

91% of new homes in mixed-use neighborhoods

but only **9%** in places that would have single-family homes only.

106 out of 115 maps

said that “increasing the ways we can “get around without a car” was a guiding principle.

4 out of **5** maps

emphasized the need to control sprawl.

On average, participants added

59 miles of transit lines per map.

“More infrastructure= more maintenance= more taxes to maintain.”

- Citizen feedback from Alternative Scenario Online Survey

“Use rails and transit to capitalize on Niagara Falls tourism.”

- Citizen participant at a Mapping Workshop in Niagara Falls

On average, participants added

53 miles of recreational/ bike trails per map.

“We can’t afford new taxes for new roads and infrastructure.”

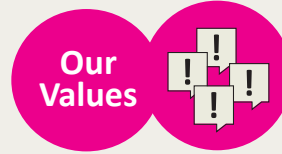
- Citizen feedback from Alternative Scenario Open House in Lockport

On average, participants added

6 miles of roads and highways per map.

“Take advantage of existing infrastructure.”

- Citizen feedback from Alternative Scenario Open House in Lockport



We Share Common Priorities

At the mapping workshops and at community events throughout the region, we asked people to express their vision for the type of region we should be building for future generations. Thousands of voices have shaped five common priorities that are important to a shared approach to land use.

Grow where we’ve already grown

Most of the maps expressed a strong desire to preserve, revitalize and re-purpose existing places rather than creating entirely new places. Many specifically wrote about “limiting sprawl”, “rebuilding infrastructure,” and “focusing development.”

Build and protect walkable communities

In general, participants prioritized compact, mixed-use and walkable neighborhoods over more spread out, homogeneous places.

Better connect our region by diversifying our transportation options

Making connections was one of the most predominant themes expressed across the 115 maps. Participants drew and wrote about making new connections or improving existing ones with specific suggestions about linking to universities, the airport to downtown, Buffalo to Niagara Falls, urban centers to one another, and doing it “without cars.”

Protect farm land, parks and natural areas

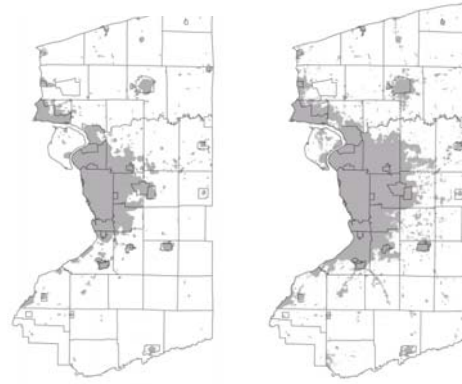
Farmland, open space, parks, waterfront, and other natural areas were themes woven into almost every map.

Maintain fiscally sound local governments

In conversations with the business community, elected leaders, and citizens at large, the issue of reducing our region’s tax burden while maintaining and improving quality public services was paramount. A close reading of many of the maps also revealed this intent, especially in the comments people wrote about where and how they imagined new development and infrastructure.

WHERE SHOULD WE GO FROM HERE?

By looking at different scenarios, we can understand the impacts of future choices.



1970> 2010> 2050

Over the past 40 years, our region has continued to spread out, even as we lost population.



What if we stay on our current path?

Business As Usual

This scenario assumes an unaltered projection of the region's development patterns from 1990 to 2010 out to the year 2050 in order to place the additional jobs and homes the region could hold by 2050. This is the unlikely "do-nothing" approach we can use as a starting point to measure the progress made in the alternative scenarios.

WHAT HAPPENS IN THIS SCENARIO?

The trends of the past continue. New jobs and homes would **continue to grow on rural land** while homes in first-ring suburbs as well as central cities would be abandoned. This sprawling development would be **harder to serve by public transit**.



...or if we imagine our future differently?

3 Alternative Scenarios developed from 115 citizen-created maps



Sprawling Smarter

One group of citizens envisioned some reinvestment in existing communities, but also wanted to see future development spread out to new places. This group thought most new development should be compact and walkable, but largely disconnected from the urban cores.

WHAT HAPPENS IN THIS SCENARIO?

Our region would see some outward growth of new jobs and homes, however, these would take on a much **denser, mixed-use form**. Abandonment would still be an issue for central cities and older suburbs. **Less farmland and open space would be lost** to development.



A Region of Villages

Another group of citizens expressed a vision to focus new development within existing neighborhoods across a renewed network of walkable communities in cities, villages and town centers throughout the region.

Our region would see **new jobs and homes concentrated** in our city, town, and village centers. Neighborhoods would be **more walkable**, and **improved transit** would connect these places better. A great deal of **farmland and open space would be protected** for agriculture and "environmental services."



Back to the City

This group of citizens imagined that nearly all new development would be used to reinvest in the urban cores of Buffalo and Niagara Falls, revitalizing virtually all the region's urban neighborhoods.

Our region would see **nearly all new jobs and homes concentrated** in our core cities. Transit would serve this denser development much better. More existing homes would be rehabbed than abandoned and our former industrial sites would be reused as employment centers.



See "Where Should We Go From Here" in Data Sources and Notes for a full description of how the extrapolation of past trends was used to construct the "Business As Usual" scenario and how the 115 citizen-designed maps were used to construct the three alternative scenarios.

What our region looks like in 40 years depends on the actions we take collectively and individually.

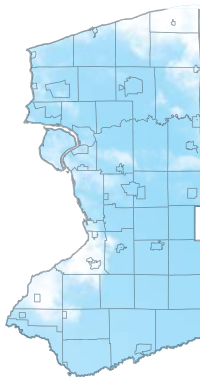
Our Values

How do the scenarios play out when tested against our values?

Using a software modeling program called Envision Tomorrow, researchers from UB Regional Institute tested out how well each of the four development scenarios perform on a series of indicators tied to our shared values. The software doesn't tell the future, but it helps us imagine it.

In the **"Business As Usual"** scenario, where development trends of the past extend out into the future, we fall considerably short in achieving the regional performance to which we aspire. In the **three alternative scenarios**, each constructed from the 115 citizen-designed maps, we see varying degrees of outcomes, but the underlying actions driving these scenarios get us considerably closer to achieving our values.

Scenarios tell a story of how choices we make today will impact our region in the future.



How we choose to use our land, invest in our resources and communities will shape what Buffalo Niagara will look like in 40 years.

There is no "one size, fits all." These scenarios aren't meant to be either-or choices.

The four scenarios tell a story of how our region may change over time based on where Buffalo Niagara is today and the choices we might make about how we use our land and how we invest our resources. They are not intended to be either-or choices, as we know land use decisions are made at the local level in our state and region. In essence, there is not one scenario or singular map that will define our future. Various actions and approaches can move us toward our values and certain approaches may work in some communities, but not in others.

As each local community reflects on their own land use and zoning codes, they can look to our shared regional values, the four alternative scenarios, and how each aligns with where we want to go as a region to help inform how they implement planning and policy in their local jurisdiction.

HOW DO OUR CHOICES PLAY OUT?

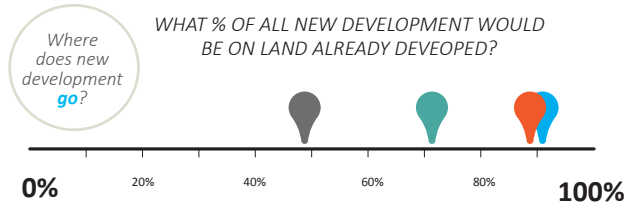
-  Business As Usual
-  Sprawling Smarter
-  A Region of Villages
-  Back to the City

What if we stay on our current path?



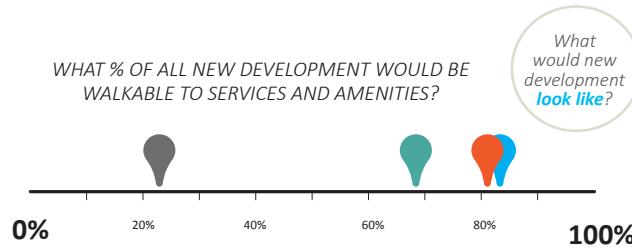
Business As Usual

Will we grow where we've already grown?



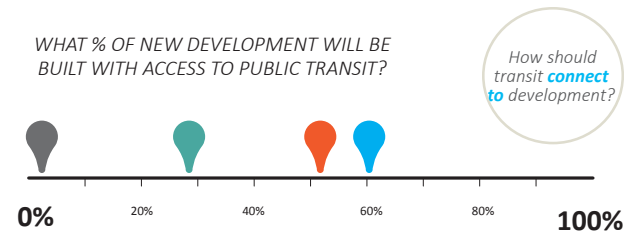
About half of new development would fall within urbanized areas, **adding more infrastructure** while **neglecting existing infrastructure in urban areas**.

Will we build walkable, livable communities and preserve those that are vibrant and working?



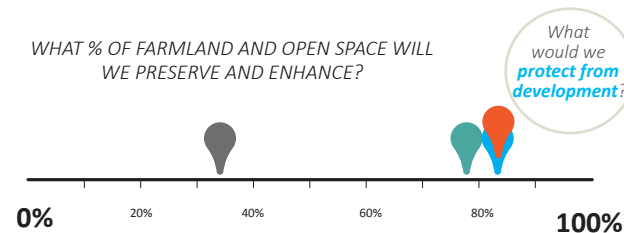
Over 75% of new jobs and homes would be added in low-density, single-use developments where **most daily needs can only be accessed by automobile**.

Will we better connect our region by diversifying transportation options?



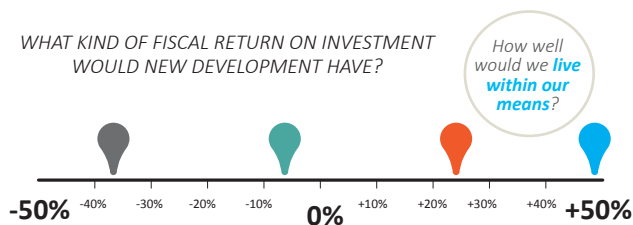
We would **drive even more** than we do now. The sprawl of homes and jobs would make building and maintaining infrastructure more costly and providing transit service more difficult.

Will we protect farmland, parks and natural areas?



One-third of our current undeveloped, natural areas would remain as farmland and **environmental services in rural areas would be replaced by large homes on large lots**.

Will our local governments be more fiscally sound?



Housing and jobs would grow revenue on undeveloped lands, but these additions to the tax base **would not be enough to cover the costs** of extending services to these sites.

→ What if we imagine our future differently?



Sprawling Smarter

About 75% of development would go in urbanized areas. Most development would be compact, **limiting new infrastructure**, adding a fair share of jobs to “brownfield” areas, and **curbing abandonment in some neighborhoods**.

Most development would be built with walkability in mind, but many new homes and jobs **would be disconnected from communities** that are already lively and walkable.

New suburban development **would be more pedestrian-friendly**, but since access to jobs would mostly be by private automobile alone, we **would drive about as much as we do today**.

“Smart growth” development in the suburbs **would protect a great deal of undeveloped land** even as it provided suburban housing choices on “greenfield” sites.

Though development would apply “smart growth” principles, **new revenues would still not cover the costs of extending infrastructure** to new developments, though it would come close.



A Region of Villages

Nearly 90% of **new development would go in urbanized areas**. Concentrating growth in the region’s treasured villages, hamlets and urban centers would **significantly limit abandonment** and development on “greenfield” sites.

Focused development would place new homes by established communities with entertainment and services nearby, making **“walkability” the new norm** in places throughout the region.

High frequency transit service would become feasible in outlying village centers leading to a **“hub and spoke” transit network that would be accessible to half of new homes and jobs**.

Focusing development in villages, hamlets and urban centers would **protect 84%** of the region’s prime farmland, natural areas and open space.

Investing in existing communities in villages, hamlets and urban centers would keep municipal finances **“in the black” as revenues would exceed costs by more than 20%**.



Back to the City

Over 90% of **new development would be within previously developed areas**, mostly in cities and older suburbs, completely **revitalizing many abandoned neighborhoods** and adding a surge of jobs to “brownfields”.

New homes and jobs would grow closely together in cities and older suburbs, making these places even **more vibrant and walkable than they are today**.

Though new transit stops would be limited, since 60% of new growth would focus around the existing transit network, this scenario would provide **the best transit connections and the biggest drop in automobile travel**.

Concentrating development in central cities and older suburbs would **preserve the lion’s share of existing open spaces**, with 90% less farmland being developed compared to the “Business as Usual” scenario.

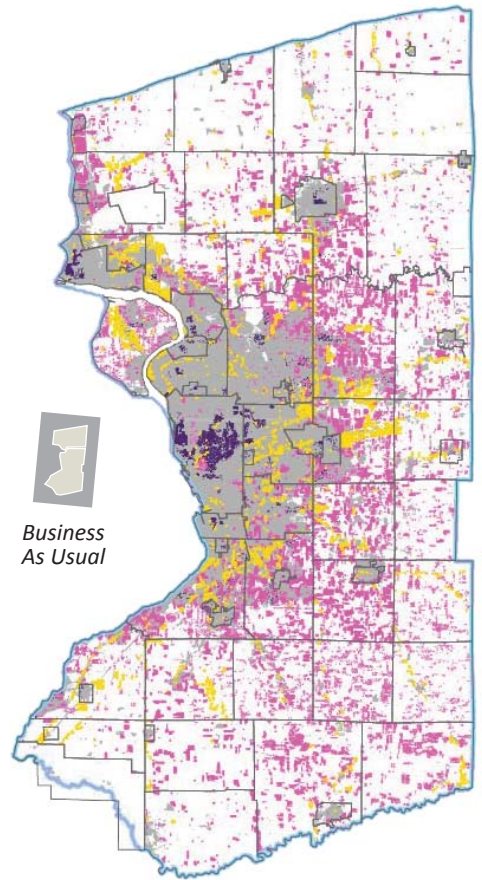
Focusing new development on the revitalization of central cities and older suburbs would generate the best return on investment of all the scenarios, with **revenues outstripping costs by nearly 50%**.

HOW DO OUR CHOICES PLAY OUT? *WILL WE GROW WHERE WE'VE ALREADY GROWN?*

Our Values

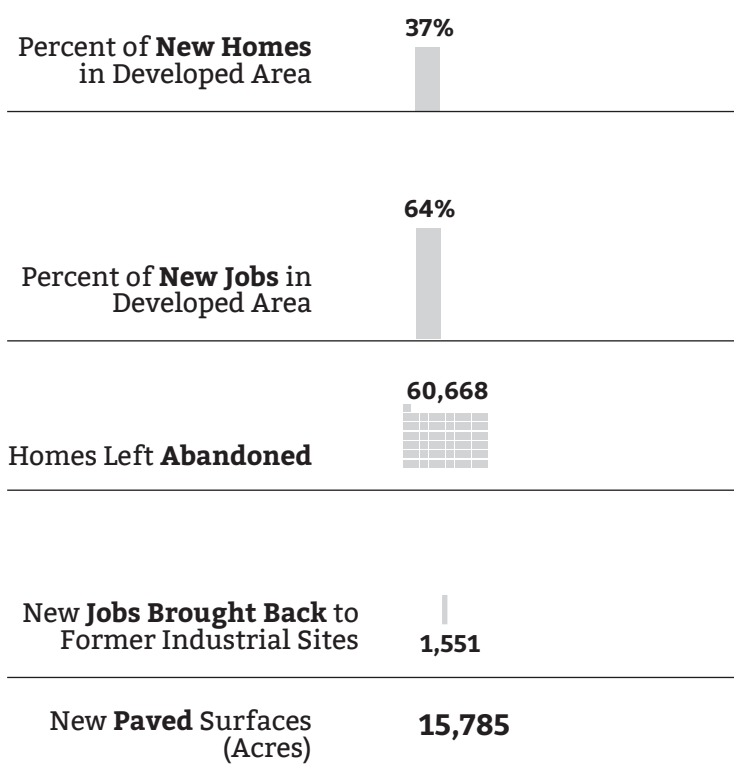
To grow where we've already grown means to focus future development around areas that are already developed. This common priority would focus **revitalization of older communities** while **protecting natural open spaces** and **curbing infrastructure costs**.

- DEVELOPED LAND
- NEW HOMES
- ABANDONED HOMES
- NEW JOBS

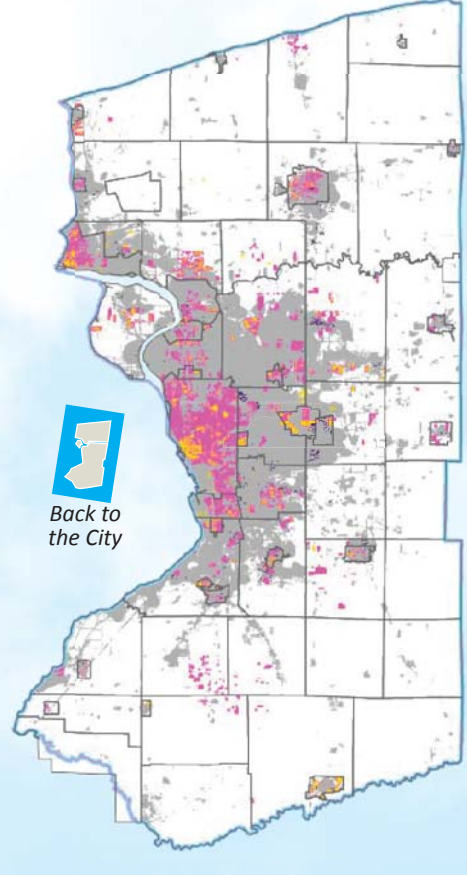
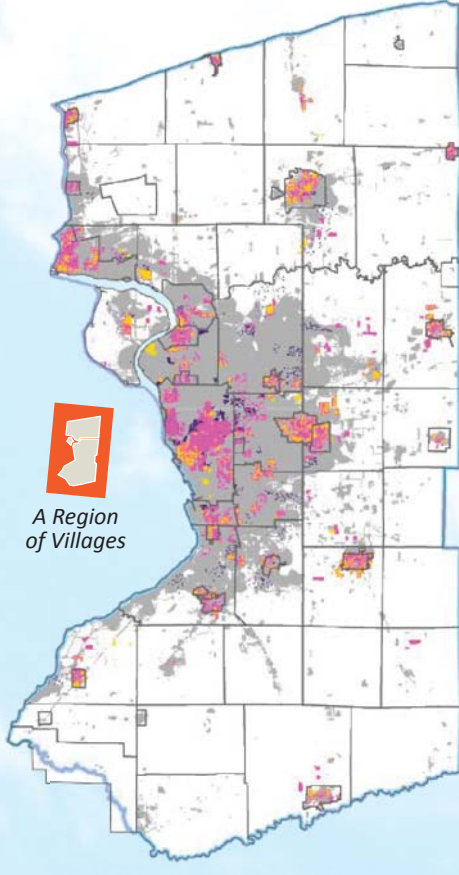
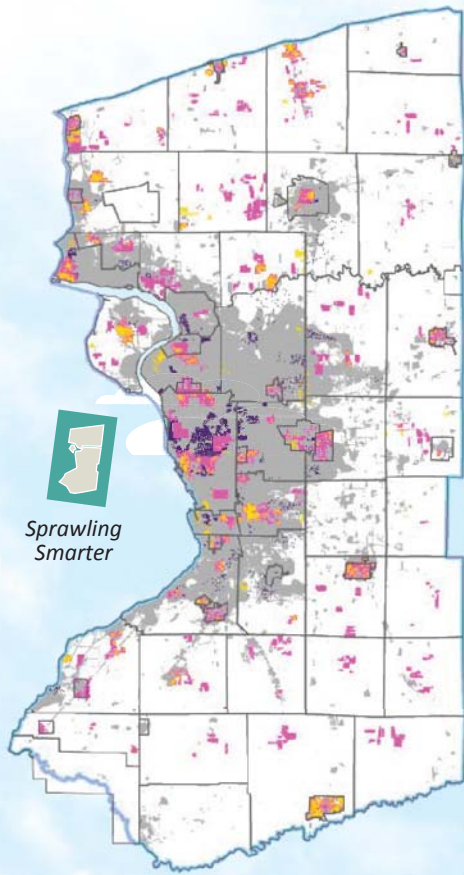


In the Business As Usual Scenario, new homes, jobs, roads, utilities, parks and schools would be built on the suburban periphery. By continuing to focus development outward, our old urban and suburban neighborhoods would suffer from increased vacancy, abandonment, and neglect. Former industrial sites in these areas would sit idle, further compounding environmental and economic issues faced by residents and municipal leaders.

In the three citizen-created scenarios, a majority of homes and jobs would be located in already developed areas. This would preserve open space and farmland while also avoiding the cost of building new infrastructure. By reinvesting in our existing communities - including housing rehabilitation - we would see fewer homes abandoned, avoid the high cost of demolition, preserve our tax base, and conserve embedded energy. Former industrial sites would see significant reinvestment and become new employment hubs well served by existing infrastructure and our public transportation system. Without the need for as many new impervious surfaces, such as roads, parking lots, and buildings, maintenance costs for municipalities would be much lower while the amount of polluted runoff making its way into our region's watershed would be limited.



See "How Do Our Choices Play Out" in Data Sources and Notes for detailed definitions of indicators and methodology for how they were measured.



66%



86%



88%



79%



92%



96%



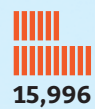
40,776



38,783



15,778



8,482

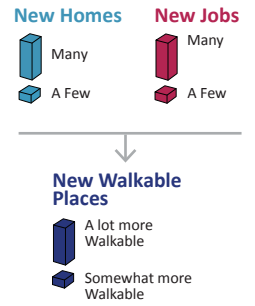
6,578

3,356

HOW DO OUR CHOICES PLAY OUT? *WILL WE BUILD AND PROTECT WALKABLE COMMUNITIES?*

Our Values

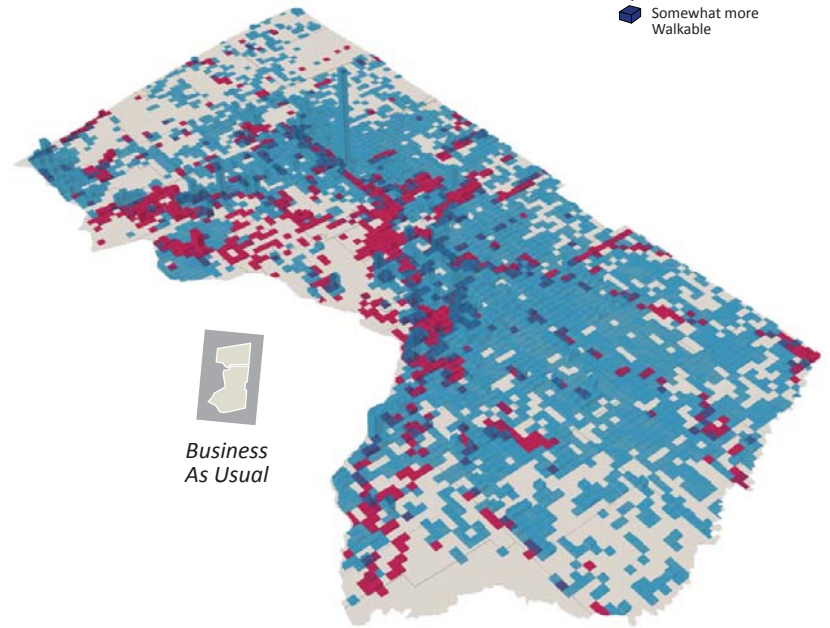
Walkable places are naturally created when homes and jobs are in close proximity to each other.



Building walkable, livable communities means that places would get more compact with a variety of amenities located close to homes. Developing denser places limits outward growth, conserves land, curbs infrastructure costs, and makes it easier to get around without a car.

In the Business As Usual Scenario, a majority of homes would be built in low-density, single-use developments that separate out employment and shopping centers. Limited bicycle and pedestrian infrastructure, such as bike lanes and sidewalks would require the use of a car for most daily activities and also limit the effectiveness of transit service.

In the three citizen-created scenarios, a majority of new homes would be built in walkable communities, using “smart growth” principles to create more walkable suburbs in the Sprawling Smarter Scenario, or focusing infill housing in our center cities, older suburbs, and village centers in the Region of Villages and Back to the City Scenarios. A mix of uses, higher densities, and transit oriented development would all contribute to a better pedestrian experience, making it easier and safer to walk to work, school, shopping, and recreation, while also conserving land and encouraging a healthier lifestyle.



Business As Usual

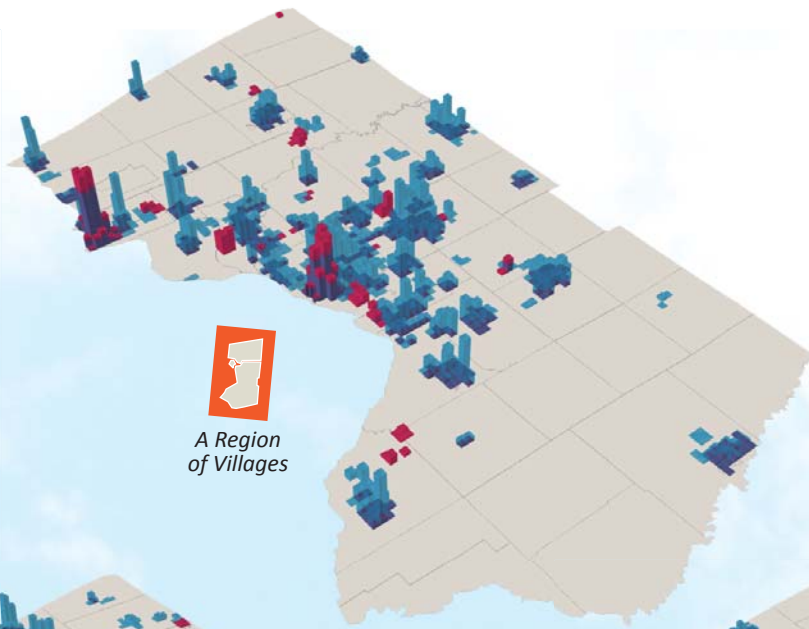
Percent of **New Homes** in Walkable Communities

23%

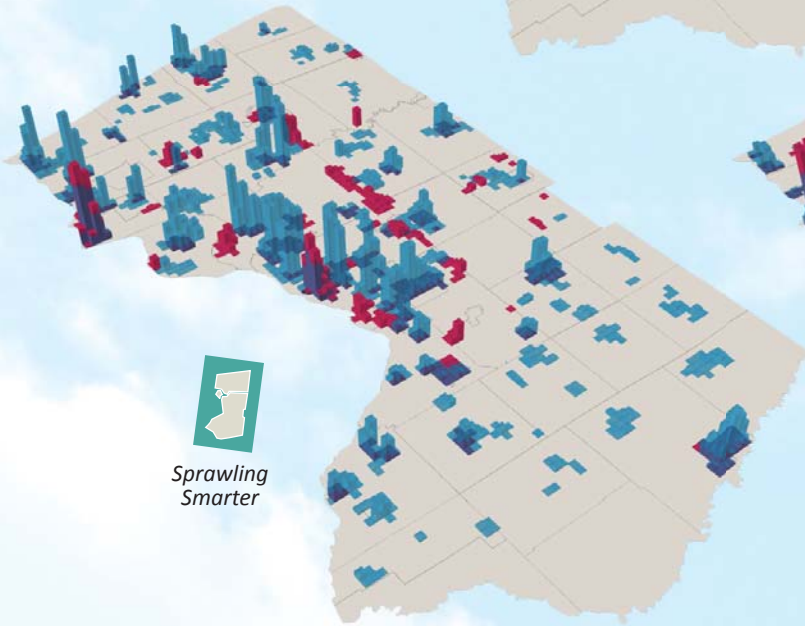
Walkability Score (0-100)

22

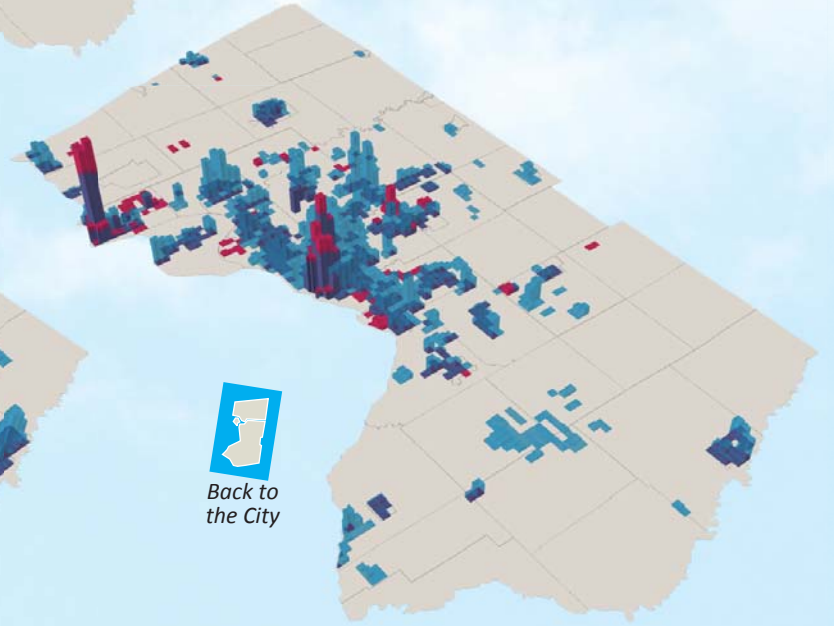
See “How Do Our Choices Play Out” in Data Sources and Notes for detailed definitions of indicators and methodology for how they were measured.




A Region
of Villages




Sprawling
Smarter




Back to
the City

69%

81%

82%

67

77

74

HOW DO OUR CHOICES PLAY OUT?

WILL WE BETTER CONNECT OUR REGION BY DIVERSIFYING TRANSPORTATION OPTIONS?

Our Values

To **connect our region** means development would be focused around the existing transit network while stops would be made more often and in more places across the region. This approach reduces our impact on the environment, reduces our reliance on cars, and concentrates development in existing communities.

The continued sprawl of homes and jobs in the Business As Usual Scenario would require us to build over 1,500 miles of additional roads over the next forty years. This would greatly increase the maintenance cost incurred by municipalities, as well as the tax burden placed on residents. By living further from our jobs and other daily services, the amount we drive each day would continue to rise. Few jobs and even fewer homes would be built in close proximity to transit, furthering our reliance on cars to get around.

In the three citizen-created scenarios, a larger percentage of new jobs and homes would be served by transit. We would be able to depend less on cars for our daily trips, conserve more energy, and emit less carbon into the environment. In the Region of Villages and Back to the City Scenarios, a majority of new job and housing growth would be in areas already well-served by transit. With more choices to get around we could save valuable time in our daily commutes, save household money, conserve energy, and reduce the size of our carbon footprint.

Access to Transit

- Frequent Access
- Some Access
- No Access

New Home Density

Height of bar = Number of new homes



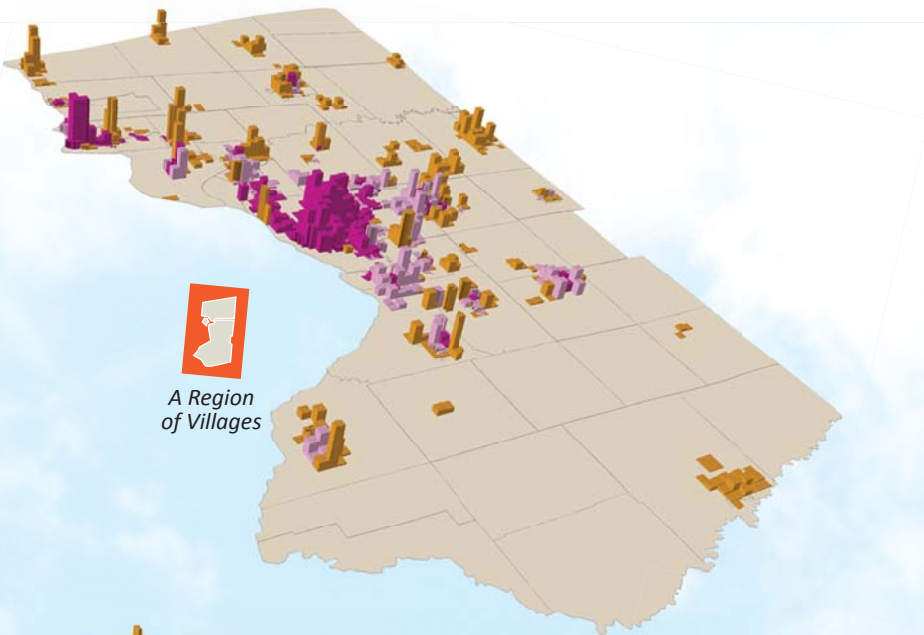
Vertical bars represent the number of new homes built and colors show accessibility to transit. 50 vertical feet = 1 new home. Access to transit defined as areas within one-half mile along a roadway of a bus or metro stop. Frequent access is shown in areas with access to stops made at least once every fifteen minutes during peak weekday hours. Quarter square mile cells with fewer than 5 homes added are excluded from the display.



Business As Usual

Transit Proximity to New Homes	1%
Transit Proximity to New Jobs	4%
Daily Vehicle Miles Traveled (VMT) Per Capita	22.7
Lane Miles of New Road	1,553 miles

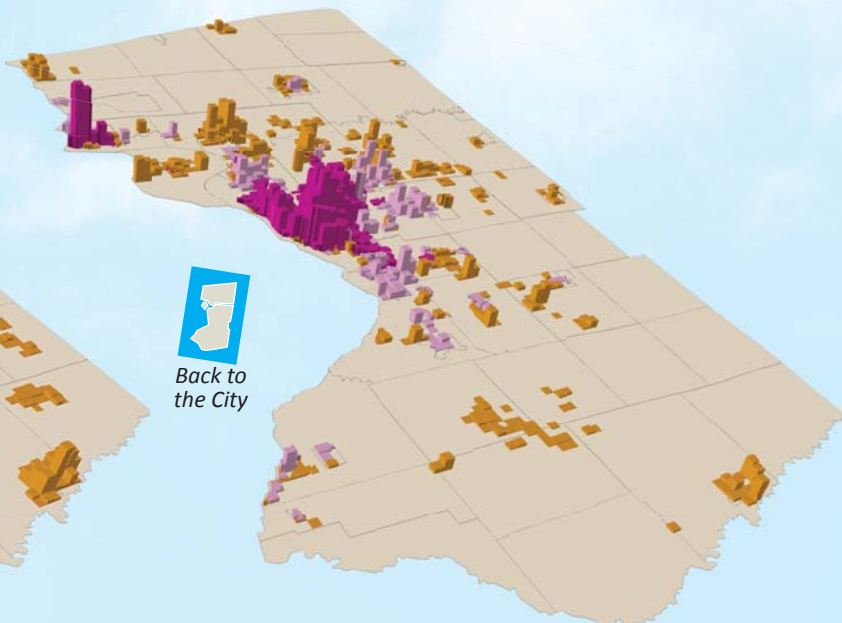
See "How Do Our Choices Play Out" in Data Sources and Notes for detailed definitions of indicators and methodology for how they were measured.



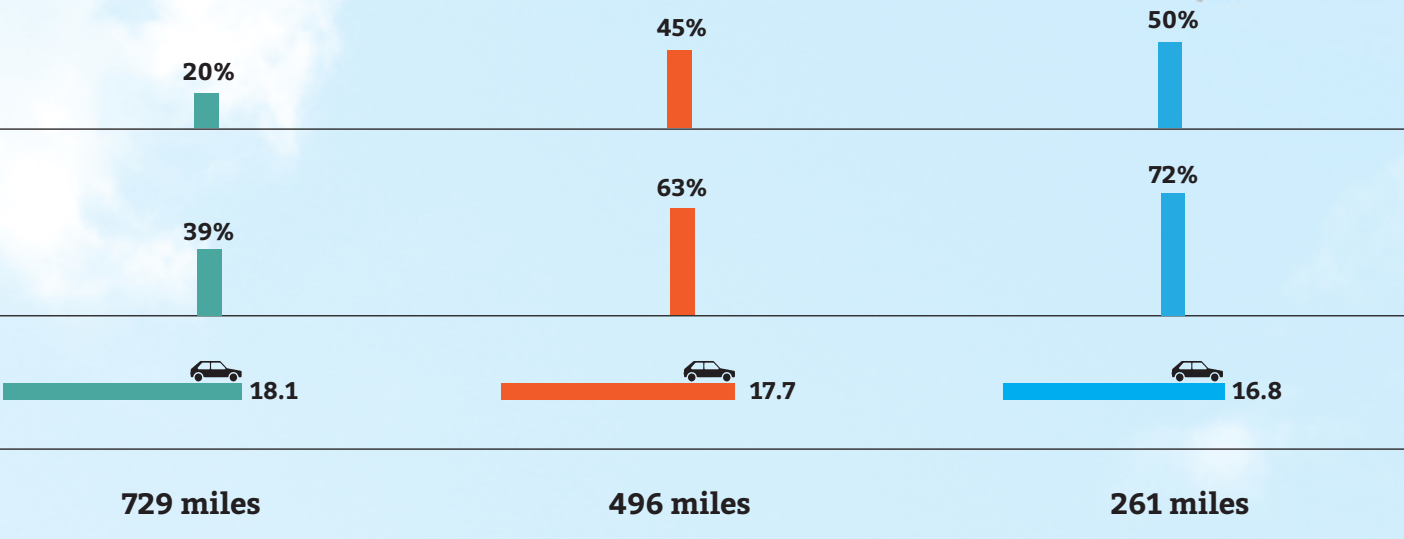
A Region of Villages



Sprawling Smarter



Back to the City



HOW DO OUR CHOICES PLAY OUT?

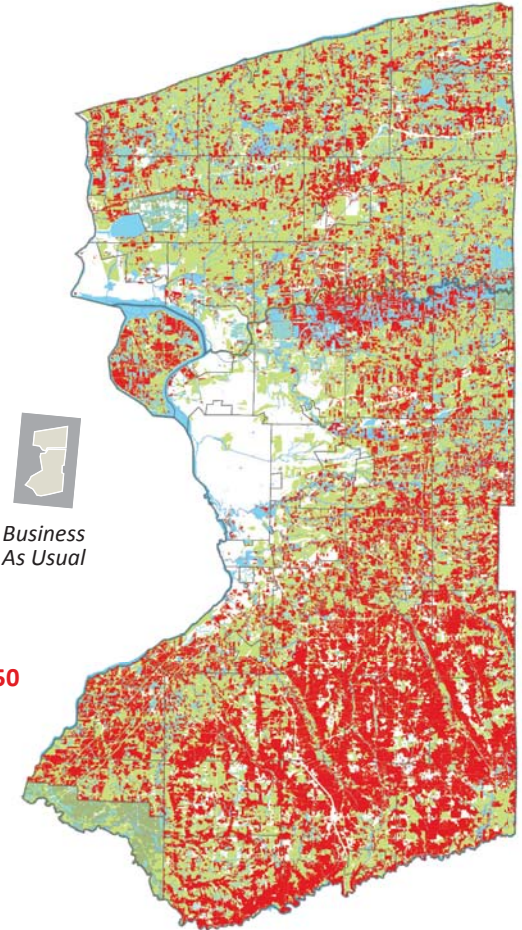
OUR VALUES

WILL WE PROTECT FARMLAND, PARKS AND NATURAL AREAS?

To protect farms, parks and natural areas means that development would be avoided on woodlands, wetlands, farmland and other open space. This approach would instead concentrate development within urbanized areas to protect the environment, strengthen our local food system, and conserve energy.

In the Business As Usual Scenario, outward development pressures would consume nearly 94 square miles of current and potential prime farmland over the next forty years. New homes in outlying areas would also consume natural habitats, like woodlands, wetlands, and other environmentally sensitive areas. Large homes that require a long commute to work would mean that the average household would use even more energy than is used at present.

In the three citizen-created scenarios, a majority of new jobs and homes would be located in areas that are already developed, lowering the pressure on outlying rural land and drastically decreasing the amount of farmland and environmentally sensitive areas lost to development. Protecting open space, prime farmland and environmentally-sensitive lands has multiple benefits, including preserving scenic values, making our food system more secure and self-sufficient, making fresh, healthy local food more readily available, and maintaining the “environmental services” and habitat that wetlands, stream corridors, woodlands and other open spaces provide.



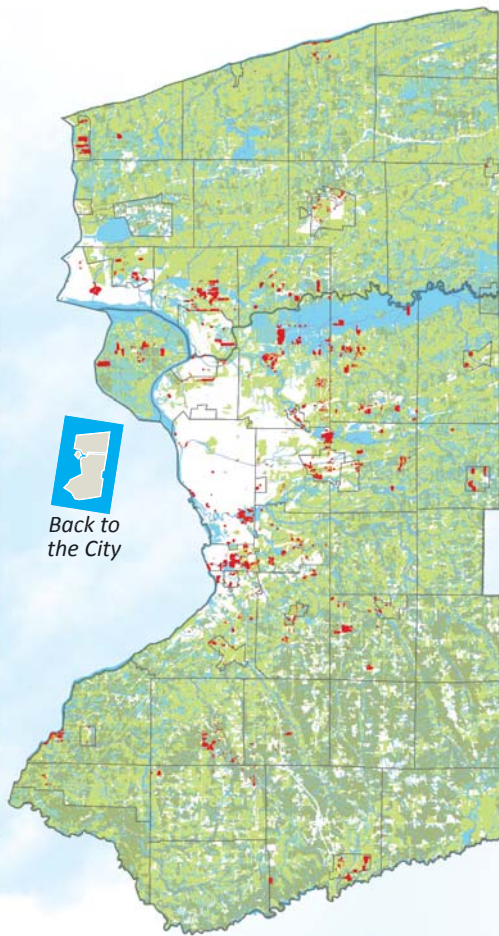
Percent of **Open Space Conserved** from Development **33%**

Current and Potential Prime Farmland Lost to Development (Acres) **58,093**

Acres of Development on Environmentally-Sensitive Areas **71,411**

Energy Savings Per Household (Compared to Existing Conditions) **-2.4%**

See "How Do Our Choices Play Out" in Data Sources and Notes for detailed definitions of indicators and methodology for how they were measured.



79%

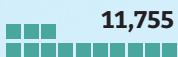
84%

84%

12,548

4,591

5,311



+1.2%

+2.7%

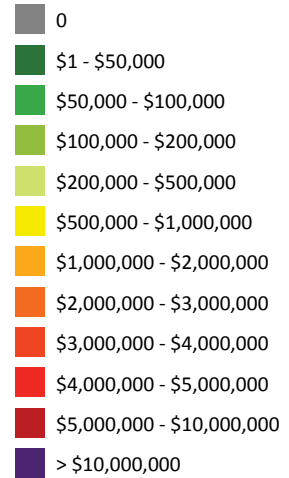
+3.3%

HOW DO OUR CHOICES PLAY OUT?

WILL OUR LOCAL GOVERNMENTS BE FISCALLY SOUND?

Our Values

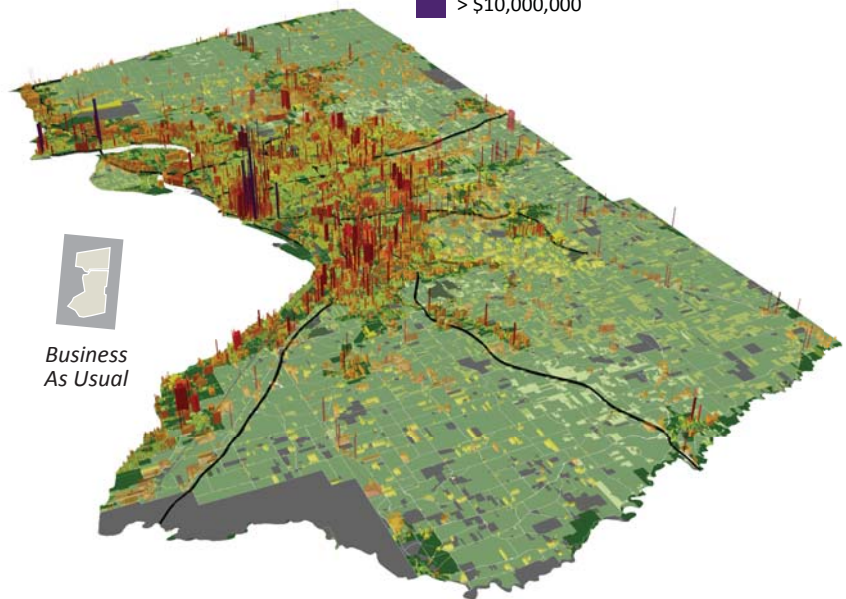
Total Property Value per Acre



To have **fiscally sound local governments** means that any new development would eventually be able to pay for associated infrastructure costs through newly generated tax revenue. By focusing development in areas that are already well served by infrastructure, governments can limit their costs and focus investments in other critical areas.

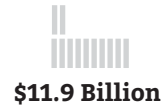
In the Business As Usual Scenario, the continued outward growth of homes and jobs would require huge investments in new infrastructure. Because lots are larger and homes are farther apart, infrastructure like roads, sewers and water would have further to go and cost more. While there would be an increase in new tax revenue generated, the cost to build and maintain the new infrastructure would be far greater, meaning municipalities would saddle future generations with large, unfunded liabilities.

In two of the three citizen-created scenarios, tax revenues from new development would be greater than the cost of infrastructure. By investing in our central cities, as well as town and village centers, costs are kept down, while tax revenue is generally higher. Even though the Back to the City Scenario generates the least amount of new tax revenue due to some urban areas having a lower assessed values, cost of infrastructure is drastically lower, meaning that surplus funds can be invested in other public amenities. There is also a greater chance that remediated industrial sites would be put back on the tax roll.

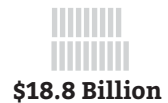


Business As Usual

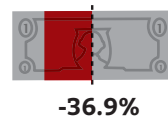
Total Tax Revenue of New Development



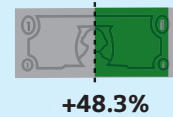
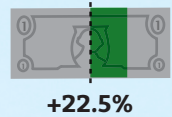
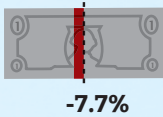
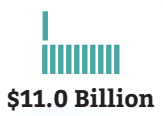
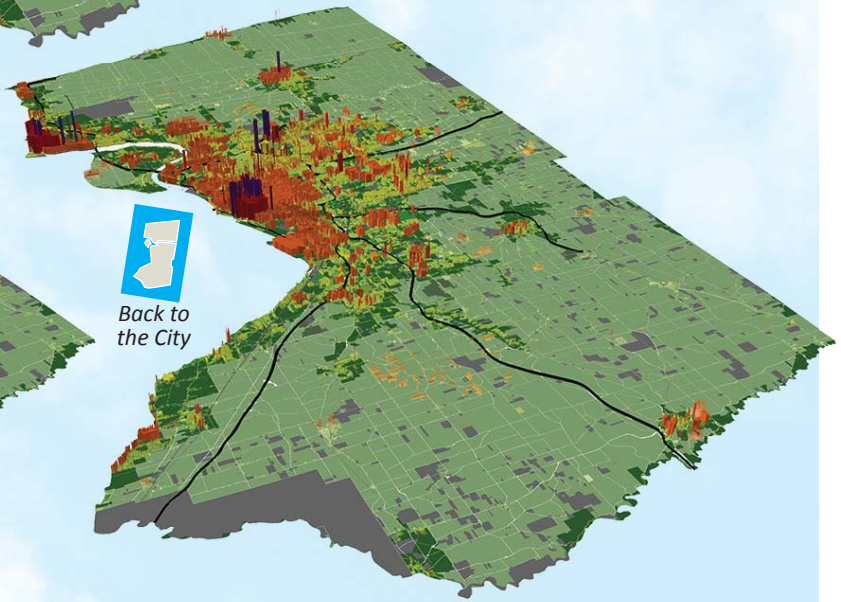
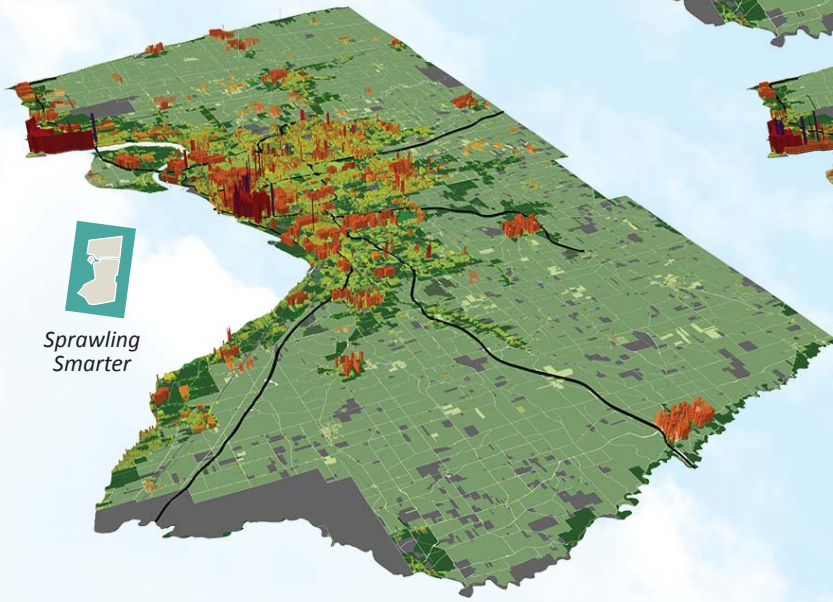
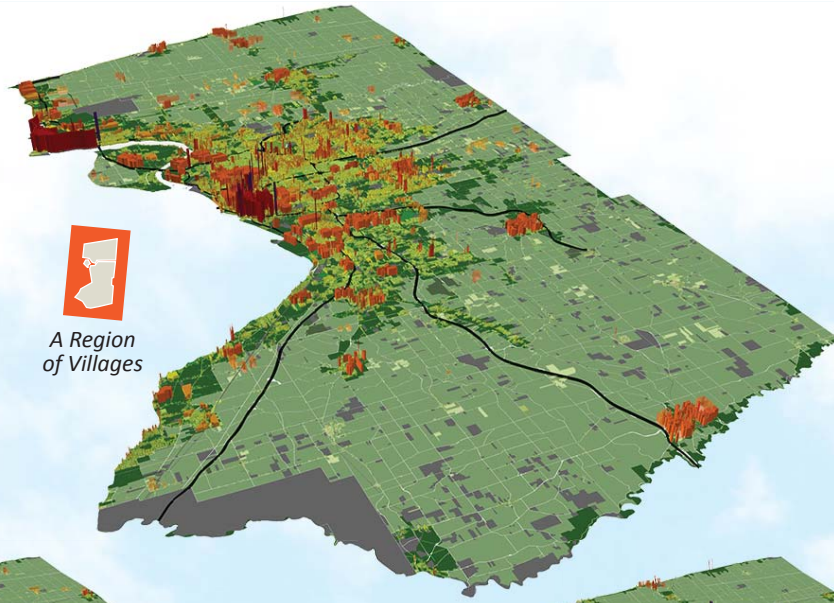
Total Cost to Build and Maintain Infrastructure of New Development



Cost to Revenue Ratio



See "How Do Our Choices Play Out" in Data Sources and Notes for detailed definitions of indicators and methodology for how they were measured.





HOW DO WE IMAGINE OUR FUTURE?



on our current path?

Can we imagine a future where new **development** continues to sprawl out as it has in our past?



HOW DO WE IMAGINE OUR FUTURE?



aligned closer with our values?

Can we imagine a future where our
built environment truly matches
what we say we value?

WHAT COULD WE DO DIFFERENTLY?

Working Teams focused on defining performance metrics, establishing goals for the future and developing strategies aimed at reaching those goals.

100+
Subject matter experts
and stakeholders



TRANSLATING COMMUNITY VALUES INTO STRATEGIES AND ACTIONS



Our Values

5 Big Ideas

and dozens of potential strategies and actions to get us there

Create Great Places and a
Thriving Economy
through Efficient
Land Use

Connect Our Places by
Expanding and
Diversifying Our
Transportation Options

Provide
Housing Choices
in Neighborhoods
that are Great
Places to Live

Conserve Our
Energy
Promote Renewables
and Prepare for the
Impacts of
Climate Change

Strengthen
Our
Food Systems
for a Healthier
Population and
Economy

5^{Big} Ideas

Create Great Places and a Thriving Economy through Efficient Land Use



How we use our land and how that impacts the quality of housing and neighborhoods, the efficiency of transportation, energy consumption, and even our food system are at the heart of sustainability for Buffalo Niagara.

Since 1970 the population of Buffalo Niagara has declined steadily even as the area of land that is built-up has grown rapidly. Even before we had “sprawl without growth” we sprawled. From 1940 to 1970 land consumption far outstripped population increase. Then we sprawled some more as population shrank. Today, the conversion of rural land into subdivisions continues.

How we have developed has resulted in more driving, more energy consumed, longer commutes, housing abandonment in our central cities, slumping housing values in our first-ring suburbs, greater investments in public infrastructure, higher taxes, pressure to transform farmland into subdivisions, loss of other natural resources, and a mismatch between land use and public transit that makes it harder for all, but especially low income residents, seniors and individuals with disabilities, to get to work, school, shopping, or health care.

How we use our land and how it impacts the quality of housing and neighborhoods, the efficiency of transportation, energy consumption, and even our food system are at the heart of sustainability for Buffalo Niagara.

Why did we sprawl? Federal policies to subsidize mortgages on suburban homes and to pay for roads and highways to get us there played a role. The widespread adoption of the automobile – once a status

symbol, now a necessity for most – also played a role. Now it seems like the costs might be greater than the benefits.

The bad news is that land use patterns change slowly. The good news is that they do change. All we have to do is look at how different our city and region looked forty years ago to imagine how much different it might look forty years into the future. We have an opportunity to start working now for the kind of region we want tomorrow.

There are also profound effects of our land use pattern on how we get around. As a region, we are driving more, commuting longer, and using more gasoline. Those who can’t afford a car are limited in employment, shopping, access to vital services like health care, and more. Even as destinations and job centers have become more spread out, public transit service has become more limited. Many suburban environments are unfriendly or dangerous to pedestrians. We are walking less and getting more obese. We discuss these impacts in greater depth in the section on **Transportation and Mobility**.

Similarly, there are connections between land use and all the other major elements of the plan. Land use patterns influence the quality of neighborhoods, our ability to grow food in our region, how we manage both production and consumption of energy, and how we might mitigate the impacts of climate change.

WHAT DOES THE DATA TELL US ABOUT WHAT WE ARE DOING?

We are consuming much more land per person.

We are rapidly depleting vital natural resources.

We are further polluting our waterways.

We are building a housing surplus, creating vacancy and abandonment.

We are building more infrastructure with fewer people to pay to maintain it.

TOOLS FOR GREATER UNDERSTANDING

“The Dollars & Sense of Development Patterns” is a special report looking at the fiscal and tax revenue impacts of various approaches to land use. Prepared for the region by Joe Minicozzi and Urban3, this report looks at various places in our region - downtowns, village centers, towns, shopping malls, main streets, suburban strip corridors, and others, and analyzes how productive they are to local and regional tax revenues when land consumption is considered.

WHAT THE COMMUNITY SAID THEY VALUE

What 115 Maps Tell Us -----

Nearly **1/3** of all maps prioritized preserving, revitalizing and repurposing urban neighborhoods.

On average, participants added

6 miles of roads and highways per map.

4 out of **5** maps

emphasized the need to control sprawl.

What Else We Heard -----

“Protect farmers and our farmland and reclaim where possible.”

- Citizen participant at a Mapping Workshop in East Aurora

“Prevent suburban sprawl from eating up more green space.”

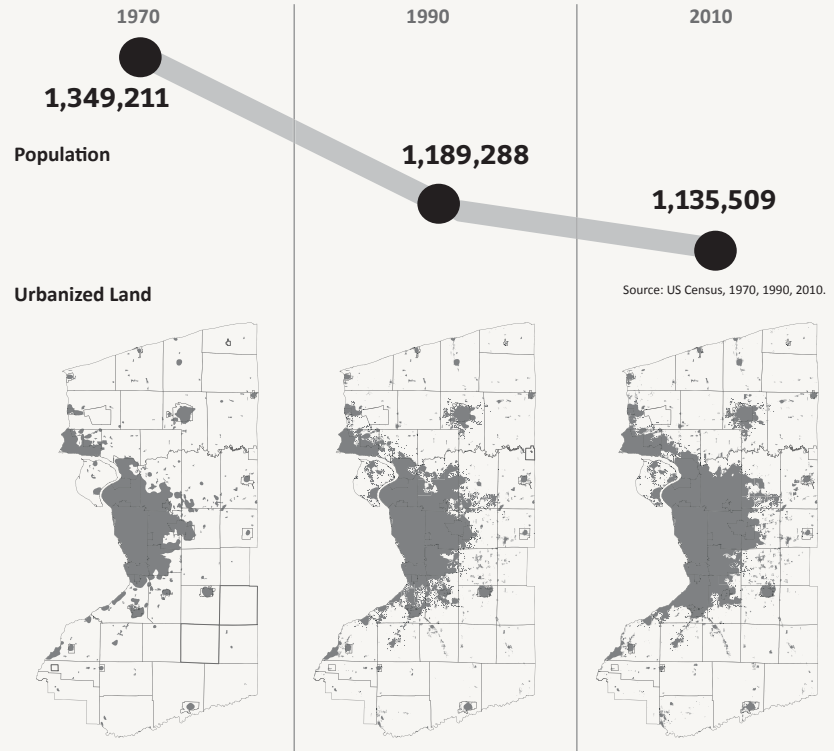
- Citizen participant at a Mapping Workshop in Niagara Falls

“Rivers and canals are an important part of our green infrastructure.”

- Citizen participant at a Mapping Workshop held at Starpoint High School

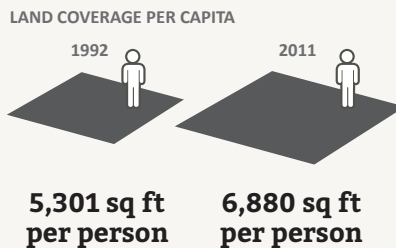
WHAT THE DATA TELLS US

From 1970 to 2010 while population fell by 213,000 people, the area of urbanized land increased by 166 square miles.



Source: UBRI Analysis, 2014. Based on housing density found from historical parcel data (NYS Dept. of Taxation and Finance, Real Property Services, 2010) and a derivation of developed land from satellite imagery (US Geological Survey, 1992 National Land Cover Dataset, 1997; USGS, 2011 NLCD, 2014; and USGS and NASA, 1975 Global Land Survey)

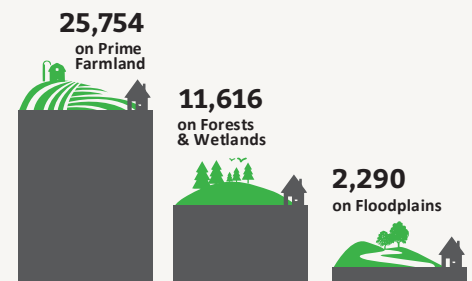
We consume 30% more developed land per person than 20 years ago.



Source: UBRI Analysis using US Geological Survey, National Land Cover Data, 1992 and 2011.ⁱⁱ

We build homes on land we could protect.

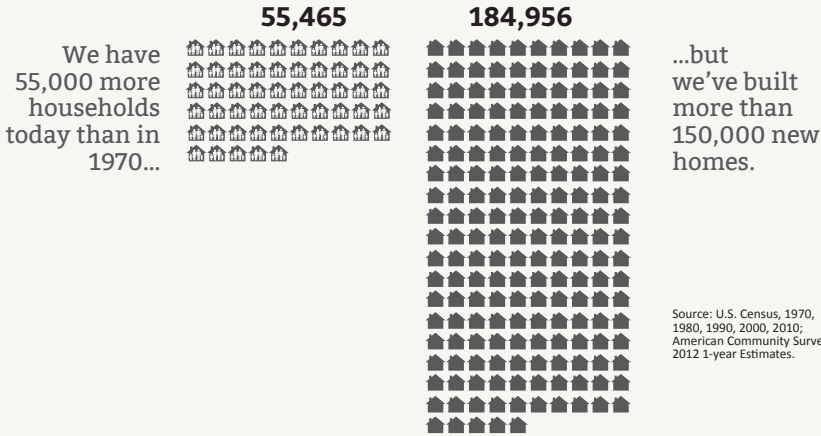
HOMES BUILT SINCE 1970 ON IMPORTANT NATURAL AREAS



Source: UBRI Analysis using data from New York State Office of Real Property Services (2010), USGS (2012) and FEMA (2012).ⁱⁱⁱ

We are building a housing surplus.

CHANGE IN NUMBER OF HOUSEHOLDS AND NEW HOMES BUILT, 1970 TO 2010

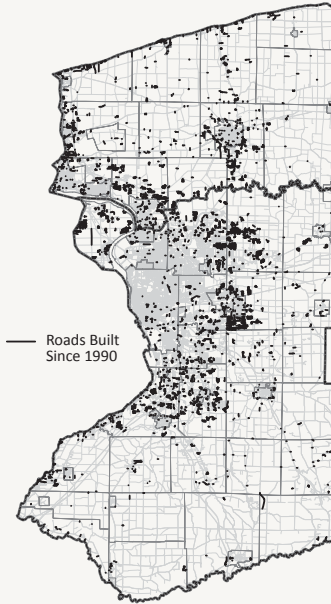


Sprawling development patterns have forced us to build more infrastructure...

In just the past twenty years, **525 miles** of new roads have been built...

...costing us **\$26 million** per year to maintain.

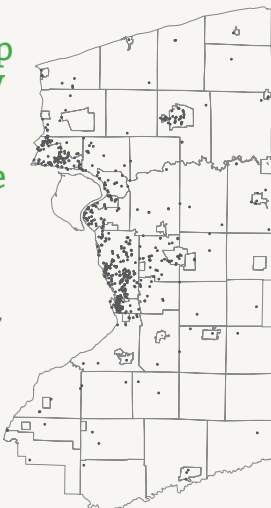
ROADS BUILT SINCE 1990



Source: U.S. Census Bureau. (1990; 2010). TIGER/Line Shapefile, New York, Roads.
Source: UBRI analysis using data from the U.S. Census Bureau (1990 and 2010), and the NYS Office of the State Comptroller (2011).^{1V}

We've cleaned up 631 legacy sites over the past thirty-five years.

FEDERAL AND STATE REMEDIATION SITES, 1978-2013



Source: NYS Dept of Environmental Conservation, 2014; US Environmental Protection Agency, 2011.

We're protecting some land and open spaces.

Over **37,000 acres** of land and open space are protected in Erie and Niagara Counties, equating to **4%** of our land area.



Source: Erie County Department of Environment & Planning (2012); Niagara County Department of Economic Development (2012); NYS Office of Cyber Security (2010); WNY Land Conservancy (2013).^V

WHAT WE COULD DO DIFFERENTLY

Develop a land use pattern that supports what our region values. p 58

Manage the cost of public services. p 60

Redesign revenue-raising structures to promote land use goals. p 61

Establish mechanisms to manage brownfields and declining neighborhoods. p 62

Promote a more compact pattern of development. p 63

Protect and restore natural places and farmland. p 64

Protect and restore water quality and quantity. p 65

WHAT WE COULD DO DIFFERENTLY

RECOMMENDED STRATEGIES AND ACTIONS

Develop a land use pattern that supports what our region values.

Develop a land use pattern that will produce the “spatial efficiency” needed to support our continuing economic development; manage the long-term costs of roads, utilities, and other public infrastructure like schools, libraries, parks and recreational facilities; help us create a region in which jobs, education, health care, and shopping are readily accessible to all; provide the framework to create great neighborhoods with housing choices; and allow us to protect farmland, forests, and natural lands for the benefit of posterity.

The first step in achieving the pattern is to sketch out where we want to go, to “paint the target,” and agree to work together to make it happen. In precedent plans, discussions in our steering committee, the work of our subject matter experts, and the deliberations of hundreds of citizens in a participatory scenario mapping exercise, we have identified some key land use approaches that support what the region values.

Concentrate most development within the existing urbanized area.

Although already “developed,” there is a significant amount of undeveloped, under-developed, or vacant land within the urbanized area where new housing, offices, shops, and other facilities could be located. What doesn’t make sense, especially for municipal finances, is to continue the practice of abandoning land, buildings and supporting infrastructure near the center of the region and replacing it with the same on the periphery. We need to grow first where we have already grown. Those decisions remain a matter of municipal home rule, but we can encourage towns and villages to adopt smart growth principles to produce a better and more efficient pattern of development.

Focus development in existing urban centers and villages.

Established downtowns like Buffalo, Niagara Falls, Lockport, Tonawanda, North Tonawanda and Lackawanna can accommodate significant additional growth in jobs and housing through the development of vacant sites and parking lots and redevelopment of existing sites to higher and better uses. So can village centers across the region – although



MOMENTUM TO BUILD ON

The **City of Buffalo’s** soon-to-be-adopted “**Green Code**” will replace a 60-year-old zoning ordinance with new rules to make it easier to build more sustainable types of development – energy-efficient, mixed use, walkable and in tune with the historic city. The “form-based” zoning code will be part of a new planning suite that will also include the city-wide comprehensive plan, Local Waterfront Revitalization Program, Brownfield Opportunity Areas, and reformed urban renewal areas.



buffalogreencode.com

in those cases we need to take care to preserve what people see as great about those places and respect local home rule prerogatives.

Redevelop brownfields for job creation.

The end of the era of heavy industry in Buffalo Niagara left thousands of acres of land and millions of square feet of buildings unused and, in many cases, damaged by pollution. With the help of federal and state programs and strong local planning and implementation, many of these sites are being cleaned up and readied for redevelopment. Citizens see these sites as ideal for job creation, especially for growth in advanced manufacturing, expansion in transportation and logistics, and growth in back office operations. Citizens at scenario mapping exercises concentrated office industrial development in former industrial areas in Lackawanna, South Buffalo, the Tonawandas, Niagara Falls and Lockport.

Connect land use to transportation, especially public transit.

We have developed a land use and transportation system that only serves people well when they travel by car. Promoting a more compact pattern of land use, denser development with a mix of uses, in walkable neighborhoods and districts along “complete streets” can bring destinations closer together to make walking, biking, and using transit more attractive, even as it allows those who choose to drive to continue doing so. Approximately six in ten adults in Buffalo Niagara are overweight or obese, so more active transportation options can bring added health benefits to our region as well. How this type of development can be accomplished will be addressed in many elements of the plan discussed below and links to a series of recommendations in the section on transportation.

Protect farmland, watersheds and natural areas.

The sustainability of our way of life depends, ultimately, on the health of our environment. Protecting our farmland will give us greater food security in the years to come. Safeguarding our waterways and watersheds will ensure the health of both land and water. Natural areas both within the urbanized area and in rural lands beyond provide “environmental services” – a technical way of saying they filter our water, recharge our aquifers, absorb storm water, provide shade to cool our cities, provide habitat for animals and more. Sections later will detail how we protect these areas, working in partnership with the many community and public sector stakeholders. This may include local cooperative extensions, soil and water conservation districts, environmental groups like the WNY Land Conservancy, Buffalo Niagara Riverkeeper, the WNY Environmental Alliance, and the WNY Stormwater Coalition, local and county governments, federal and state partners like the NYS Department of Environmental Conservation and US Army Corps of Engineers, among others. Our values and land use priorities expressed in the scenario planning exercise emphasize the desire to preserve these lands from development.

What if development decisions were made based on proximity to public transit?



MOMENTUM TO BUILD ON

The University at Buffalo School of Medicine and Biomedical Sciences building at Main and High Streets will be the largest transit oriented development project in the region to date, connecting directly to the Allen Medical Campus Metro Rail station to give employees, patients and visitors an attractive alternative to driving their car to the Buffalo Niagara Medical Campus. Encouraging travelers to shift travel modes will save energy, carbon emissions and space for parking.

Manage the cost of public services.

One of the major features of “sprawl without growth” is the continuing extension of our public infrastructure – sewers, water and roads, but also schools, libraries, parks and more – to serve a smaller number of people. Each additional mile of infrastructure and each new square foot of building space is both a new capital cost and a new long-term maintenance obligation which falls directly on the shoulders of local taxpayers. Over time, we can reduce the costs of local government, utility service, public education and more by developing according to our values and working to make provision of a range of public services more efficient.

Pursue shared services agreements, public-private partnerships and consolidation.

Create partnerships for provision of water, sewer, police, fire, parks, highway maintenance and other services to manage capital investments, manage operating costs and improve service quality. The possibilities require careful study to make sure they will achieve the stated goals and determine which approaches are likely to work best for which kinds of services. Decision-makers require reliable evidence-based policy advice before approving such structural changes. Partners in the region should consider sponsoring a comprehensive study of the opportunities.

Address education needs regionally.

Enrollments are declining in many public and parochial schools. Some school facilities are new or recently renovated. Others are aging and some are empty. Meanwhile, there are great disparities in educational outcomes from one community to the next. At the same time, perceptions of school quality have a big impact on where people choose to live. Since these challenges impact a number of districts we need a regional strategy not only to control the cost of education but to ensure access to a high quality education for all. As a region, government, educational, and civic leaders should begin discussing a way forward together.



MOMENTUM TO BUILD ON

Private donors to the Western New York Land Conservancy are investing in the permanent protection of scenic and environmentally sensitive lands around the region. The



Mill Road Overlook

in the Town

of Aurora was preserved from development in perpetuity in 2013. The **Stella Niagara Preserve** in Lewiston will save for future generations 29 acres and a quarter mile of shoreline along the Niagara River, for which a \$3.2 million capital campaign is underway.

wnylc.org

Redesign revenue-raising structures to promote land use goals.

Tax policy is part of the system that has promoted our sprawling and inefficient pattern of land use over recent decades. The structure of local property taxation, for example, prompts municipal leaders to pursue new development to generate new revenues only to see that development create more demand for service in response. We need a revenue structure that promotes our land use goals, fosters real economic development, and produces adequate revenue for operation of local governments and public education and infrastructure maintenance.

Review local revenue-raising structures.


The need to generate local revenue to fund vital public services is often at odds with the goal of promoting a more efficient pattern of development. A new study of the Buffalo Niagara Region by Joe Minicozzi at Urban3 demonstrates how “smart growth” projects contribute much more to the tax base of municipalities where they are located than conventional sprawl development. Further investigation should guide development of revised revenue-raising mechanisms to promote more efficient forms of development and discourage sprawl.

Consider tax increment financing.

New investments generate new tax revenues. Tax increment financing through PIFs (PILOT payment Increment Financing) offers a way to capture these growing revenues. The PIF dedicates payments from projects that qualify for PILOT’s (payment in lieu of taxes), beyond what the municipality was already earning in taxes, to help finance site preparation and infrastructure development for transit oriented development, urban infill, and “smart growth” projects.

Align economic development incentives with “smart growth” policies.

Economic development entities in the region typically provide incentives for job growth through provision of local tax abatements. As the Western New York Regional Economic Development Council has done, agencies should adopt decision-making criteria to make sure such incentives go to support projects consistent with “smart growth” policies in terms of location, design, connection to transportation networks, investments in green energy and energy efficiency, and focus on new rather than locally relocated jobs.



What if thousands of acres of old industrial lands were cleaned up and made ready for redevelopment?



MOMENTUM TO BUILD ON

Brownfield reclamation and redevelopment efforts are quickly becoming some of the region’s greatest smart growth success stories. We hear a lot about **SolarCity** building the largest solar manufacturing facility in the Western Hemisphere on the remediated Republic Steel site known as the Buffalo High-Tech Manufacturing Innovation Hub at **RiverBend**. But there are dozens of other success stories across the region, including the **Niagara County Brownfields Program** which has secured millions in grant funding for cleanup efforts, completed 125 environmental site assessments, and created a local development corporation to manage and implement a revolving loan fund.

Establish mechanisms to manage brownfields and declining neighborhoods.

Deindustrialization, population decline, and churn in regional housing markets have left a legacy of damaged industrial land and buildings and vacant and abandoned homes and lots. We need to improve our ability to bring these kinds of properties back to useful and taxable purposes and to encourage new infill development on these sites.

Strengthen the land bank.

Erie County took a big step forward recently in the creation of the Buffalo Erie Niagara Land Improvement Corporation – a land bank – with hopes to include Niagara County soon. The land bank will have the authority to acquire, hold, maintain, redevelop, and re-market abandoned homes and land. A \$2 million allocation from the Office of the Attorney General in 2013 has made it possible to get the land bank up and running.

Redouble brownfields efforts.

The City of Buffalo and Niagara County have both been aggressive in the use of the Brownfields Opportunity Area, Brownfield Clean-up, and Environmental Restoration programs to plan for the clean-up and reuse of old industrial sites. Niagara County, in particular, has developed a best-in-category program for these sites. However, enabling legislation is set to expire. Regional leaders should re-emphasize these programs and advocate to extend them.

Continue to promote “shovel ready sites.”

State, county and local governments should collaborate to expand assessments, develop a regional inventory, and provide marketing strategies for vacant, under-utilized and brownfield properties within the framework of a region-wide land use concept and consistent with “smart growth” principles. This should include encouragement to municipalities to preserve and properly zone larger-scale sites with potential for research and development, technology, manufacturing or distribution activities.

Expand use of historic preservation tax credits.

Adaptive re-use and preservation of historic buildings, including old industrial facilities, among others, can be an important part of smart redevelopment. Expand promotion and training for use of federal and state historic preservation tax credits and related programs.

What if every local land use decision considered the impacts it would have on our waterways?



MOMENTUM TO BUILD ON

How and where we develop has far-reaching impacts on our rivers, streams and the two Great



Lakes framing our region’s geography. **Buffalo Niagara Riverkeeper** has been working to bring issues of watershed restoration and land use to the forefront through their various educational and cleanup programming. Their *Niagara River Habitat Conservation Strategy* outlines the best opportunities to protect and restore our natural living infrastructure in the Niagara River Watershed.

bnriverkeeper.org

Create a regional “Main Street” organization.

The National Main Street Center has provided an extraordinarily successful model for strengthening the commercial centers of small towns and villages. A partner organization for Erie and Niagara Counties that all municipalities could access could help implement citizen visions for redevelopment of villages in the region to be like they are now only better. This could become a program of an existing organization, build on an existing program like the one in Lockport, or a new regional not for profit could be created.

Promote a more compact pattern of development.

As noted throughout the plan, our current pattern of dispersed development carries costs in energy consumption, land use, transportation demand and otherwise that we need to contain. A more compact pattern of development can help us make land use and transportation more efficient and protect natural and agricultural lands.

Provide capacity for municipalities to revise zoning codes.

Authority for land use controls remains with cities, villages and towns. All municipalities should be encouraged to update their zoning codes to promote mixed uses, allow more intensive development in hubs and corridors, and protect valuable natural and agricultural lands from development. With tight budgets and limited or no planning staff available in many municipalities, One Region Forward recognizes the need for technical assistance and capacity support to assist cities, towns and villages accomplish this important task.

Promote form-based codes.

An increasingly popular approach to development regulation focuses on the control of the built form as much as land use. The City of Buffalo has pioneered the adoption of form-based code in Western New York – a new ordinance that will promote the redevelopment of the city as walkable, mixed use and dense while retaining the prevailing character of its great neighborhoods. Best practices in the One Region Forward “tool-kit” – including those from Buffalo – should encourage other municipalities to develop and adopt their own form-based codes.

Locate new public facilities strategically.

Schools, university facilities, government buildings, cultural venues, sports facilities and entertainment centers can give density and vitality to urban places – or they can generate auto-oriented transportation demand on suburban sites. Encourage the sponsors of such facilities to choose locations that are well-served by bus, rail, bicycle and walking. Make sure they are also connected with restaurants, shops and housing that can benefit and be benefited by proximity to these facilities.

Protect and restore natural places and farmland.

Because streams and stream corridors, woodlands, wetlands, and farmland – in crops or fallow – encompass a wide range of environments and provide a variety of benefits, an array of strategies are also needed to protect them.

Complete the inventory of natural places and farmland.

Making informed decisions about how to protect these resources requires complete and accurate information on what they are. A number of different agencies and not-for-profit organizations have undertaken some part of this task – or are working on it now. Partners working in land conservation and stewardship should convene a working group to create a single complete data base, assembling and coordinating the pieces that are already complete and filling in with additional survey work where gaps exist.

Quantify the economic impact of parks and open spaces.

It is sometimes imagined that parks and open spaces are amenities without a discernible dollar value. But these lands support job-creation, enhance property values, or provide environmental services that would be expensive to provide otherwise. Build on the work of the Buffalo Olmsted Parks Conservancy and the Buffalo Niagara Riverkeeper to document the argument for investments in parks, trails, and preserved open spaces.

Update or create local protection plans.

Many towns already have open space or farmland protection plans. These can bring the broader policies to ground in each jurisdiction. Where these exist they may need to be updated. Where they are missing, localities should work to create them, in part to identify lands for purchase.

Preserve land through purchase and conservation easement.

There are two common and secure ways to protect land from development, conservation easements and the outright purchase of land. A range of programs that do this already exist, and land trusts are supporting these efforts, but more needs to be done. By passing open space bonds, municipalities like Clarence have used their own funds and a combination of these methods to protect natural and farm land. The Federal Natural Resources Conservation Service has an Agricultural Conservation Easement Program to support the purchase of development rights. New York State Department of Agriculture and Markets reinitiated its farmland protection grant program in 2014. And the Niagara River Greenway pays to protect open space.

But we need advocacy to make permanent the federal tax incentive to donate conservation easements, to expand the farmland protection program in New York State and to raise revenue to purchase valuable lands for permanent preservation.

Protect and restore water quality and quantity.

Water flows over and through the land. Thus, how we use land, design buildings and create infrastructure can have a big impact on the quality and quantity of water.

We need to understand better what policies and practices degrade our waters and which protect them. However, there are some things we can do right away to improve the situation.

Remedy sewer overflows and stormwater pollution.

In municipalities like Buffalo, one system handles both sanitary sewage and storm water. When heavy rains fall, the capacity of the water treatment plant is exceeded and a combination of sewage and runoff is discharged directly into regional waterways. Some combination of “gray infrastructure” and “green infrastructure” can make such events less frequent or severe while working toward meeting federal mandates to resolve the problem.

Address federal areas of concern.

Polluted waters and underwater sediments are another part of Buffalo Niagara’s legacy of industrialism. The International Joint Commission has identified both the Buffalo and Niagara Rivers as Great Lakes Areas of Concern (AOC). Through the Federal Remedial Action Plans (RAP) program, significant progress has been made in resolving beneficial use impairments in support of de-listing the Rivers. Supporting implementation of the Buffalo and Niagara River Remedial Action Plans will be important for the region.

Promote green infrastructure development and green development practices.

In the long run one of the most effective ways to address the Combined Sewer Overflow (CSO) issue, as well as water quality and quantity issues is to retain storm water on site. Rain barrels, rain gardens, bioswales, graywater recycling, detention areas, wetland preservation and related tactics can reduce storm water demands on waste water treatment plants, conserving energy and promoting groundwater recharge. New storm water regulations make much of this mandatory for new development.

Plan with the watershed in mind and review land use practices for water impacts.

Our watersheds transcend municipal, county and even state and national boundaries. What happens in Lancaster and Cheektowaga, for example, determines, in part, the quality and quantity of water in the Scajaquada Creek as it flows into the Niagara River in Buffalo. The Buffalo River watershed encompasses lands in many towns and two counties – Erie and Wyoming. The Niagara River watershed also includes a significant area of land. As a guiding principle for all of our planning, we must keep in mind that land uses in natural areas, not political jurisdictions, affect the quality and quantity of our waters.

5^{Big} Ideas

Connect Our Places by Expanding and Diversifying Our Transportation Options



Transportation is the thing that connects anything in our region with everything else. It is how we get to work, school, shopping, health care, recreational opportunities and more and it is how we get home again. To put it another way, transportation is the thing that opens up nearly every opportunity we enjoy, the thing that makes most of our choices real.

For most people in region today, that means driving a car. The current average annual cost of owning and operating an automobile ranges from \$8,000 a yearⁱ on up depending on the value of the car and the amount of driving one does. But there are other costs as well – in time spent driving, the costs to government to maintain roads and highways, the carbon emitted into the atmosphere from burning gasoline, loss of life and limb for accidents involving motorists, cyclists and pedestrians, the health impacts of air pollution and more.

For those who cannot drive, such as young people and some seniors and persons with disabilities, for those who choose not to drive, and those who simply can't afford a car – the costs are far higher in terms of lost or limited access to job opportunities, education, recreation, health care, shopping and the simple loss of independence.

The crux of the problem is that our long-term dependence on the automobile has promoted a land use and development pattern that can reasonably be served only by the automobile itself. Streets and roads designed for the car are unfriendly to people on bicycles or on foot. Distances that are easy for motorists to travel are difficult or impossible for those using other modes.

The dominance of the automobile has been especially devastating for public transit. As our car-dependent region spread out, the transit system could not afford to follow. Longer suburban bus routes cost more to operate and drew fewer riders. Transit entered a vicious downward spiral of fewer riders, less revenue and cuts in service, which led to still fewer riders, less revenue and additional cuts.

In addition to our public transit system, our current freight transport system faces efficiency challenges. Our regional competitiveness in the global marketplace depends on the roads, rails, airplanes, ships, and warehouses that allow local companies to get their products to market. According to IHS Global Insight forecasts, regional freight volume is projected to double as early as 2035.ⁱⁱ To ensure that our region can effectively meet current and future freight demands and be competitive, key infrastructure improvements are needed to better facilitate the movement of goods.

Along with the opportunity freight holds for our region is the \$1.4 billion industry in transportation and logistics that Buffalo Niagara is well-positioned to share. Logistics is an industry that helps our local companies reach their market. It is also an industry in itself that can provide jobs, income and wealth.

WHAT DOES THE DATA TELL US ABOUT WHAT WE ARE DOING?

We have more cars on the roads and travel more miles, contributing more to pollution.

We spend more time commuting.

Our transit service in a sprawling region is often inconvenient and time-consuming.

Few of us live near transit service.

Our transit ridership is up recently, but way down over the long term.

For many of us, public transit is a necessity, not a choice.

TOOLS FOR GREATER UNDERSTANDING

The City of Buffalo's **Complete Streets** policy and the **Buffalo Green Code**.

The Niagara Frontier Transportation Authority's **Metro Amherst-Buffalo Corridor Alternatives Analysis**.

The Greater Buffalo Niagara Transportation Council **Metropolitan Transportation Plan for 2050**, now being developed in concert with One Region Forward.

WHAT THE COMMUNITY SAID THEY VALUE

What 115 Maps Tell Us -----

On average, participants added **69 miles of recreational/ bike trails per map.**

106 out of **115** maps

said that “increasing the ways we can “get around without a car” was a guiding principle.

92%

of all maps listed the need to increase and extend public transit as a guiding principle.

What Else We Heard -----

“Use rails and transit to capitalize on Niagara Falls tourism.”

- Citizen participant at a Mapping Workshop in Niagara Falls

“Increase peak hour service frequencies to around 10 minutes for core bus routes.”

- Citizen feedback through Text It Forward survey

“Rails-to-trails, particularly for connecting rural areas with other parts of our region, are a strategy we need to pursue.”

- Feedback from a member of the Private Sector Council

WHAT THE DATA TELLS US

We drive more than twice as much as we did in 1970.

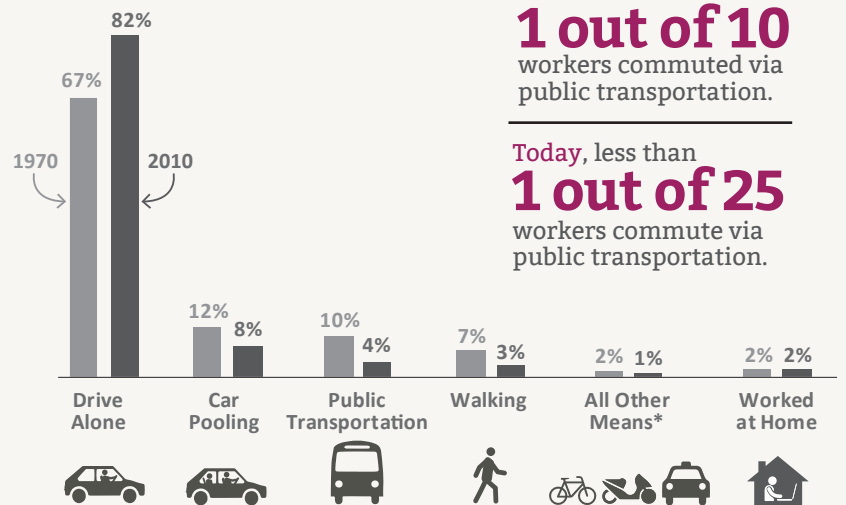
DAILY VEHICLE MILES TRAVELED PER CAPITA, 1970 AND 2010



Source: Greater Buffalo Niagara Regional Transportation Council, 2011.

We commute to work by car more and take transit less.

COMMUTING MODES, 1970 AND 2010



In 1970,

1 out of 10 workers commuted via public transportation.

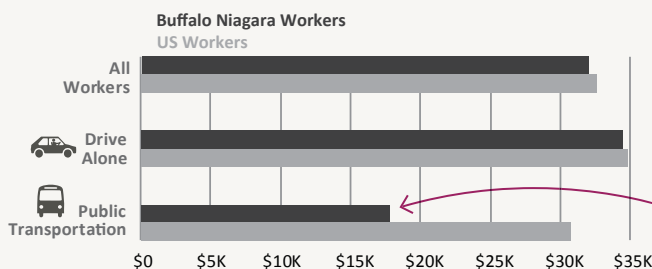
Today, less than

1 out of 25 workers commute via public transportation.

Source: US Census Bureau, 1970; American Community Survey, 1-year Estimates, 2010.

How we commute in our region is a reflection of how much we earn.

MEDIAN ANNUAL INCOME BY MEANS OF TRANSPORTATION TO WORK, 2006-2010



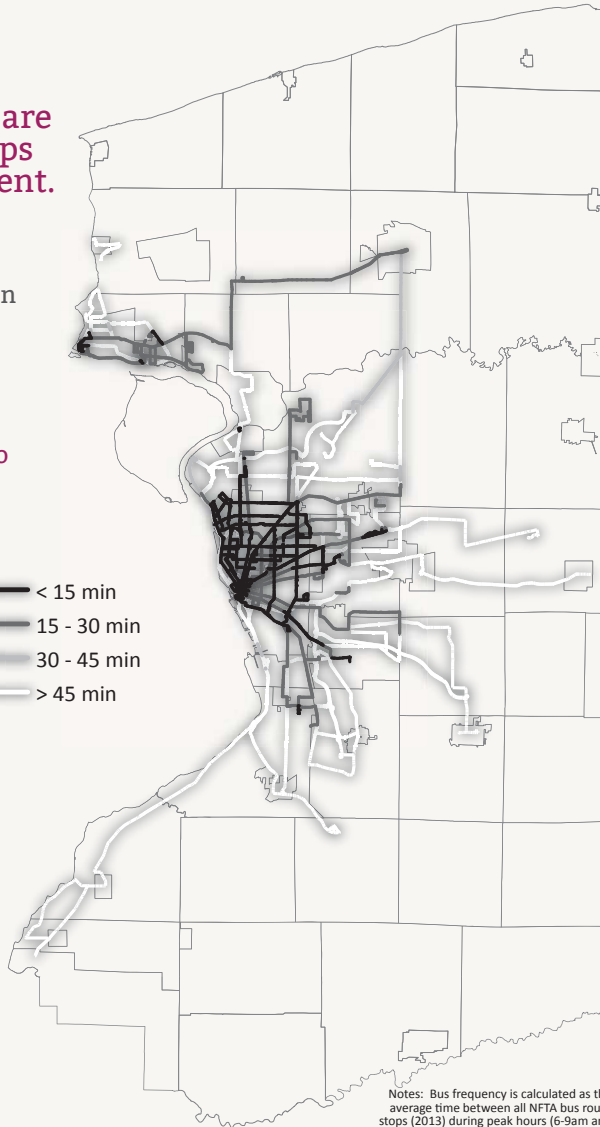
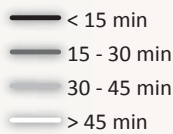
Source: US Census Bureau, American Community Survey, 2006-2010 5-year Estimates.

Across the US, workers who use public transit earn almost as much as workers who drive alone, but in Buffalo Niagara, workers who use public transit earn only half as much as those who drive alone.

Public bus routes are extensive, but stops are often infrequent.

For tens of thousands of people who do not have a car, travel is often inconvenient and time-consuming. Workers who take public transit are **eight times more likely** than those who drive alone to spend **two hours or more** in their daily commute.

BUS FREQUENCY IN BUFFALO NIAGARA



Notes: Bus frequency is calculated as the average time between all NFTA bus route stops (2013) during peak hours (6-9am and 3-6pm on weekdays) for each street segment with bus service.

Public transportation is not an option for many in the region.



.....1/2 mile.....



PEOPLE

26% of Buffalo Niagara's population lives within easy access to public transportation.



.....1/2 mile.....



JOB

31% of Buffalo Niagara's jobs are located within easy access of public transportation.

Source: UBRI Analysis using data from US Census, 2010, and NFTA, 2012.iii

WHAT WE COULD DO DIFFERENTLY

Develop a regional "hub and corridor" transportation system.

p 70

Create innovative financing mechanisms.

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Create a Buffalo Niagara International Trade Gateway.

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WHAT WE COULD DO DIFFERENTLY

RECOMMENDED STRATEGIES AND ACTIONS

Develop a regional “hub and corridor” transportation system.

Although decades of “sprawl without growth” have created a land use pattern for which it is increasingly difficult to provide convenient and energy efficient transportation service, the historic pattern of development in our region still offers an opportunity to match transportation – and transit – to land use. The region grew up along the major arteries emanating from Buffalo and Niagara Falls and in outlying villages connected to them, creating a system of hubs and corridors (e.g. Broadway as a corridor with hubs at Fillmore Avenue, and the villages of Depew, Lancaster and Alden). If we concentrate development of jobs, housing and infrastructure in these hubs and corridors, we can create a pattern that is more efficient and can be better served by transportation.

High quality transit.

The past decade has seen steady growth in transit ridership after decades of declining ridership, falling revenues, and service cuts. Elimination of federal operating subsidies and constraints on state support have compounded the loss of farebox revenues. Previous service cuts continue to limit ridership growth and the revenues that would come with it. All of this has occurred during decades of sprawl without growth and rising automobile use. Recent growth in ridership, however, combined with developments in the Metro Rail corridor and future plans by the Seneca Nation of Indians to establish a Transit Center in the Irving, NY area of the Cattaraugus Territory and incorporate additional routes to better link the Territories and the Southern Tier to the Buffalo Niagara urban area, offer a ray of hope that the situation can be significantly improved. A program of targeted service improvements, partnerships with major institutional destinations (e.g. the Buffalo Niagara Medical Campus), and well-designed incentives and promotions could shift the momentum in favor of transit. None of this, however, can happen without additional funding. The region should make transit funding and system improvement a top priority for advocacy and action. Additionally, concentrated development patterns that promote walking and may effectively be served by transit can reduce transportation costs for users as well as the costs of public services and infrastructure. This in turn can increase the return on investment as the result of land development used at its best and highest value, resulting in an increase in sales and property tax receipts.

Transit Oriented Development (TOD).

Transit Oriented Development, in which new homes and apartments, offices and shops are built in close proximity to high quality transit service – especially rail transit – has proven in many cases around the nation to be a good way to improve land use, neighborhood quality, and

What if public transit was extended where there is demand?



MOMENTUM TO BUILD ON

The **Niagara Frontier Transportation Authority** has planning under way with an analysis of alternatives for transportation improvements in the “Buffalo-Amherst Corridor.” Because of growth in the Buffalo Niagara Medical



Campus and in Amherst the area has been identified as most likely to draw ridership needed to support high quality transit improvements. That might include an extension of Metro Rail, new Bus Rapid Transit, enhanced bus service, or other investments. The corridor also has high potential for promoting dense mixed use development that will further promote access to transit and growing ridership.

to.nfta.com

transportation access. The University at Buffalo's forthcoming School of Medicine building atop the Allen-Medical Campus Metro Rail station is a good example of TOD. The NFTA, Buffalo Urban Development Corporation and private developers should work together on other pilot projects along the light rail line. Pilot projects and other TOD planning efforts should include ways in which affordable housing may be incorporated in these development efforts to provide people of all ages and incomes with improved access to transportation, jobs and housing choices.

Joint development as a value capture strategy.

The concept of joint development opens the possibility of coordinating investments in transit infrastructure with investments in new buildings to reinforce the relationship between transportation and land use. Aligning public and private investments helps ensure that both will enjoy a suitable return.

Complete streets.

If we want to promote alternative modes of travel – walking, cycling, transit, etc. – we need to provide the environment and infrastructure to make it safe, comfortable, and interesting for those travelers. A comprehensive concept has been developed to accomplish this – commonly called “complete streets” – which provides for ample sidewalks, street trees, on-street parking, bike lanes and other aspects of street infrastructure design to make pedaling, walking or waiting for a bus more attractive. The good news is complete streets can often be achieved within existing budgets. Incorporating bike lanes or crosswalk treatments into routine tasks such as paving and restriping provides opportunities to implement complete streets across the region. Many small, low-cost improvements can, when thoughtfully implemented over time, create a much friendlier and safer environment for everyone.

Corridor makeovers.

Part of the difficulty in promoting alternative modes of travel can be seen in the character of many suburban “main drags,” where multi-lane roadways without sidewalks serve retail establishments with big set backs and big parking lots. These environments make walking, waiting for a bus, or riding a bicycle not only unpleasant, but often downright dangerous. Developers in many places, however, have shown how such environments can be transformed, step by step, by bringing activities to the building line, tucking parking in back, creating pleasant sidewalk paths, and throwing in a bit of complete streets to boot. Work to remake the Village of Williamsville is headed in this direction. A pilot project on Transit Road, Niagara Falls Boulevard or McKinley Parkway could show the public what might be possible in the transformation of our least pedestrian friendly environments.

Bicycle infrastructure and incentives.

A crucial element in promoting travel by bicycle – not just for recreation, but for getting from here to there – is to provide the appropriate infrastructure to make it safe and convenient – on the way to and at the destination. Regional and municipal officials should work with bicycle advocacy groups to promote development of bike lanes on streets and

What if we made it easier to drive less?



MOMENTUM TO BUILD ON

Buffalo CarShare provides a great option for people who can't afford or don't want to own a car. Members pay a low annual fee and reasonable hourly and daily rates to use vehicles stationed conveniently around Buffalo neighborhoods. CarShare helps reduce energy consumption by promoting less driving. It helps household economics where automobile ownership is not in the budget. It also provides a locally-owned alternative to national corporate car-share companies. CarShare has 500 members 15 cars – and a pick-up truck – with plans to grow to 30.



buffalocarshare.org

“sharrows” where pavement widths are inadequate for bike lanes. The partnership between the City of Buffalo and GO Bike Buffalo to create a bicycle master plan for Buffalo is a great example and may serve as a resource for other communities in the region in how to become more bike friendly.

Major employers should also be encouraged to offer financial incentives to promote biking and other non-motorized commute options to work, such as a parking cash out program. A significant number of employers provide free or reduced price parking for their employees as a fringe benefit. Under a parking cash out requirement, employers are allowed to continue this practice on the condition that they offer the cash value of the parking subsidy to any employee who does not drive to work.

Innovative parking programs and management.

Performance-based pricing is a parking management system that is responsive to fluctuations in demand and compatible with existing parking technologies (primarily parking pay stations). Performance prices for curb and other parking locations can yield ample public revenue as demonstrated by performance based programs implemented in Seattle, WA, Pasadena, CA, Washington, DC and others. In turn, many communities and districts have dedicated these funds to help pay to clean and maintain sidewalks, plant trees, improve lighting and provide other public improvements. The implementation of performance-based parking pilot programs in strategic locations in the Buffalo Niagara region could help address needed infrastructure improvements and ongoing maintenance of public facilities.

Establish transportation management associations.

The Buffalo Niagara Medical Campus Inc. has been a local pioneer in bringing together multiple organizations to promote alternative transportation options collaboratively. This includes managing parking options, installing alternative fuel vehicle infrastructure, making accommodations for bicycle commuters, and promoting the use of public transit by employees and visitors to partner organization workplaces. This approach could be scaled up for an even larger district, such as an entire downtown, or the entire region.

Embrace emerging technologies.

We can't know exactly how new technologies may change our world, but emerging technologies such as vehicle automation and semi-automation, solar freeways and parking lots, smart transportation cards and others may help us get the most out of our existing infrastructure, improving safety and reducing emissions in the region. Incorporating these technologies will be necessary for a robust regional hub and corridor system going forward.

What if more employers offered alternatives to driving?



MOMENTUM TO BUILD ON

The Buffalo Niagara Medical Campus has made a strong commitment to providing alternative ways to commute to the growing downtown hub. Its Transportation Demand Management programs include bicycle sharing, secure bicycle storage, and charging stations for electric cars. Their parking lot also features “green” elements such as solar and wind-powered lighting and on-site storm-water management.



bnmc.org

Create innovative financing mechanisms.

The stark reality is that the improvements we seek in transportation are largely not possible without new sources of revenue. The Federal Highway Trust Fund, fed by a fixed 18.4 cent per gallon gasoline tax, produces less revenue (in inflation adjusted dollars) today than twenty or thirty years ago and is on the verge of bankruptcy. Support for public transit continues to be inadequate, with NFTA farebox revenues combined for metro bus, rail and paratransit service less than 30 percent of operating costs.^{iv}

Advocate for highway trust fund reform.

Leaders in business, government, health care, higher education and other sectors should work together to advocate for reform in the Federal financing system for transportation. As vehicle miles traveled declines and fuel economy improves the per-gallon (not a percentage) tax on gasoline generates less and less revenue. At the same time many infrastructure needs go unmet and construction costs soar. Reform of the highway trust fund needs to ensure significant increases in revenue for transportation and to carve out a larger proportion of revenue raised for transit, cycling, and redesign of transportation corridors.

Advocate for increased state investment.

New York State provides capital funding for transportation projects and operating assistance for transit, as well as matching funds for a range of federal transportation programs. Unfortunately, these sources of funding are proving inadequate in the long run to meet regional needs. While we're waiting for Congress to act on the Federal Highway Trust Fund, the regional planning network also needs to press state leaders for greater funding for transportation projects.

According to a recent report by the American Petroleum Institute, New York States collects 49.86 cents/gallon in gasoline taxes. This rate does not include the additional 18.4 cent federal excise tax.^v The original purpose of this fund was to assure reliable, predictable investment in the future of the State's transportation infrastructure to keep our roads and bridges in good repair. However, three quarters of the dollars from New York's motor fuel tax are now being used to pay for borrowing and operating costs of state agencies, leaving only 22% for capital construction to improve our infrastructure in State Fiscal Year (SFY) 2012-2013.^{vi}

Develop options for regional financing.

We need the federal and state governments as active partners. Ultimately, however, if we hope to build a modern transportation system to support our 21st century economic growth, we may have to raise some of the money to do so in our own backyard. Despite presumed public antipathy to taxes, a referendum on specified tax and fee increases for clearly-targeted and well-explained projects supported by community leadership could pass. There are many options for financing, such as

What if all our village centers were more pedestrian friendly?



MOMENTUM TO BUILD ON

The Village of Williamsville is working to transform its Main Street business district with strategic improvements to the streetscape infrastructure – new street tree plantings in “structural soil” that makes trees healthier, new pedestrian scale street lighting, sidewalk rain gardens to capture and filter stormwater, sidewalk bump-outs that making crossing safer – and host of other investments in making the village safer and more attractive.



picturemainst.com

San Diego's TransNet program. Currently, there are over ten different transportation financing related ballots in counties around the country to be voted upon in the November 2014 election.^{vii} But, the first step in Buffalo Niagara is to put revenue raising for transportation on the public agenda. Success would mean, not only being able to finance projects that are consistent with regional goals and plans, but bring efficiencies in project delivery not possible under federal rules and procedures.

Create a Buffalo Niagara International Trade Gateway.

The Buffalo Niagara region is well positioned for Cargo-Oriented Development (COD). COD may be defined as the development of places that are both multi-modal nodes of freight transportation and centers of employment in logistics and manufacturing. The region has powerful assets to help it take a more prominent role in the global trade, transportation, logistics and supply chain industry. These assets include a strong advanced manufacturing base, proximity to the Greater Golden Horseshoe Region of Toronto, providing access to the 4th fastest growing market in North America, strong physical infrastructure in road, rail, air and short sea shipping capabilities and unmatched "soft infrastructure" of import/export expertise, including customs brokers, third-party logistics, legal and financial specialists and others. Logistics is a \$1.4 trillion industry annually in the US and Buffalo Niagara is well-positioned to claim more than its share. Just as important, the resurgence of manufacturing in our region will get a major boost from close connections to improved logistics services. Production of goods and their delivery to market are more time sensitive than ever before. To grasp this opportunity, Buffalo Niagara should create an integrated center for transshipment, storage, collection and distribution of goods, regionally-centered around a convergence point of rail lines, truck routes, water shipping routes and air transport modes and facilities. Some elements of the work include:

Advance the International Trade Gateway Organization.

In June 2014, International Trade Gateway Organization, Inc. (ITGO) was officially created to implement the ITGO Strategic Plan. Immediate next steps including securing resources to support the hiring of an executive director and a marketing campaign which experience from other regions suggests are necessary elements required to develop and implement the gateway initiative. Other early ITGO steps are also focused on expanding relationships with the Western New York Regional Economic Development Council (WNYREDC), inclusion of logistics into ongoing regional planning efforts, building communications and government relations capacities and forging a connection with the Port Authority of New York and New Jersey to gain status as a designated inland port.

Build the physical infrastructure for trade.

While the two Class 1 rail lines and other existing transportation infrastructure in the region is robust, certain strategic capital projects need to be undertaken to strengthen the network. These include

improvements to plaza renovations at both the Peace Bridge and Lewiston-Queenston Bridge, taking advantage of excess capacity at the Niagara Falls International Airport, and replacement of the Portageville, NY railway bridge – a very weak link in rail connections between port facilities in New York/New Jersey and Buffalo Niagara which is entering the final stages of the environmental review process.

Advance key policy initiatives.

Border crossing procedures, the workforce “pipeline” for logistics specialists, and overall federal funding for transportation infrastructure are all key issues for continued development of the Buffalo Niagara International Trade Gateway and require timely action on policy. A pilot project is underway by the US Department of Homeland Security and the Canadian Ministry of Defense on procedures for pre-clearance for trucks and to facilitate legitimate border crossings in general. Broader application of new procedures is needed. Coordination with WNYREDC and the regional workforce development system is needed to beef up training programs for logistics professionals.

Research key issues in logistics.

Advancing the development of the Buffalo Niagara International Trade Gateway will require better answers to key questions about the regional logistics system. This will require research and analysis on current rail usage and bottlenecks, the potential for increased water-borne transport on the Great Lakes, assets and needs for warehouse space and sites, supply and demand for personnel in key specializations, and outreach to international shippers to better understand the market and its needs.

5^{Big} Ideas

Provide
Housing Choices
in Neighborhoods
that are Great
Places to Live



Creating and maintaining quality housing and great neighborhoods are central to making Buffalo Niagara better for everyone. Where we live impacts how we live and respecting our history, embracing existing neighborhoods while preparing for communities of tomorrow will ensure all residents have access to housing choices throughout the region.

Our homes are essential to our identities as individuals and vital to the lives of our families. Our homes and neighborhoods influence our health and shape our opportunities. They frame our access to school, work, shopping, recreation and more. For some, a home is their biggest investment; for others it is their largest monthly expenditure.

Housing and neighborhoods are also crucial to our work toward a more sustainable regional way of life. Our homes influence how much energy we use for heating, cooling, and, increasingly, for appliances from stove and refrigerator to air conditioner and dishwasher to computer and big screen television. Our neighborhoods – where they are and how they are connected – have a lot to do with how much energy we use for transportation and how we use the land in our region.

The good news is that Buffalo Niagara, in general, has strong housing resources and a variety of great neighborhoods. The rest of the story is that much of the housing in our central cities – Buffalo, Lackawanna and Niagara Falls – has become vacant, dilapidated, and in many cases, demolished. The value of much of our housing in our first-ring suburbs has stagnated¹ because of shifts in demand and the aging of the stock. Many suburban homes are slow to sell and some are also vacant.

Meanwhile, much housing has been built on the periphery of the region, often disconnected from the framework of neighborhoods, and generating new energy demand in the form of long commutes and larger interior spaces to heat and cool. Put together, sprawl without growth has meant we are abandoning centrally located houses to build rural houses and the new infrastructure that goes along with them.

The future will be a challenge. Housing demand is shifting dramatically – as our current population continues to age, younger generations seek new forms of housing, more people choose to live alone, and families with children decline as a proportion of all households. At the same time, housing supply – and the neighborhoods that support housing – doesn't always fit the demand.

WHAT DOES THE DATA TELL US ABOUT WHAT WE ARE DOING?

We build bigger homes but have smaller households.

Our new housing units don't accommodate a changing population.

Renters in our region are more likely to be burdened by housing costs.

Our housing supply continues to far outpace demand.

Communities in our region are plagued by vacant homes.

Vacancy rates are particularly problematic in our central cities and first-ring suburbs.

Our aging population and preferences of millennials don't mix with sprawling neighborhoods.

TOOLS FOR GREATER UNDERSTANDING

Housing for Complete Communities and the Fair Housing Equity Assessment
Housing and Neighborhoods Strategy Document



WHAT THE COMMUNITY SAID THEY VALUE

What 115 Maps Tell Us -----

Participants placed

91% of new homes in mixed-use neighborhoods, but only **9%** in places that would have single-family homes only.

37 maps

listed 'Revitalizing Urban Neighborhoods' as a guiding principle.

What Else We Heard -----

“People working closer to where they live.”

- Citizen participant at a Mapping Workshop held in Niagara Falls

“We do have great buildings with great bones, and we have great neighborhoods but we also have some that have come back (e.g. West Village, Grant Street). We have some other neighborhoods that can be great again.”

- Citizen feedback from Community Congress #1

“We need to be offering more housing type choices especially in our urban centers.”

- Feedback from Private Sector Council member

WHAT THE DATA TELLS US

Homes are bigger but households are smaller.

AVERAGE SIZE OF HOMES

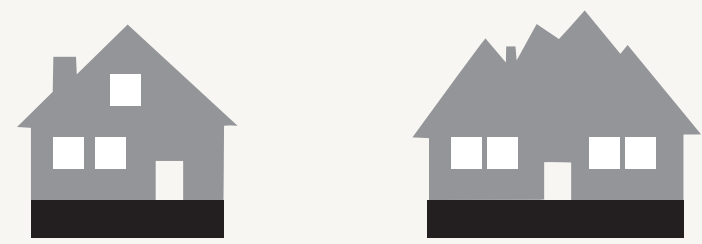
1,755 SQ FT

AVERAGE SIZE OF HOUSEHOLD

3.2 people per household

We keep building bigger homes... even though fewer people live in them.

2.3 people per household



1970

2010

Source: NYS Department of Taxation and Finance, Office of Real Property Tax Services, 2010. Source: US Census Bureau, 1970, 2010.

We are building the same types of homes, but households are changing...

BUILDING PERMITS 2002-2010, SINGLE FAMILY HOMES WITH CHILDREN 2012



75% of building permits issued from 2000 to 2010 were for single-family homes.

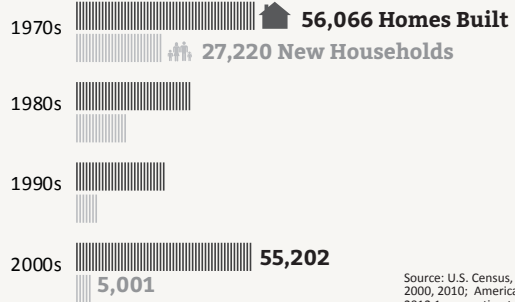


28% of households are families with children.

Source: U.S. Census Bureau, Building Permits Survey, 2012; American Community Survey, 2012 1-year estimates.

From 1970 to 2010, we built three homes for every new household...

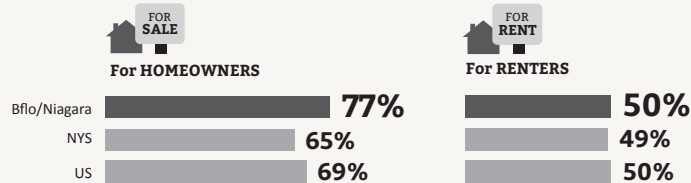
HOMES BUILT VS NEW HOUSEHOLDS



Source: U.S. Census, 1970, 1980, 1990, 2000, 2010; American Community Survey, 2012 1-year estimates.

Housing is affordable for homeowners in Buffalo Niagara, but often not for renters.

PROPORTION OF HOUSEHOLDS SPENDING LESS THAN 30% OF THEIR INCOME ON HOUSING COSTS

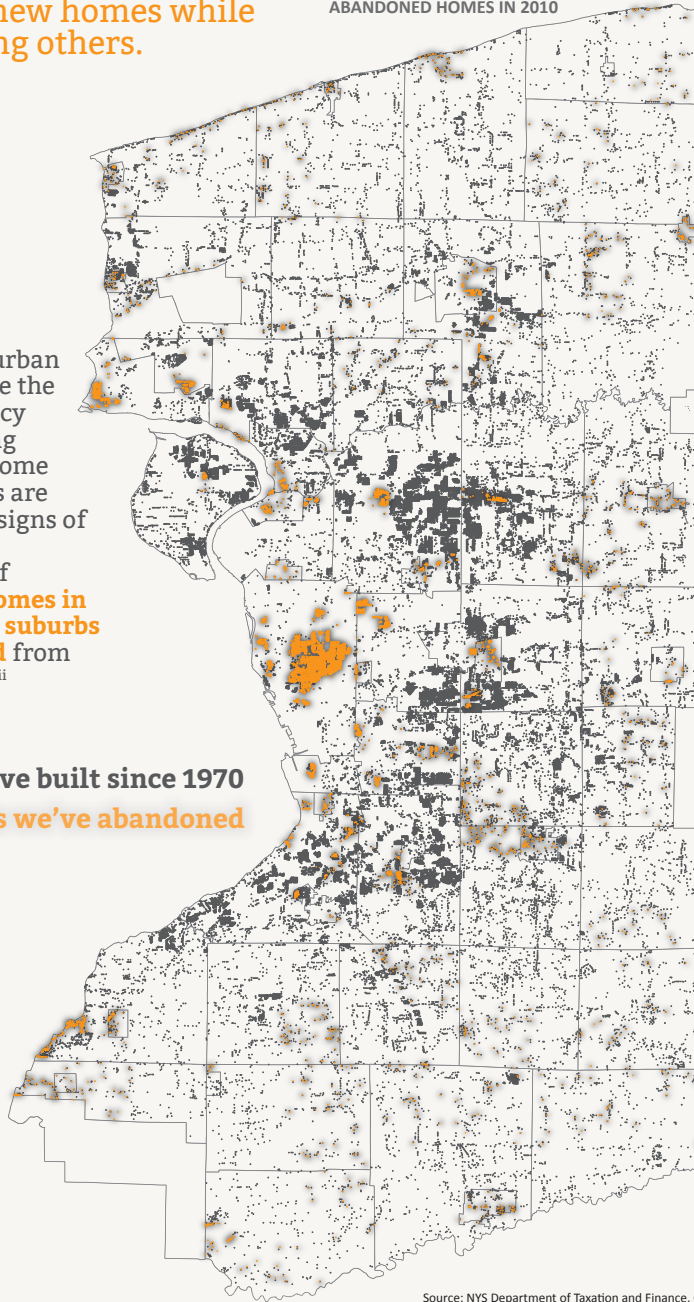


Source: American Community Survey, 2010 1-yr estimates.ii

Half of those who rent in the Buffalo Niagara region are burdened by housing costs deemed unaffordable.

We build new homes while abandoning others.

HOMES BUILT AFTER 1970 AND ABANDONED HOMES IN 2010



Today, while urban areas still have the highest vacancy rates, first-ring suburbs and some outlying areas are experiencing signs of decline. The number of **abandoned homes in our first-ring suburbs nearly tripled** from 1990 to 2010.ⁱⁱⁱ

Homes we've built since 1970
Homes we've abandoned

Source: NYS Department of Taxation and Finance, Office of Real Property Tax Services (2010), US Census (2010), Erie County Dept. of Env. & Planning (2012) and Niagara County Dept. of Economic Development (2012).^{iv}

WHAT WE COULD DO DIFFERENTLY

Provide data and analytical resources for informed decision-making for housing and neighborhoods p 80

Anticipate, accommodate and embrace demographic shifts p 81

Pursue neighborhood-specific asset-based strategies for redevelopment p 82

Improve the housing support delivery system p 83

Vacant dwellings more than tripled in forty years.



Over **30,000 more homes sit vacant today** than in 1970 with more spreading outside our cities than ever before.



Source: U.S. Census Bureau, 1970, 2010.

WHAT WE COULD DO DIFFERENTLY

RECOMMENDED STRATEGIES AND ACTIONS

Provide data and analytical resources for informed decision-making for housing and neighborhoods.

A strategic approach to preserving and modernizing our housing stock and neighborhood environments will require a clear picture of where we are and where we are headed.

Develop a Regional Property Information System.

Accurate, current data is essential to good decision making. This resource should include open source data on housing, land, neighborhoods and municipalities to support ongoing planning and policy-making around housing and neighborhoods. The need is for a system that will be continually refreshed rather than provide a single point-in-time analysis; encompass a breadth and depth of data from neighborhood level indicators on assets and needs to parcel level data; and provide data for use by the public in general, although some categories of data might be private and password-protected. Key questions include what local organization or institution might host such a system and how it would be sustained financially over time. Finally, a Regional Property Information System might be part of a larger data and analysis capacity to serve the overall planning and implementation effort behind One Region Forward.

Conduct a current analysis of housing supply and demand.

A current market study is an essential starting point for discussion of planning and development strategies for neighborhoods. No comprehensive assessment of housing and neighborhoods has been conducted in recent memory. But one would provide the basis for the informed decision-making we seek. It should address market and neighborhood dynamics on both a broad regional and hyper-local basis. This might be a first use of the developing Regional Property Information System and a step toward implementing other recommendations in this plan.

What if more neighborhoods had the organizing capacity of PUSH?



MOMENTUM TO BUILD ON

For nearly a decade, **PUSH Buffalo** (People United for Sustainable Housing) has been combining community participation, housing renovation and green energy to push neighborhood regeneration on Buffalo's West Side. PUSH pioneered the "Net-Zero Energy House," runs a state-funded weatherization program, and recently announced a 46 unit rehab and infill housing project to provide affordable, energy-efficient housing to low-income Buffalo residents in its 25-block "Green Development Zone."



pushbuffalo.org

Anticipate, accommodate and embrace demographic shifts in housing development and neighborhood revitalization.

As noted above, the impacts of an aging population, an influx of ‘New Americans’ through immigration, and changing lifestyle preferences by younger generations all promise to put a strain on existing housing resources and provide incentives for new designs, forms of tenure and neighborhood environments. We need to deploy information, promote proto-type projects, and provide tangible supports for development of new housing types and forms of tenure in mixed use neighborhoods.

Develop a housing toolbox.

Municipalities, developers, non-profits and residents need models and precedents for designing and producing sustainable housing types and neighborhoods. This would include an on-line repository of best practices and case study information about a range of housing types (townhouses, lofts, “granny flats,” etc.) and forms of tenure (co-ops, condos, co-housing, etc.). In addition, information should also be supported by in-person technical assistance.

Deploy new housing models.

New housing models to meet the changing needs and preferences of residents require local proof of concept. It has to work here. Partners involved with One Region Forward should organize a coalition of local governments, not-for-profit community development companies, developers and others to pioneer a range of new housing types and forms of tenure to meet the increasingly diverse needs of the regional housing market and to develop the neighborhoods that support these housing types. This would include housing tailored to the needs or preferences of senior citizens, persons with disabilities, artists, immigrants, students, young professionals, empty-nesters, and others. Requirements include a lead agency for advocacy and education, a market analysis for housing types not currently in production, technical assistance to help communities implement new housing types, and new funding mechanisms for development types not supported by conventional lending products.

Relieve regulatory roadblocks to housing innovation.

In many cases zoning codes or other housing regulations may need to be amended to allow some new types of housing or forms of tenure. This is particularly true of suburban communities that grew up around a model of single-family households with children – a demographic segment that has decreased dramatically in recent decades. To lead the effort, partners involved with One Region Forward could advance technical assistance for zoning and planning regulation reform to work with the coalition of municipalities, CDCs, and developers engaged in this effort.

What if more people lived in our downtowns?



MOMENTUM TO BUILD ON

Twenty-five years ago housing in Downtown Buffalo was still just a hope. But the publication of “A New Neighborhood in Downtown Buffalo” documented the opportunity. Citizens at the Downtown Summit in 1994 prioritized it. And early projects like the **Ansonia Center** and **Theater Place** began to prove the market. Since then, the idea of Downtown as a great place to live has continued to gather steam as the supply and value of housing has grown. Since 2006, more than 1,000 new housing units have come on line, with an additional 350 units in progress. Meanwhile, we are seeing downtown living catch on in Niagara Falls, North Tonawanda and other urban centers.

Pursue neighborhood-specific asset-based strategies for redevelopment.

Public and private resources for housing and neighborhood redevelopment need to be strategically targeted where new investments can build on strong neighborhoods nearby, leverage existing assets, engage active residents and help neighborhood-scale housing markets work again. Municipal leadership and collaboration with community based organizations and residents is key to set strategy, conduct participatory planning, and align capital investments with neighborhood plans.

Emphasize community based planning.

Planning with residents and stakeholders can maximize participation, leverage diffuse resources and focus on quality of life improvements. Working closely with residents and stakeholders is essential because so much of the knowledge, energy and money that is needed to regenerate neighborhoods exists at that local scale. Success will depend as much on investments by home owners and small scale entrepreneurs as it does on municipal government, developers, or banks. The active engagement of all is needed to produce plans that work for specific neighborhoods and have the active support of those who stand to benefit. But neighborhood planning can be resource intensive. A strong commitment from local government, philanthropy and business will be needed to provide the support structure for local planning that lasts.

Focus and coordinate public investments in neighborhoods with strategic assets.

It's crucial to coordinate public policy and capital investment priorities with local plans to create complete neighborhoods. Even mundane capital projects like street paving, curbs, sidewalks and street lighting can buoy resident efforts at regeneration. Larger investments in parks, transit, schools, community centers, business districts and the like can have an even greater impact – but only if all of these are coordinated with local planning initiatives. Participatory budgeting and crowd-sourced project financing can support these strategic investments. But alignment of local, county, state and federal investments with local plans is the key. Also important is treating neighborhoods holistically where “complete streets,” local services and neighborhood retail are part of the mixed use environment that supports diverse, accessible, quality housing. For some communities, this means repairing or restoring existing fabric. For other communities, this may mean retrofitting or repurposing dated and underutilized commercial stock, or creating town centers where none currently exist.

What if we had robust tools to address vacancy and abandonment?



MOMENTUM TO BUILD ON

The **Buffalo Erie Niagara Land Improvement Corporation** – Buffalo Niagara’s new land bank – is now up and running. Equipped with new powers from the New York State Legislature, the agency is beginning to acquire distressed properties, preparing them for redevelopment, and putting these properties in the hands of responsible new owners. The new land bank is an essential element in addressing 77,000 tax delinquent loans in Erie County alone and promoting neighborhood redevelopment and infill projects in both counties.

benlic.org

Leverage the energy of new demographic groups.

Urban neighborhoods have long been identified with specific ethnic groups, industrial specializations or cultural tendencies. Neighborhood planning should embrace the potential for immigrant communities, artists, or other groups to lead regeneration efforts and use unique ethnic, cultural or occupational identities to leverage investment and customer traffic. Changes already underway throughout the region can be leveraged to enhance these opportunities. These approaches can help create stronger neighborhoods if the initiatives are authentic, are supported by neighborhood input, and backed by reliable market information.

Design alternative long-term strategies.

Design alternative long-term strategies for areas where disinvestment has left few of the assets, anchors and actors that are needed to power successful neighborhood revitalization. For such neighborhoods the time for conventional neighborhood redevelopment may be decades away. Where housing stock and commercial fabric have mostly been eroded and anchor institutions have departed, scarce public resources in conventional approaches cannot be expected to overcome immense private disinvestment. Both interim and long-term strategies are needed to support the redevelopment process and provide options for those who call those neighborhoods home. Far from the “benign neglect” of decades past, however, these neighborhoods need active management of community change, driven by local residents and a firm understanding of the existing market potential.

Improve the housing support delivery system.

The network of community-based organizations providing services for housing and neighborhood revitalization needs to achieve significantly greater productivity while retaining its responsiveness to local conditions and contexts. Partners involved with One Region Forward should identify a trusted institutional funder and trusted convener to lead a patient and broad-based collaborative effort to reform the system.

Reconsider the scope and scale of the system.

It should be possible to increase region-wide capacity and share expertise across the system while remaining responsive to local constituencies. Small neighborhood-based organizations can serve as a conduit for high quality regional services for their communities even as they provide local knowledge and input on community needs to a high-capacity support organization or network. This model would allow for opportunities to enhance services to traditionally underserved communities in cities, suburbs and rural areas alike. But redesigning long-term arrangements will not be easy. It will require skilled facilitation supported with patient resources and encouraged by state- and federal-level funders of housing services to bring such a process to a successful conclusion.

What if we created more traditional neighborhoods?



MOMENTUM TO BUILD ON

One of the emerging approaches to fighting sprawl is known as TND or traditional neighborhood development. **The Gardens at Oxbow** in Lewiston, NY is a noteworthy local example of the concept. TND features compact homes with front porches that face the street and close-by connections to neighborhood amenities like shopping, restaurants, parks and transportation. They're designed not only to be more walkable but more sociable as well.

thegardensatobox.com

Better protect renters and home buyers.

Develop better opportunities, supports and protections for renters and home buyers, particularly from traditionally vulnerable groups. Persons of color, those of low-income, seniors, immigrants, limited-English proficiency speakers and non-traditional families are among the groups that typically have been marginalized by the conventional housing and finance industries. The current housing support system attempts to break down barriers to quality housing for these – and all – demographic groups, but housing discrimination, public opposition and individual and institutional discrimination present tremendous challenges. Increased resources, focus and options need to be directed toward providing quality affordable housing near transit as a precursor and support for broader opportunity for these populations.

Cultivate a positive image of housing aid to improve participation.

A stigma often attaches to programs designed to provide assistance to households struggling to get or keep affordable housing. In some cases, the stigma is perceived by residents of neighborhoods where officials seek to locate affordable housing resources. In other cases, those who need and qualify for such assistance see the stigma in accepting help. Housing providers should launch a broad-based effort to rebrand affordable housing and educate the public on its benefits. This should include an extensive outreach effort to identify barriers to participation and to involve civic leaders and officials in a marketing and advocacy program.

Improve the code enforcement system.

Municipalities and housing providers should work together to develop new policies and tools to address slumlords and vacant properties more effectively. The code enforcement system should also be linked to education and support programs. Better use of information technology and focused prosecution through a dedicated housing court are both possibilities. But homeowners in violation of housing codes and in need of assistance should be able to get help through the enforcement system. Therefore, work to integrate financial and technical assistance programs for homeowners with the code enforcement mechanism.

5^{Big} Ideas

Strengthen Our Food Systems for a Healthier Population and Economy



Food is a self-evidently central element in making a sustainable way of life – in our region, not to mention the nation and the entire planet. Food is basic to human health. But how we grow, process and distribute food also has profound implications for land use, transportation, energy and environmental quality.

For Buffalo Niagara the challenges come at several levels. Many of our citizens lack easy access to fresh, healthy, affordable food because of where they live, a lack of transportation, or lack of money. Our population in general suffers from high rates of chronic diseases such as obesity, diabetes and heart disease because of poor diet rooted in our culture, but also in our food system. Most troubling, perhaps, is that our food supply is facing a period of severe instability because of climate change.

While agriculture is an important part of our regional economy, very little of the food we eat comes from Western New York. Instead, our food comes through a far-flung network across the

nation and the world. We should expect the cost of food to increase and its availability to decline as the energy costs of transportation grow and droughts, severe weather and other aspects of climate change disrupt crops in other places. One response must be to grow more food locally.

Sprawl is a problem from a transportation, infrastructure, land use, and public finance perspective, but it has also been an important contributor to the decline of agriculture in our region. Some farms have gone out of business because of the difficult economics of farming in our region. However, many have disappeared because it was simply more lucrative to “grow” houses than to grow crops on rural land.

WHAT DOES THE DATA TELL US ABOUT WHAT WE ARE DOING?

We consume large quantities of food grown outside our region.

We have vanishing or underutilized prime agricultural land.

Farmers across our region are quickly approaching retirement.

The majority of our farmland is producing animal feed.

Our residents aren't eating a healthy diet.

Our poor diets have real impacts on our health.

Local farms don't produce the food we need for a healthy lifestyle.

Many residents are suffering from food insecurity.

For many, healthy foods are inaccessible.

The cost of farming is high, relative to revenue generated.

TOOLS FOR GREATER UNDERSTANDING

Growing Together
Food Access and Justice Strategy Document



WHAT THE COMMUNITY SAID THEY VALUE

What 115 Maps Tell Us -----

Participants protected an average of **106,000 acres**

of farmland per map (about 42% of all current farmland in the region).

At least

59 maps

used “protecting farmland” as a guiding principle for future development.

What Else We Heard -----

“Preserve and expand sustainable farming in urban, rural and suburban areas. Produce more local food in all communities.”

- Citizen feedback from the Mapping Workshops

“Use farmland as an economic development tool such as the food related industries Batavia has attracted.”

- Feedback from Private Sector Council member

“Support urban agriculture — not community gardens — as part of food production. We have the land to do it. We need the policies.”

- Citizen feedback from Community Congress #1 in Erie County

WHAT THE DATA TELLS US

We continue to lose cropland every year.

Since 1992, our two counties have seen nearly 21 square miles of cropland go out of production* — an area roughly double the size of North Tonawanda.

Cropland converted to homes since 1992

The map shows residential construction over the past twenty years within areas that were previously identified as cropland (by satellite imagery).



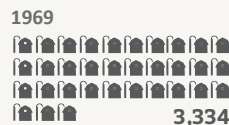
*Source: USDA-National Agricultural Statistics Service, Census of Agriculture, 1994, 2009.

Map Source: U.S. Geological Survey, (1997). 1992 New York Land Cover Dataset; U.S.D.A., National Agricultural Statistics Service, Research and Development Division, Geospatial Information Branch, Spatial Analysis Research Section. (2012). Cropland Data Layer; Erie County Department of Environment and Planning. (2012). Parcel Data; Niagara County Department of Economic Development. (2011). Parcel Data.

We are losing farms at an alarming rate.

~~✗~~ **33 Farms** out of business every year.

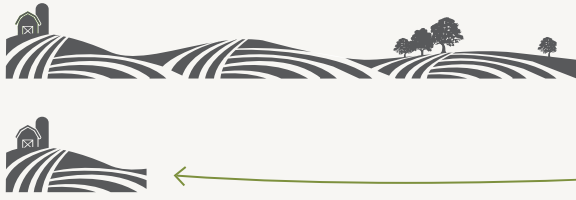
~~✗~~ **1,254 Farms** lost since 1969



1,254 operating farms out of business since 1969, including 789 in Niagara County alone.

Source: USDA-National Agricultural Statistics Service, Census of Agriculture, 1976, 2009.

Much of the land in Buffalo Niagara that could be used for farming today is not.



315 square miles of Buffalo Niagara is classified as “Prime Farmland” but **only 25% is used for agriculture.**

Source: Calculation by UB Regional Institute. Data Sources: US Department of Agriculture (USDA), Natural Resource Conservation Service (2013); USDA, National Agricultural Statistical Survey, Research and Development Division, Geospatial Information Branch, Spatial Analysis Research Section. (2011), Erie County Department of Environment and Planning (2012) and Niagara County Department of Economic Development (2011).ⁱⁱ

We don’t grow enough healthy food for ourselves.




Today, the region only grows **38%** of the fruits and vegetables we’d need to eat in order to follow USDA healthy-eating guidelines.

Source: Calculations by the Food Systems Planning and Healthy Communities Lab. Data Sources: United States Department of Agriculture: National Agricultural Statistics Service and Economic Research Service; Department of Commerce: United States Census.

Our poor diets have real impacts on our health.

Of Adults in Buffalo Niagara...

...less than **3 out of 10** consume five servings of fruits and vegetables a day 

...about **6 out of 10** are overweight or obese 

...and **1 out of 10** live with diabetes. 

Source: Erie County Department of Health, 2010-2013 Community Health Assessment, 2009; Niagara County Department of Health, 2010-2013 Community Health Assessment, 2009.

The food industry is an important part of our economy.

About **1 out of 5 JOBS** in the region is food-related

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2010.ⁱⁱⁱ

Residents in many areas find it hard to find fresh, healthy food.

55,954 people lack access to a car and live beyond walking distance to a grocery store.



Source: Calculations by the Food Systems Planning and Healthy Communities Lab. Data Sources: Reference USA, 2012; US Census, ACS 2011 5-year estimates; Bureau of Labor Statistics Consumer Expenditure Survey, 2011.

WHAT WE COULD DO DIFFERENTLY

Make the region’s food system a Buffalo Niagara policy priority. p 90

Improve access to healthy food for disadvantaged residents. p 91

Promote urban farming and community gardens. p 92

Ensure a reliable supply of labor for food production and processing. p 93

Strengthen regional farm to table links. p 93

Preserve agricultural land. p 94

Promote sustainable agricultural methods. p 95

Promote a culture of healthier eating. p 96

WHAT WE COULD DO DIFFERENTLY

RECOMMENDED STRATEGIES AND ACTIONS

Make the region's food system a Buffalo Niagara policy priority.

It should go without saying that food is one of the building blocks of regional sustainability. But in an era of looming climate change disruptions and a challenging energy economy, it makes sense for each region to take stock of its own capacity to produce and process food and for residents to get access to healthful foods.

Create the structure for developing and advancing food policy.

The Erie County Food Policy Council was recently created. We should establish a Niagara County counterpart with broad-based participation, whose early agenda would include an update to the Niagara County Farmland Protection Plan to increase farmer buy-in and promote a shared vision with other plans in the region.

Establish a regional food policy board to coordinate planning for food in WNY.

Convene a board with members of food policy councils and other local food advocates. Develop an online food system database resource for the Buffalo-Niagara region that would serve to: (1) identify organizations and foundations that can help get healthy food to households in need; (2) use feedback from food banks, block clubs and other groups to inform farmers about the foods that are culturally-appropriate in our region; (3) link local growers to local retailers to get local foods into local markets; and, (4) create a resource whereby consumers can shop from a local Farm Stand, Community Supported Agriculture arrangement or Farmers' Market.

Build the pipeline of food system projects that align with available funding opportunities.

Cultivate projects that seek support from resources such as the New York State Consolidated Funding Application and work with funders to prioritize projects which seek to improve food justice, food access, agricultural viability, and a sustainable food system.

What if more local farmers were able to sell directly to consumers?



MOMENTUM TO BUILD ON

Buffalo Niagara has seen a profusion of farmers markets in recent years with more than two dozen in Erie and Niagara counties operating at least one day a week. **Farmers markets** make the idea of buying local food a practical reality for thousands of households and they provide area farmers with a major outlet for their produce. From the long-running Clinton-Bailey market to the popular Elmwood Bidwell farmers market to operations in Hamburg, North Tonawanda, Niagara Falls and elsewhere, homegrown produce is more and more widely available.

Increase awareness about food system issues across the board.

Educate local and state elected representatives on challenges and opportunities in food production and food access. Bring together food service and sustainability directors of local universities, school districts, correctional and health care facilities. Develop a collaborative network of colleges, universities and their students to support, strengthen and spur innovation in the local agriculture and food distribution industries. Undertake a regional education campaign at existing events to increase public recognition of the benefits and opportunities in local agriculture and to improve residents' knowledge about local farmers. Launch a consumer education campaign that enlists existing media networks including broadcast television, radio, 211, and public service announcements to promote the benefits of local, healthy food to the local public.

Improve access to healthy food for disadvantaged residents.

Help those who lack income, transportation, or proximity to stores. A range of both urban and rural neighborhoods suffer from a lack of accessible outlets for fresh and healthy food so that residents who are isolated, lack transportation or have very low incomes may not be able to get such food. A range of strategies might be employed.

Develop and implement a Healthy Corner Store program.

Start a pilot program with five corner stores in areas underserved for healthy food. Provide technical assistance to help store owners market fresh fruits and vegetables, and later provide capital assistance for equipment and store improvements. Or provide subsidies to food stores locating within low-vehicle ownership or low-healthy food access areas and selling fresh food, and to ones already located in those areas that begin to sell fresh food in place of other foods.

What if farmers had better access to local markets?



MOMENTUM TO BUILD ON

Our region has seen a flowering of **community supported agriculture (CSA)** – or farm share – programs. Typically, CSA subscribers pay a flat fee at the beginning of the year and receive a box of produce weekly throughout the growing season. The contents of the share vary depending on the time of season, as well as the range of products produced. However, every share brings fresh, affordable local food to local tables. There are now more than a dozen CSAs close enough for residents of Buffalo Niagara to take advantage.

Encourage the use of mobile food trucks.

Mobile entrepreneurs can be a good vehicle for delivering healthy, locally-produced foods to neighborhoods and local schools lacking healthy food options nearby. Reduce licensing requirements or vary rates based on serving healthy foods.

Improve transportation access.

Review and modify transit routing and schedules to improve access to food providers, especially in areas where vehicle ownership is low. Or provide free rides home from healthy-food retailers to customers living in neighborhoods with low-vehicle ownership. Provide free rides to customers who spend more than a baseline amount of money at the store. Fund vouchers for free transit or taxi rides to and from healthy food stores.

Support and enhance public food assistance.

Promote, create new, and increase participation in existing “double-up bucks” programs used to increase value of public assistance dollars at fresh market retail options like farmers’ markets, and for purchases of locally-grown products at any retail destination, including convenience stores. Work with public officials to educate and facilitate enrollment in public assistance programs at public institutions (libraries, schools, colleges) and food retail destinations, from corner stores to supermarkets.

Promote urban farming and community gardens.

While it is important to differentiate urban farming from community gardening, both practices can help improve access to healthy food for residents, improve city economies, and strengthen neighborhoods. A range of supports should be provided for these activities.

Provide security of tenure to farmers and gardeners.

Urban farmers and community gardeners both invest significant time, energy and resources in building soil and creating garden infrastructure. The threat of displacement provides a strong disincentive to such investments. Therefore, institute long-term leases for community gardens on publicly-owned lands in Buffalo and Niagara Falls.

Facilitate access to land for urban agriculture.

Develop a database of vacant urban parcels and their soil quality. Work with the Cities of Buffalo and Niagara Falls to identify and test the soil on the Cities’ vacant parcels. Prioritize parcels for remediation and inform the public which parcels are most suitable for agricultural use.

What if we
thought of our
food as medicine?



MOMENTUM TO BUILD ON

In response to the crisis of diabetes and related health issues among its members, the **Seneca Nation of Indians** and the Seneca Diabetes Foundation established the **Food Is Our Medicine (FIOM)** project to restore the health and wellbeing of the Seneca Community. The initiative reintroduces Native American food systems, Native models of nutrition, indigenous land management, and sustainable food production practices through a range of programs including the Elders’ Sharing Circle, community gardens for Seneca children, FIOM 5K Run/Walk, the Seneca Nation Native Planting Policy, the Seneca Nation Farmers Market, and the FIOM documentary film series.

www.foodisourmedicine.org

Ensure a reliable supply of labor for food production and processing.

One of the most challenging issues for area farmers is how to ensure that they have workers to tend, harvest, package, and process their crops and produce.

Develop the food system workforce.

Promote workforce development in all food systems sectors and create fair-wage food jobs. Develop training programs that are built around food processing, preservation, distribution and preparation to limit food waste and reduce hunger locally. Establish a business incubator for food processing which leverages a network of food kitchens, culinary schools and other actors interested in business development.

Address farm worker immigration issues.

Create pathways to legal residence for immigrant agricultural workers. In the meantime, advocate to modify the constraints of the H-2A visa program. Enable immigrant farm workers to work at multiple farms in the same year and to return to the same sponsor farm for multiple years.

Promote fair wages for farm workers.

Analyze the impact of a federal Fair Labor Standards Act in Agriculture on American competitiveness in the global agricultural market. Ultimately, create a federal farm worker fair wage law applicable to all states.

Strengthen regional farm to table links.

Buying locally-produced goods will make our food healthier, less energy-intensive and more secure. But sustaining farms in our region will require that farmers have better access to local markets. A range of strategies are available to make this happen including:

Prioritize New York State goods in State purchasing.

Revise State purchasing policy and regulation to require State agencies to purchase foods produced in New York State and, more specifically, from within the regional food shed of the purchasing agency, when competing products are within a stipulated price differential.

What if local governments created or updated farmland protection plans?



MOMENTUM TO BUILD ON

Erie County updated its **Agriculture and Farmland Protection Plan** in 2012 and the Niagara Communities Comprehensive Plan 2030 (produced in 2009) includes a follow up to the 1999 Niagara County Agricultural and Farmland Protection Plan. Both documents underscore the importance of agriculture to both regional economy and community health. Both outline strategies for preserving farmland, strengthening farm economies, and improving the connections between local farms and local tables.

www2.erie.gov/environment/index.php?q=AgPlan

Make CSAs more affordable and accessible.

Create and fund a revolving loan fund to help low-income people obtain shares in Community Supported Agriculture arrangements. Encourage volunteer support where members could buy shares through sweat equity. Establish refrigeration and freezer shares at CSA drop-off sites.

Create a brand for specialty products from each County.

Brand and market Niagara County fruit as a County specialty. Determine a brand for Erie County agricultural specialties and use this to promote our products in the broader marketplace.

Promote links between local farmers and ethnic food markets.

Develop partnerships between refugee and immigrant organizations and farm groups to ensure farms to grow food that meets the needs of Buffalo-Niagara’s diverse cultures.

Create a regional “food hub.”

A food hub is both a facility and an organization that can help farmers share resources and aggregate products for more efficient sale to the market. Support the “Ready to Grow Food Hub Planning Project” by providing input on challenges and opportunities in the food system. More generally, support the development of programs and policies that increase the marketability of locally-grown food, including food hubs and farmer cooperatives.

Preserve agricultural land.

Some of the region’s best farmland is vulnerable to conversion to new housing. Some of the best farmland has already been lost. Sustaining local agriculture in Buffalo Niagara will require preserving land for crops and livestock. Some of the means for achieving this goal will come to ground in the urban areas of the region. These are addressed in the section on Land Use and Development. But other direct means of preserving farmland need to be implemented.

Identify farmable soils.

Identify parcels not currently used for farming that could be made ready for agriculture. Determine parcel owners’ interest in having the land farmed and find farmers looking to rent land. Connect interested parcel owners with farmers interested in farming more land. Identify farmable soils currently used for farming.

What if we cleaned our waters so that our local fish were safer to eat?



MOMENTUM TO BUILD ON

Clean water and healthy ecosystems grow fish, which is a potential local sustainable food source for Buffalo Niagara. However, historical contamination, storm water run-off, pollution, among other things severely limit our ability to eat healthy fish from our own Great Lake and rivers. **Buffalo Niagara Riverkeeper’s** efforts to improve water quality are aiming to clean up our waters and restore our fishing potential through the \$70 million dollar clean-up of legacy pollution in the Buffalo River.

bnriverkeeper.org/can-i-eat-the-fish

Protect valuable farmland through purchase and transfer of development rights programs.

Finance Transfer of Development Rights with revolving fund accounts used to pay farmers for development rights on their land. The municipalities' or counties' funds are later repaid by developers buying the development rights from the municipality or county. Developers use those rights to gain approval for development in other locations.

Offer low-cost retirement planning services to farmers.

Our ability to keep farmland in agricultural production depends in large part on our ability to meet the needs of farmers who are retiring and have expected to retire on the proceeds from the sale of farmland.

Promote sustainable agricultural methods.

Farming can have significant impacts on the environment, in both the food produced and in the by-products of production. More sustainable agricultural methods can help farmers use less water, energy, pesticides, protect streams and watersheds from farm pollution, and prepare for the impacts of climate change on farming.

Although our region is blessed by plentiful water, there is still a cost to treat and transport it. However, there are limits to the supply. It remains important to conserve the resource. Start by installing water meters on unmetered water delivery systems. Then build the capacity of farms to harvest and use rainwater on site.

Protect streams and watersheds.

Educate farmers about the environmental importance of stream buffers between agricultural land and waterways. Tie the education program to incentives for creating stream buffers. State or private funding agencies would reward farmers for creating stream buffers.

Facilitate Good Agricultural Practices.

Support (GAP) certification for local farmers through grants and funding mechanisms, especially for small-scale farms. Encourage farmers to minimize the use of pesticides.

Prepare for climate change.

Provide farmers with information on the effects of climate change on crop production to encourage them to grow products that will thrive in a changing climate. Educate farmers about implementing long-term plans on their farms to diversify production.

What if there was a structure for advancing food policy?



MOMENTUM TO BUILD ON

If towns and cities are going to take food into account as part of the ongoing operation of government, elected officials need good information and advice about how public policy can shape the food system for the better. The **Food Policy Council of Buffalo** and Erie County was created in 2013 to fulfill exactly that need.

It exists as a sub-entity



of the Erie County Board of Health and will provide consultation on ways to improve access to healthy, locally grown food and build regional farm economies. Participants hope to establish a partner organization for Niagara County soon.

hkhcbuffalo.org

Promote a culture of healthier eating.

American eating habits have led to an epidemic of diabetes, heart disease, and obesity. Promoting healthier eating habits can help individuals live better lives and reduce the social costs of health care related to these diseases.

Transform the food environment in K-12 schools.

Launch a nutrition education program for local public schools that uses the classroom and the cafeteria to increase students' understanding of healthy and local food through local food purchasing and farmer demonstrations. Reward school districts financially for each locally-sourced meal they serve to students. Local funding agencies can promote procurement of the regionally-grown foods by paying school districts a fraction of the cost of each locally-sourced meal served.

Increase the consumption of fruits and vegetables.

One of the most important ways to promote good health is to ensure that individuals meet the benchmark of five servings of fresh fruits and vegetables on a daily basis. The combination of educational programs and food access measures described throughout this plan can help achieve that goal.

Encourage breast-feeding.

Infant breast-feeding is one of the strongest predictors of adult health. Therefore, promote breast-feeding for the youngest members of the region's population. Modify building codes to mandate private areas specifically designated for breast-feeding mothers to feed their babies or pump breast milk.

What if all school cafeterias had salad bars?



MOMENTUM TO BUILD ON

The **Youth Advisory Council** for the Healthy Kids Healthy Communities partnership in Buffalo has made improving school meals in Buffalo Public Schools their top agenda item for 2015. Specifically, the group brought a campaign to the Board of Education calling for every school in the district to offer a salad bar. Moving forward, the group hopes cafeterias will offer a variety of fresh and local food options that are made from non-genetically modified ingredients, and prepared on the spot for lunch.

What if no
children arrived
to school hungry?



MOMENTUM TO BUILD ON

The “snack pack” program of the Rural Outreach Center empowers families toward self-sufficiency. The program sends backpacks home with students filled with nutritious snacks and meals. To promote interaction and reinforce learning, an educational activity is included in the backpacks designed for children and their families to do together. The activity covers topics such as reading food labels, smart shopping, nutritious and fun recipes using the usual snack pack food items. Both child and parent are empowered to make better nutrition decisions, while also helping to stretch food budgets.

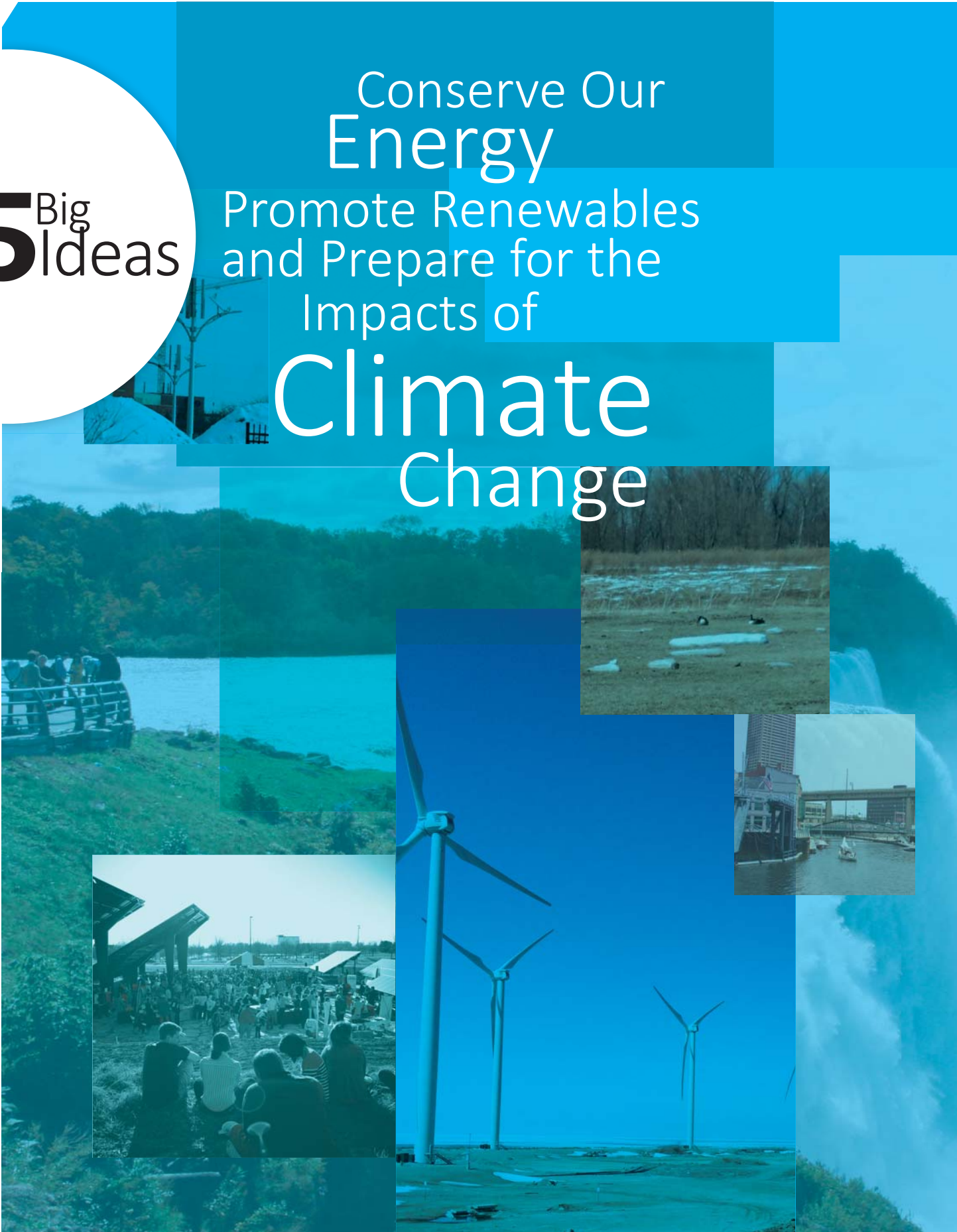
theroc.co

5^{Big} Ideas

Conserve Our Energy

Promote Renewables and Prepare for the Impacts of

Climate Change



Global climate change will be the dominant local issue of the 21st century.

We already know that changes in the earth's atmosphere are caused in large part by the burning of fossil fuels. We know that the resulting warming in air and water will lead to shifts in weather patterns, increases in extreme storms, more frequent floods and droughts. This will also lead to disruptions to our food system, stresses on ecosystems, rising sea levels, migrations of people, increasing likelihood of conflict over resources, damage to oceans and more.

There is great practical urgency to mitigate the extent of climate change by reducing emissions of greenhouse gases. We can do this by making buildings and vehicles more efficient; by driving less -- which depends both on available alternatives and land use patterns; and expanding the use of renewable energy sources. We also need to prepare for transitions likely to result from climate change already assured by dramatic increases in atmospheric carbon dioxide over the past 200 years.

Climate change is a global problem. Globally, average annual surface temperatures have risen by 1.5 degrees Fahrenheit since 1900 – and the pace of this heating has increased over recent decades.ⁱ Climate scientists agree that

carbon dioxide and other GHGs (Green House Gases) already emitted into the atmosphere are enough to cause an increase in mean global temperatures of 2C – about 3.6F – by the middle of the century – enough to cause a chain of damaging disruptions in global ecological systems.ⁱⁱ

But the planet isn't just getting warmer. Weather is less predictable. Storms are stronger and more frequent. Patterns of rainfall are shifting, leaving some areas in drought, others newly prone to flooding. As global population increases, carbon emissions continue and climate change intensifies, the impact around the globe will only be greater.

In the U.S., we contribute to these changes more than most others across the globe. Energy consumption per capita in the U.S. is nearly four times the global average. So even though we have less than five percent of the world's population, we release roughly 20 percent of the greenhouse gases emitted throughout the worldⁱⁱⁱ. And the global rate of GHG emissions is still rising at a pace that exceeds the rate on which the most pessimistic forecasts of global temperature increase and sea level rise are based.

WHAT DOES THE DATA TELL US ABOUT WHAT WE ARE DOING?

Our environment is changing.

The region has increasing temperatures and rainfall.

We are seeing more extreme weather events.

More homes are being threatened by flooding.

The region is consuming fossil fuels at high rates.

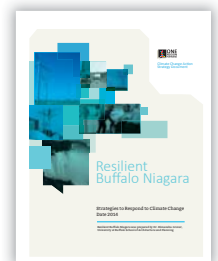
Our consumption habits are slow to change.

We are producing more clean energy here.

We see increased demand for fresh water and potential pressure on the Great Lakes.

TOOLS FOR GREATER UNDERSTANDING

Resilient Buffalo Niagara
Climate Change Strategy Document



WHAT THE COMMUNITY SAID THEY VALUE

What the Community Said -----

Over **100** people said the best way to make Buffalo Niagara more sustainable would be to limit our consumption of fossil fuels.

What Else We Heard -----

When asked what they would like to see changed in their community...

“renewable energy and conservation”

“expand recycling in general by eliminating disposable products”

“ban hydraulic fracking”

“Climate change is the number one issue

facing our planet, including the US. We need to do all we can NOW. Alternative energy through clean *Feed In Tariffs* would be a great start.”

- Citizen feedback from Community Congress

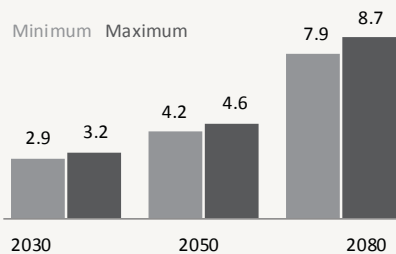
“Focus on energy conservation — not just efficiency.

- Citizen feedback from Community Congress

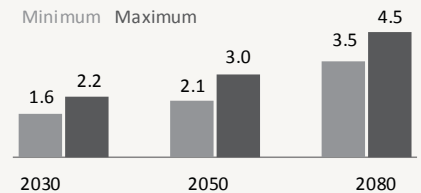
WHAT THE DATA TELLS US

The region is projected to get warmer and wetter.

PROJECTED INCREASE IN ANNUAL AVERAGE TEMPERATURES (DEGREES FARENHEIT)

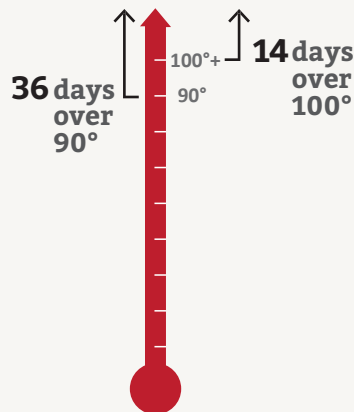


PROJECTED INCREASE IN ANNUAL AVERAGE RAINFALL (INCHES/YEAR)



Source: National Center for Atmospheric Research, Community Climate System Model, 2012. Notes: Based on the IPCC's 4th Assessment A2 Scenario which assumes: high population growth, medium economic growth, high energy use, low resource availability, medium-high land use changes slow pace of adopting technological changes to reduce emissions.

By the end of the century, we could experience...



Source: Frumhoff, et al. 2007. "Confronting climate change in the US Northeast." Union of Concerned Scientists.

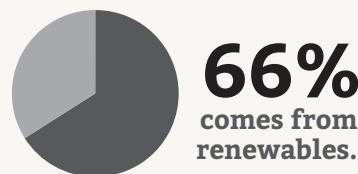
Over **\$6.6 billion** of residential property in Buffalo Niagara lies within floodplains.



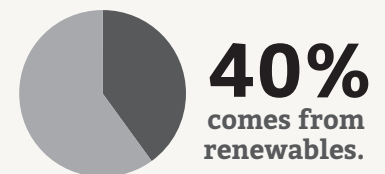
Source: Analysis is based on GIS overlay of NYS Office of Real Property System (RPS) parcel center points (2010) with FEMA Q3 Digital Floodplains (1996).

We generate renewable energy, but most of it isn't consumed here.

Electricity we generate



Electricity we use



Source: U.S. Energy Information Administration, Department of Energy, 2012; The New York Independent System Operator, 2013.

WHAT WE COULD DO DIFFERENTLY

Work for greater energy efficiency and conservation in our buildings and transportation system.

p 102

Promote renewables locally.

p 104

Make renewable energy growth an economic development priority.

p 105

As a region, we need to focus on renewable sources of energy.

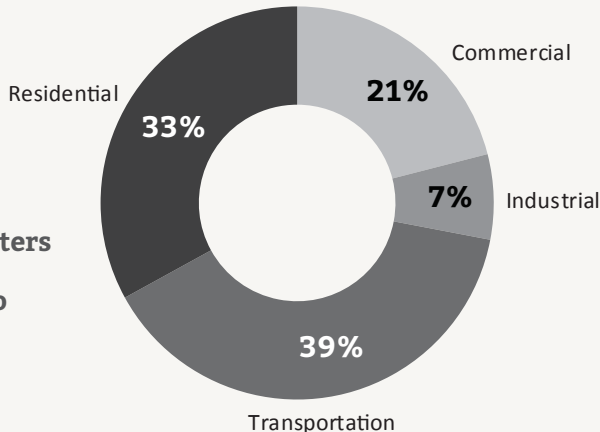
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We need to plan now to prepare the region for climate change impacts and anticipate adaptive responses.

p 106

What we use our energy for...

ENERGY CONSUMPTION BY USAGE, 2010

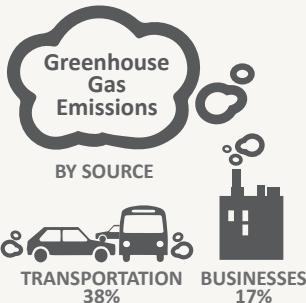


Nearly three-quarters of the energy we consume is used to power our homes and cars.

Source: Ecology and Environment, Inc. Cleaner, Greener Communities Western New York Regional Tier II Greenhouse Gas Inventory, 2012. Calculations are for the five-county area of Western New York which includes Allegany, Cattaraugus and Chautauqua counties. For a complete list of data sources used for calculations, refer to CGC WNY Regional Tier II GHG Inventory.

We are responsible for most of the greenhouse gas emissions in our region.

80% come from our homes, transportation and businesses.



Source: Ecology and Environment, Inc. Cleaner, Greener Communities Western New York Regional Tier II Greenhouse Gas Inventory, 2012. Calculations are for the five-county area of Western New York which includes Allegany, Cattaraugus and Chautauqua counties. For a complete list of data sources used for calculations, refer to CGC WNY Regional Tier II GHG Inventory.

Our environment can be used to help us manage climate change.

Urban trees in Buffalo Niagara absorb over

245,000
metric tons of CO₂

...which is equivalent to taking **40,788** passenger vehicles off the road.



Source: Ecology and Environment, Inc. Cleaner, Greener Communities Western New York Regional Tier II Greenhouse Gas Inventory, 2012; carbonfootprint360.com, "Greenhouse Gas Equivalencies Calculator", 2013.

WHAT WE COULD DO DIFFERENTLY

RECOMMENDED STRATEGIES AND ACTIONS

Work for greater energy efficiency and conservation in our buildings and transportation system.

The biggest impact we can make now and in the near term is to work for greater energy efficiency and conservation in our buildings and transportation systems (understanding that efficiency and conservation are not the same thing; one uses technology to reduce the energy demand of our current behavior while the other requires that people behave differently to use less energy). Some of the things we can do to make this happen include:

Make homes more efficient.

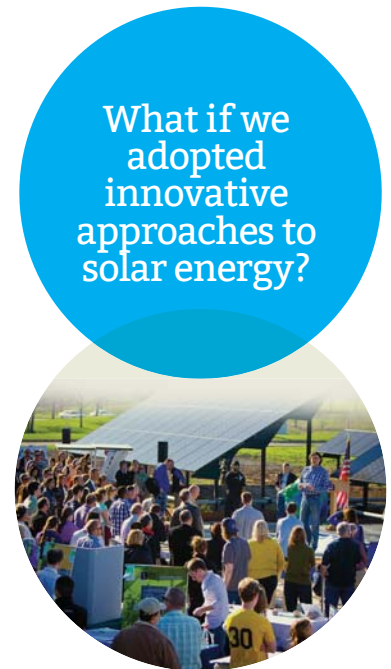
Mount a broad-based program to provide energy audits for homes region-wide as the basis to install energy efficient technology (lighting controls, heating and air conditioning) and weatherize more than 400,000 homes. We can save money and avoid significant carbon emissions if we do. PUSH Buffalo is pioneering such a program with capital improvements financed directly by immediate savings by the consumer.

Government, lead the way.

Encourage local governments, major institutions, and companies to lead the way by conducting organizational climate action plans that will help our largest energy users manage down fossil fuel use through performance contracting, adoption of renewable technologies, and transportation demand management programs. The University at Buffalo is implementing the climate action plan they adopted in 2011 with dramatic results.

Develop alternative energy infrastructure.

Work with hospitals, universities, companies, business improvement districts, parking garage operators and others to expand the electric vehicle recharging infrastructure throughout the region. Compressed natural gas vehicles emit lower levels GHGs than gasoline engines, but still contribute to atmospheric carbon levels. Continued diversification of our energy sources and adoption of energy alternatives is necessary to reduce GHGs.



MOMENTUM TO BUILD ON

Photo-voltaic solar energy technology is sometimes deployed at scale in utilitarian “farms” with a rack-and-stack architecture. When the New York Power Authority offered the University at Buffalo 750 kilowatts of solar capacity, leaders knew that wouldn’t be appropriate for their campus. They engaged Walter Hood, a nationally-celebrated landscape architect and artist, to design a solar energy facility that is also landscape art. “**The Solar Strand**” is demonstrating how renewable energy infrastructure can become a part of our day to day environment.

buffalo.edu/sustainability/solar-strand

Update building codes for efficiency.

Regional leaders should help lead a coalition to advocate for improvements in the New York State building code to enforce contemporary energy efficiency standards, encourage the use of renewable energy in new and retrofitted buildings, and incorporate passive solar design in all buildings.

Implement energy efficient lighting.

In addition to alternative fuels, more efficient light sources should be considered including traffic signal lights, street lights and lights in facilities such as parking garages. Replacing older less-efficient high-intensity discharge (HID) or metal halide technologies with more efficient options, such as light-emitting diode (LED) and induction lamps, represents a real opportunity for reducing costs and energy use. Municipalities including Buffalo have already taken steps to replace incandescent traffic signal bulbs with Light Emitting Diodes (LEDs) on traffic signals citywide.^{iv} In addition to LED traffic signals, municipalities should also consider LED street lighting programs.

Traffic signal retiming and optimization.

Signal optimization is one of the most cost effective measures that can significantly help with traffic flow on arterial roads and minimize points of congestion. Within the City of Buffalo four traffic corridors have undergone signal retiming and optimization (Delaware, Jefferson and Hertel Avenues and Seneca Street) and four more corridors are underway or nearing implementation for retiming and optimization (Niagara, Clinton and Main Streets and Elmwood Avenue). Retiming and Optimization is also slated to take place on Niagara Falls Blvd. and Sheridan Drive. Additional corridors and areas of opportunity for signal retiming should be pursued to lessen emissions that negatively impact our air quality.

Green infrastructure & stormwater management.

Effective stormwater and stream/river management can reduce the risk of flooding for transportation infrastructure. Stream and river management can reduce conditions that exacerbate flooding impacts on transportation.

In turn, green infrastructure can be incorporated into existing and new transportation infrastructure in terms of both design and materials used to lessen the amount of impermeable surfaces that create run off which add to some of our sewer overflows and stormwater pollution issues in the region.

And across the board...

Other energy saving strategies are incorporated in sections of this plan dealing with land use (promote compact development), transportation (reduce vehicle miles traveled), housing and neighborhoods (reuse existing building stock), and food access and justice (promote locally-sourced produce and reduce energy inputs to farming).

What if all homes were more energy efficient?



MOMENTUM TO BUILD ON

The **New York State Energy Research and Development Authority (NYSERDA)** is partnering with 18 community-based not-for-profits across the state, including PUSH Buffalo, to install home weatherization and energy efficiency upgrades. The goals are two-fold: to help households reduce their monthly energy bills and to create living wage employment in the green jobs sector. Recommended improvements are financed with the energy savings reflected on the consumer's energy bill. Meanwhile, installation contractors hire dozens of new workers.



nyserda.ny.gov/All-Programs/Programs/On-Bill-Recovery-Financing-Program

Promote renewables locally.

Promoting the spread of renewable energy production requires a challenging mixture of local initiatives with actions not immediately under the control of actors in Buffalo Niagara. Together, however, these actions – policy changes, market innovations, and capital investments – can create the system that will quicken our transition to renewable sources of energy.

Create infrastructure for renewables.

Develop power infrastructure to promote the proliferation of distributed renewable energy production, upgrading energy and storage capacity, improving the operations of the New York State Independent System Operators A, and promote the development of micro-grids to facilitate renewable generation at the local scale.

Extend renewable portfolio standard.

Encourage New York State Public Service Commission to extend the coverage of the state’s Renewable Portfolio Standard and continue to increase the proportion of total energy that utilities are required to produce as renewables, that customers are allowed to produce as renewables, and that certain state entities are required to consume as renewables. This will continue to build both demand and supply for green energy.

Create the market for distributed energy production.

Support creation of pricing mechanisms for sale of power from distributed renewable generators to grid operators (often known as a Feed-in Tariff), net metering to facilitate the same, and programs to finance conservation and renewable energy investments such as on bill financing and Property Assessed Clean Energy (PACE) in which repayment obligation attaches to the property, not the original borrower.

More state funded solar and wind.

State initiatives have gone a long way toward jump-starting markets in renewable energy, but more can be done. Expand programs by New York State Energy Research and Development Authority to fund solar energy projects and create similar programs to fund wind power projects.

Streamline permitting for renewables.

Rationalize the process for permitting for wind, solar, geothermal, and other renewable installations supported by strong educational programs about the benefits of such investments for household economics, business success, and community resilience.



MOMENTUM TO BUILD ON

Leadership in Energy and Environmental Design (LEED) building standards are increasingly the rule in architecture in Buffalo Niagara, especially in public sector buildings.



The Educational Opportunity Center, UB School of Medicine, UB’s Davis Hall, and the new US Federal Courthouse among many others have earned or are applying for LEED certification. In the private sector, **The Planing Mill, Bethune Lofts, and the Elmwood Village Condominiums** are incorporating LEED’s comprehensive sustainability principles in their designs. For residential properties, Niagara County is leading the way with a 2014 law providing property tax incentives to homeowners building and renovating to LEED standards.

Public buildings, lead the way.

Convert public buildings to renewable energy sources to increase demand and save public dollars, keeping in mind that while prices for fossil fuels are likely to fluctuate, costs for renewable infrastructure will predictably decline over time and the “fuels” in question are free. Consider a target date of 2025 for total conversion.

Expand collaboration between NYPA and Ontario Power.

The future of the Niagara region as the “energy hub” of the Great Lakes will depend in large part on the ability of the New York Power Authority and Ontario Power to trade electricity – much of it wind power from the Midwest and Ontario – to manage and balance the flow of power. New York and Ontario are both currently working on investments in transmission capacity. NYPA and Ontario Power should collaborate to ensure these investments work together.

Make renewable energy growth an economic development priority.

The development of renewable energy – part of what is known as the “blue/green” economy – can help create local community jobs, income and wealth – in the installation of renewable technology, the management of energy and carbon emissions at the organizational scale, and even for the research and development of new efficiency and renewable production technologies.

Support Research and Development.

Engage area universities to tap research and development resources on renewable energy production, distribution, storage, and conservation toward creation of a “green” energy industrial sector centered in Buffalo Niagara.

Grow an energy manufacturing sector.


Promote the development of renewable energy manufacturing for renewables through an expansion of the industrial supply chain of materials and products made in Buffalo Niagara.

Train workers for clean energy jobs.

Work with companies, unions, and educational institutions to establish a training and placement pipeline for the manufacture, installation, maintenance of renewable energy and efficiency technology.

Teach carbon accounting.

Expand education and training for carbon accounting such as the green building certificates offered through the UB Educational Opportunity Center, as well as programs to educate professionals in the application of LEED standards.



What if we expanded wind power projects?

MOMENTUM TO BUILD ON

With the construction of the **Steel Winds** project on the former Bethlehem Steel property in Lackawanna several years ago, electricity generated by wind power has become a visible part of regional energy solutions. The ensemble of tall turbines generates 35 megawatts of power and joins “wind farms” in Wyoming, Chautauqua, Cattaraugus and Allegany County as facilities generating nearly three percent of all upstate electricity needs. On a local level, the **Seneca Nation of Indians** is leading the way supported by its strategic energy plan focused on renewable energy. In 2014, the Nation received a \$1.5 million grant from the US Department of Energy to design and install infrastructure that will deliver wind power to tribal buildings and 5.5 kWh on the Cattaraugus Territory.

wind.sunedison.com/projects/steel-winds

Target public investments.

Provide preferential scoring for investments in renewable energy infrastructure in the New York State Consolidated Funding Application process through the Regional Economic Development Council and through industrial development agencies in the region.

Grow co-op power.

Develop distributive energy systems in which a large number of owner/producers contribute electric power to the grid; coordinate with the creation of energy cooperatives which serve member-owners. Both schemes help create local wealth as they serve communities.

As a region, we need to focus on renewable sources of energy.

Even as efforts to exploit reserves of oil, gas, coal and tar sands continue, demand is outstripping the supply of fossil fuel energy, raising prices across the board. Worse yet are the costs of actually burning these fuels. We need to move to renewable energy sources for all of our needs and sooner rather than later. Local leaders need to join the global debate.

Advocate for a green energy future.

Many of the crucial decisions about our next energy economy will be made at state, federal or international levels. But Buffalo Niagara can speak to its interests for a green energy future. The national policy debate about whether to tax carbon emissions or regulate them needs to be resolved to avoid the “do nothing” option. Meanwhile, adoption of hydraulic fracturing methods in natural gas extraction is being fought on a state by state basis. Regional leaders should continue to advocate for a concerted transition to safe and green energy sources.

We need to plan now to prepare the region for climate change impacts and anticipate adaptive responses.

Even if we reduced carbon emissions suddenly and dramatically, our climate would continue to change before it stabilizes again. We need to develop the ability to withstand shocks to regional systems and learn how to bounce back after they hit.

What if our communities became more resilient to more severe and frequent storm events?



MOMENTUM TO BUILD ON

In addition to providing water quality benefits, protecting and expanding naturalized areas along our lakes, rivers, creeks, and streams will protect our homes, roadways, and businesses from flooding and storm surges caused by climate change. Active River Areas and Coastal Shorezones are much more than the floodway or beach, they include floodplains, wetlands, dunes, marshes, and for rivers, naturally occurring meander belts, all of which slow and store floodwaters and wave surges, buffering uplands from extreme storm events. The **West Seneca Oxbow**, a former meander from Buffalo Creek, is an example of this natural infrastructure. Through a donation by the Jacobs Family, the Town of West Seneca has preserved the Oxbow and restored its function and ecology, providing flood resiliency to this area in perpetuity.

bnriverkeeper.org/oxbow-west-seneca

Design and manage infrastructure to meet new threats.

A range of new threats mean that standard designs for public infrastructure may no longer be adequate to withstand the effects of climate change. Local officials should work together to anticipate changing environmental and operational conditions and update design standards, including pavement requirements and maintenance protocols accordingly. Climate change-induced design factors include temperature change, precipitation and water levels, wind loads, and storm surges and wave heights which have both short-term and long-term implications. These factors may require the retrofit of existing facilities as well as the redesign of new, replacement, or renovated capital items.^v

Develop community risk assessments.

Counties and municipalities should develop community risk assessments to guide planning and investment in climate-related preventive measures. This should include the identification of vulnerable facilities and systems, an assessment of likely consequences due to projected events, and preparatory measures that can be taken.

Improve preparations.

Local and regional officials should review, expand and maintain disaster and emergency preparedness plans and programs, anticipating an increase in the number of events – blizzards, flooding, heat emergencies, high winds, water shortages, and disruptions in power and data – that may be caused by aspects of climate change. Agencies should also assess where emergency response capacity needs to be enhanced -- and act on those assessments in advance of emergent events. Localities that understand the likely consequences and prepare for them will be more “resilient” in the long run.

Don't put development in harm's way.

Review and revise land use policies (e.g. flood insurance, zoning, riparian buffers) to address foreseeable climate impacts. A range of actions can serve to mitigate the worst damage from climate-related events. Reducing the incentive to build in flood-prone areas provided by the National Flood Insurance Program would be one step, although not within our control regionally. Zoning to limit building in flood plains and regulation to protect stream corridors from development would also help.

Update flood maps.

Update and use the 500-year flood plane maps for site planning review. As extreme weather events become more common the notions of 100- and 500-year floods become less useful. Just as a light-year is a measure of time, not distance, a 500-year flood is a measure of extent of flooding not frequency. Ultimately – an ounce of prevention being worth a pound of cure – the point is simply to discourage or prohibit building in areas that are likely to flood. This will require accurate information and acting on it appropriately.

What if we
“greened” all
our streets and
impervious
surfaces?



MOMENTUM TO BUILD ON

In March 2014, the US Environmental Protection Agency and NYS Department of Environmental Conservation approved the **Buffalo Sewer Authority's** \$430 million combined sewer overflow 20-year control plan. A balance of traditional grey storage and sewage treatment plan updates with roughly \$100 million in innovative green infrastructure urban storm water retrofits, the program funds green street construction projects across the city including ones on Elmwood, Claremont, Parkdale, Windsor, Ardmore, Fillmore, Carlton, the Niagara Street Great Lakes National Scenic Byway, and others. Additional green street work will continue and is capitalizing upon the reduction of between 240 and 400 acres of impervious surfaces associated with demolition activity in the City.

bsacsoimprovements.org

MOVING ONE REGION FORWARD BUILDS ON THE EXISTING NETWORK

A STRONG NETWORK ALREADY WORKING ACROSS OUR REGION



ONE REGION FORWARD TAPS INTO THE NETWORK



Facilitating broad-based conversations with the network to reflect on where we are and where we want to go.

WHAT WE'LL NEED TO MOVE FORWARD

Coordinating Planning & Policies

Making Smart Investments

Fostering Collaborative Partnerships

Community Learning and Action

Building Capacity & Tools

This network is already finding better ways to work more collaboratively and contributing to our region's momentum

Informing the conversation with accurate data and objective analysis



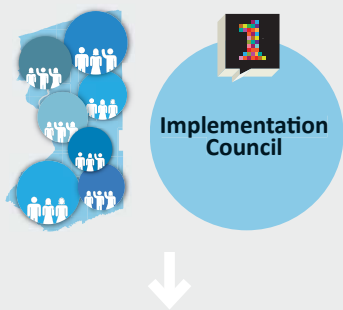
Engaging the community and those who aren't typically at the table

Utilizing new tools and ways to reach the community

HOW CAN WE MOVE OUR VALUES FORWARD?

*Implementation of this plan will not fall on the shoulders of one organization or body. Many actors, ranging from **nonprofits, local governments, citizens, county and regional entities, the business community, and academic institutions** can and must play a part in moving One Region Forward.*

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



The Implementation Council will advance a coordinated strategic approach for the future based on research and community-informed decision-making.

Guiding future collaboration and participation

Measuring our future progress

Led by members of organizations across Buffalo Niagara

We know implementation is already in motion. The question is, can we better support and coordinate efforts that point toward key regional values to advance those initiatives and measure progress of implementation?

The networked approach to implementation seeks to do just that, by aligning and **coordinating local planning**, targeting how we make **public and private investments** across the region, promoting **collaborative partnerships**, informing and **engaging citizens and decision-makers**, and finding ways to **build capacity and technical support** to assist efforts at the local level.

And finally, we know **implementation must be results-driven**.

The One Region Forward performance base has been developed to gauge if our collective efforts are successful in creating the prosperous and sustainable 21st century region we want. A critical piece of implementation involves a commitment to measure these metrics over time and recognize local actions, project and policy changes that move the region forward.

A collaborative organization will be established to **guide this process** and measure our region's collective progress toward implementation. Called the **One Region Forward Implementation Council**, this group will be an off-shoot of the steering committee that guided the planning phase and will develop a charter to make clear its mission and ensure that partner organizations will actively contribute over the long haul.

WHAT WE'LL NEED TO MOVE FORWARD

Coordinating Planning & Policies



Some examples of what's already happening in our region and how it aligns with our values

Transportation planning will draw from community input and values culled from One Region Forward

Greater Buffalo Niagara Regional Transportation Council's (GBNRTC) Long Range Transportation Plan will strongly integrate the regional values and priorities established through One Region Forward to ensure that transportation planning responds to regional goals for how we develop our land and our transportation system.

Zoning codes are being developed to create places that embrace the key values of One Region Forward

Buffalo Green Code has created a land use plan and zoning code strongly built on sustainability. It will make it easier to build more sustainable types of development - energy-efficient, mixed use, and walkable environments.

How the Implementation Council will support what we need to move forward

Partners of the One Region Forward Implementation Council will work collaboratively, as well as within their own organizations' powers and authorities, to assist local planning and policy measures that support our shared community values. This will come in a variety of forms and may include: individual partners exercising their powers and authority to influence planning and development decisions, such as through the county 239-m and 239-l development application process; working collaboratively to support local communities with planning capacity as they look to update their comprehensive plans and zoning codes; connecting local communities with organizations that have expertise in certain planning or policy issues, such as complete streets ordinances; and making available shared tools that make planning easier, more transparent and focused on advancing the performance we seek to achieve for the region.

WHAT WE'LL NEED TO MOVE FORWARD

Making Smart Investments



Some examples of what's already happening in our region and how it aligns with our values

Leveraging state funding for the region

The WNY Regional Economic Development Council is redefining the way state investments are made in our region. Coordinated strongly with One Region Forward, WNYREDC's "Smart Growth" decision-making process mirrors the One Region Forward value base.

Leverage federal funding for the region

Through its Preferred Sustainability Status program, the U.S. Department of Housing and Urban Development offers bonus points for competitive grant funding to projects that align with One Region Forward. Other federal departments are paying close attention to regional plans developed through this process, showing the value of what One Region Forward can mean as we think about how federal dollars support investment locally.

Prioritizing transportation investments in the region

Our region's metropolitan planning organization, the GBNRTC coordinates how federal dollars for transportation projects get prioritized. GBNRTC is committed to leverage the performance base of One Region Forward to help prioritize projects that best support what our region values.



How the Implementation Council will support what we need to move forward

The One Region Forward Implementation Council will work to expand opportunities for aligning public and private investments with regional values. Some of the ways it will support this approach include: educational programs, like continuing the **Economics of Sustainability** lecture series launched by the Buffalo Niagara Partnership; offering project advisement to local communities or organizations seeking funding through the Western New York Regional Economic Development Council; and continuing conversations with local economic development organizations, industrial development agencies, and municipalities about ways they can focus their investments (capital budgets, community development block grants, tax incentives, etc.) to reach the collective performance our values indicate we want out of our region.

WHAT WE’LL NEED TO MOVE FORWARD

Fostering Collaborative Partnerships



Some examples of what’s already happening in our region and how it aligns with our values

A public-private partnership working to improve streetscapes and public spaces

The Buffalo Building Reuse initiative was sparked by a joint recognition between the City of Buffalo and the Buffalo Niagara Partnership that the public and private sectors each bear responsibility for the ultimate revitalization of the city’s urban core. It consists of a public-private partnership that pools resources and capacity to revitalize the downtown Buffalo real estate market. Leveraging both public and private dollars, the project has created a downtown revolving loan fund to support projects that would not otherwise break ground, and allocated more than \$6 million in public and private dollars to improving streetscapes and public spaces throughout downtown.

Getting food to the policy table

Established to offer guidance to local governments on food policy issues, this group is helping to redefine the landscape of how food is thought about by local and county governments and other institutions. Bringing together farmers, academic experts, health professionals, and passionate citizens, this group is pooling together disparate expertise to fill a policy knowledge base seen in many of our local governments.

A forum to advance justice and equity

Supported by the Open Society Foundation, Open Buffalo is a civic initiative to activate long-term improvements in justice and equity throughout Buffalo and the region. It is an unprecedented collaboration among a diverse group of partners that includes Coalition for Economic Justice, Partnership for the Public Good, PUSH Buffalo, VOICE-Buffalo, and many others.

How the Implementation Council will support what we need to move forward

Collaboration is the fundamental building block for One Region Forward. Through the three-year planning process, the initiative has helped to facilitate the formation of new partnerships and supported strengthening existing ones. Facilitating and partnering with collaborations that can support actions that get us toward our values will be an ongoing focus for the Implementation Council, especially for efforts that strongly aligned with recommended strategies and actions within this plan.

WHAT WE'LL NEED TO MOVE FORWARD

Capacity Support for Implementation



Some examples of what's already happening in our region and how it aligns with our values

Community values guide decisions

The participatory scenario planning process used to sharpen common regional land use values and assess the “full cost” of various forms of development is being scaled down to smaller geographies. Technical staff from UB Regional Institute and GBNRTC have been testing this level of assistance with two small scale planning processes in the region: Vision Niagara, a public-private partnership focused on reinventing Niagara Street in Buffalo as a more walkable, multi-modal and vibrant corridor and a second project that evaluates the impacts on the surrounding neighborhood from new Intermodal Transportation Center in Niagara Falls coupled with the removal of the northern section of the Robert Moses Parkway from Main Street to Findley Drive.



How the Implementation Council will support what we need to move forward

In the short term, the Implementation Council will work within its collective bandwidth to offer support for local implementation where needed. Recognizing that local assistance may require more advanced support, the Implementation Council will seek funding to launch more comprehensive support that may include online data-sharing platforms, hands-on assistance to local municipalities as they update their comprehensive plans, zoning codes, and other innovative ways to support local communities.

WHAT WE’LL NEED TO MOVE FORWARD

Community Learning and Action



Some examples of what’s already happening in our region and how it aligns with our values

How the Implementation Council will support what we need to move forward

Investing in Citizen Champions

Launched in 2014, the Citizen Planning School “teaches” about the One Region Forward initiative and what implementing the region’s values for sustainability can look like at the grassroots, community-level. The program, and its accompanying service learning program “Champions for Change” where citizen participants cultivate plans for change in their community, will continue and be supported by a graduate level course at the University at Buffalo School of Architecture and Planning.

In addition to continuing the Citizen Planning School and the Economics of Sustainability series, the Implementation Council will explore all sorts of ways to continue informing our region about critical issues to One Region Forward. This could include: strengthening relationships with academic and educational institutions around how their curriculum and research programs can align with One Region Forward; extending partnerships with other citizen leadership programs like Leadership Buffalo, Leadership Niagara, Buffalo Niagara River Academy, Open Buffalo, etc.; and on a broader basis, ongoing engagement of the community through online conversations via the communications and social media vehicles launched through the initiative.

Learning from best practices

Through its Economics of Sustainability Series, the Buffalo Niagara Partnership has brought in speakers from across the country to talk about how sustainable approaches to development make sense for businesses and our region’s quality of life. The Partnership will continue to host this series as a way to engage the business community and public sector around best practices they can consider for integrating in their operations and practices.

Civic entrepreneurship for food access

Issues of poverty and inequality are felt in communities across the region. Niagara University EntrepreneNU social enterprise competition challenges students to develop business plan solutions. In the first year of the program, food access, nutrition and hunger will be the focus of the program.

WHAT WE'VE MOVED FORWARD IN 2014



Citizens drive change on the ground demonstrating sustainability in action at the community level



195

register as **Citizen Planners** to get practical tools and knowledge in planning for sustainable communities



17

become **Champions for Change** who received additional hands-on training and technical assistance to develop a community-based project

Workshops and Technical Assistance
Champions receive additional training from staff at UB School of Architecture & Planning to create a plan for change.

Learning Sessions

Citizens learn from the **network**, experts working in the private, public and nonprofit sectors.

Panel discussions focus on two-way learning.

Citizens Planners and Champions meet others who are active in their communities.

Toolkits offer additional resources, funding opportunities, and related planning efforts.



IDEA
SUMMIT

The Program

The program provides citizens of Erie and Niagara counties with tools to increase the sustainability of their communities and ultimately, the Buffalo Niagara region at large. All participants attend issue-based lectures, have access to online tool kits, receive a Certificate of Completion, and attend a Sustainability Idea Summit that celebrates the work of all program participants.

In 2014

The Citizen Planning School invited members of the community to become a Citizen Planner and also offered an additional level of training called **Champions for Change**.

Champions for Change are

Citizen Planners that want to take their engagement one step further by

creating a micro-plan for a sustainability project in their community, attending technical assistance hours to create this plan, and presenting it at a **Sustainability Idea Summit**.



Moving Our Values Forward

The community, as an integral part of the network, is directly involved in implementing change. New projects are ripe for implementation building a baseline for scaling up for greater impacts across our region. New data is created out of the program to measure our future progress. Learning from this program will guide future collaboration and participation.

**OUR VALUES TELL
US WHERE WE
WANT TO GO**



**OUR IDEAS OFFER
MANY WAYS WE
CAN GET THERE**



HOW WILL WE KNOW WE'RE MAKING PROGRESS?

INDICATORS WILL TELL US IF WE'RE GETTING THERE

Measuring our progress will tell us if our actions are moving us towards our values

Are we building less new infrastructure...



...conserving more natural open space...



...driving less...



...creating a healthier environment...



...saving more taxpayer money...



The Performance Base of One Region Forward

One Region Forward was built on an extensive, inclusive and far reaching community engagement process. It brought together the voices of thousands from across the region - citizens, business leaders, developers, community stakeholders, local government officials, and others – all who shaped this plan and its direction. Starting with the value statements culled from our 160+ local plans, refreshed and sharpened through countless conversations across the region, and imagined through citizen-designed maps crafted by a diverse group of nearly 800 residents, we have a clear sense of the direction the community would like to see the region go.

That direction is markedly different from the predominant development patterns of the past several decades. It embraces reusing our existing infrastructure, creating walkable, livable places, investing in diverse transportation options, and stewardship for our farms, open spaces, and natural habitat. In essence, it is a clear rejection of the “Business As Usual” future growth scenario.

Yet, even with a strong sense of where we want to go (or where we don't want to go), One Region Forward recognizes there is no singular path or map that can tell us how to get there. Strategies for action are not “one size, fits all,” and the most promising way to create a sustainable region for future generations is to work together and support locally and organizationally appropriate ways that get us moving toward the performance we want.

How will we know if our collective efforts are working? Again, there is no single barometer that can tell us that, but if we commit to asking the question, we can reflect on our performance as a region. Through its partnership with the UB Regional Institute, One Region Forward will commit to measuring the indicators on the following pages over time. The numbers aren't the only way we will measure progress, but they offer an objective way for us to continue the conversation about the future we seek to create for Buffalo Niagara.

A series of indicators were derived from the planning process. As a group, these metrics are intended to help gauge if the region is collectively moving in the direction outlined in the plan.



Are we concentrating new development where we already have infrastructure?

HOW IT ALIGNS WITH OUR VALUES
Increasing density in urbanized areas reduces infrastructure costs and preserves natural, open space.



WHERE WE ARE TODAY

68%

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

WHERE WE WANT TO GO



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

Definition: % of development within Urbanized Areas serviced by a sewer district.

Source: Parcel Data (Erie Co. DEP, 2012 Niagara Co. DED, 2011); Urbanized Land Area (US Census, 2010); Sewer District Boundaries (various county and municipal sources, ca. 2013).

Methods: Select from parcels classified as vacant in the previous year those that change to residential, commercial and industrial properties. Then select the parcels that are within sewer districts that also intersect developed land classified by parcel data, and divide the acreage of these parcels by the total area of all newly developed parcels to calculate a percentage.

Frequency: Measured annually.

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

HOW IT ALIGNS WITH OUR VALUES

Growing employment opportunities in strategic areas maximizes revenues and limits new costs.



WHERE WE ARE TODAY

26%

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

WHERE WE WANT TO GO



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

Definition: % of jobs within identified "Main Street" areas, downtowns, or Brownfield Opportunity Areas.

Source: LODS Census Block Data from OnTheMap (2011); BOA Boundaries, Downtowns, "Main Streets" (2012).

Methods: Using GIS, clip the census block data to the shapes of "Main Streets", downtowns, BOAs. Using the calculated job density per block and the area of the clipped blocks, estimate the number of jobs within these areas and divide by the total number of jobs in the region as given by the OnTheMap data.

Frequency: Measured annually. 2-year lag due to data availability.

Are we conserving natural, open spaces?

HOW IT ALIGNS WITH OUR VALUES

Protecting open space enhances ecosystems vital to a clean and healthy environment.



WHERE WE ARE TODAY

693

square miles of open space are conserved from development.

WHERE WE WANT TO GO



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

Definition: % of open space (as of 2011) Conserved from Development.

Source: Parcel Data (Erie Co. DEP, 2012 Niagara Co. DED, 2011); WNY Land Conservancy (2013); National Conservation Easement Database (2012).

Methods: Calculate the total acreage of parcels that are classified as vacant, public open space or conservation areas that lie outside of areas classified as developed by land cover data.

Frequency: Measured annually.

Are we increasing public access to our waterfronts?

HOW IT ALIGNS WITH OUR VALUES

The more accessible our shores are, the more opportunity for all to enjoy clean waterways.



WHERE WE ARE TODAY

83.5

linear miles of shoreline with public access.

WHERE WE WANT TO GO



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

Definition: Linear miles of shoreline with public access.

Source: Parcel Data (Erie Co. DEP, 2012, Niagara Co. DED, 2011); US Geological Survey, National Hydrography Dataset (2012).

Methods: Select all publicly-owned parcels by property class from parcel data. Extract public lands which intersect any major water body. Calculate the length of public shoreline, as well as the total length of major shorelines, using GIS software.

Frequency: Measured annually.

Are we reducing the miles we travel in cars?

HOW IT ALIGNS WITH OUR VALUES
By driving less, we save time, money and contribute to a cleaner environment.



WHERE WE ARE TODAY

17.9

daily vehicle miles traveled per person.

WHERE WE WANT TO GO



We'll be making progress if we **decrease** the daily miles we travel by car.

Definition: Vehicle miles traveled per capita.

Source: Greater Buffalo Niagara Regional Transportation Council (2011); ACS 5-year estimates (2011).

Methods: Find the total regional vehicle miles traveled from GBNRTC data; divide by the total regional population as given by ACS estimates.

Frequency: Measured annually, 1 or 2-year lag due to data availability.

Are more workers commuting via alternative modes of transportation?

HOW IT ALIGNS WITH OUR VALUES
Travel to work by walking, biking, public transit, and carpooling makes our communities and our environment healthier.



WHERE WE ARE TODAY

18%

of the region's workers commute via alternative modes of transportation.

WHERE WE WANT TO GO



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

Definition: % of workers commuting via alternative modes of transportation.

Source: U.S. Census Bureau, American Community Survey 1-year estimates (2010).

Methods: Find from ACS' "Means of transportation to work" (T128) for the Buffalo Niagara Falls metro.

Frequency: Measured annually, 2-year lag due to data availability.

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

HOW IT ALIGNS WITH OUR VALUES
Energy is conserved and our communities become more walkable if we don't have to depend on cars for travel.



WHERE WE ARE TODAY

26%
region's homes

32%
region's jobs
are within areas accessible to transit stops.

WHERE WE WANT TO GO



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

Definition: % of new development sites built within areas accessible to transit stops.

Source: US Census Bureau (2010); LODS Census Block Data from OnTheMap (2011); NFTA Transit Stops (2013).

Methods: Select from parcels classified as vacant in the previous year those that change to residential, commercial and industrial properties. Divide the number of these parcels that fall within 1/2 mile of a transit stop (metro or bus) by total number of parcels that were developed.

Frequency: Measured annually.

Are we becoming more bike-friendly?

HOW IT ALIGNS WITH OUR VALUES
More bike lanes make a better-connected and healthier region.



WHERE WE ARE TODAY

153

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

WHERE WE WANT TO GO



We'll be making progress if we **increase** the amount of land dedicated to bike travel.

Definition: Linear miles of bike lanes.
Source: Greater Buffalo Niagara Regional Transportation Council (2014).
Methods: The length of bike lanes, bike routes and shared road lanes, calculated using GIS software.
Frequency: Measured annually.

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

HOW IT ALIGNS WITH OUR VALUES
Reducing vacant structures preserves our tax base, conserves embedded energy and strengthens our communities.



WHERE WE ARE TODAY

23,924 residential vacancies

5,796 commercial vacancies

Definition: # of residential addresses determined "undeliverable" by US Postal Service.
Source: HUD and US Postal Service, Vacancy Data (2013).
Methods: Download data from <http://www.huduser.org/portal/usps/login.php> for the final quarter of the year being measured. Sum the total number of business addresses and residential addresses within Erie and Niagara county classified as vacant.
Frequency: Measured annually.

WHERE WE WANT TO GO



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

Is the new housing we build walkable to services and amenities?

HOW IT ALIGNS WITH OUR VALUES
Building more homes in walkable places creates healthier communities and makes amenities more accessible.



WHERE WE ARE TODAY

5%

of new homes built since 2000 were built within walking distance to a main street, downtown or transit corridor.

Definition: % of homes built within walking distance to a "Main Street," downtown or commercial corridor.
Source: Parcel Data (NYS ORPS, 2010); Downtowns, "Main Streets" (2012); NFTA Transit Stops (2013).
Methods: Percentage of new homes (found comparing parcel data from two consecutive years) built within walking distance (half-mile) of walkable communities (defined as areas with more than 8 housing units and at least 2 jobs per acre), "main streets", downtowns, and central business districts.
Frequency: Measured annually.

WHERE WE WANT TO GO



We'll be making progress if we **increase** the share of new homes built in walkable places.

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

HOW IT ALIGNS WITH OUR VALUES
The less we have to spend on basic living expenses, the more opportunity we have.



WHERE WE ARE TODAY

On average
53%

of household income (for median-income families) is spent on housing and transportation costs.

WHERE WE WANT TO GO



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

Definition: The percentage of income the average family spends on housing and transportation costs.

Source: HUD Locational Affordability Portal (2014).

Methods: Using the Location Affordability Portal provided by HUD, find the percentage of income spent by the median-income family on housing and transportation.

Frequency: Measured annually.

Are we increasing access to healthy food for those most in need?

HOW IT ALIGNS WITH OUR VALUES
The more people have access to healthful food, the healthier our communities become.



WHERE WE ARE TODAY

55,954

households without a vehicle and beyond walking distance to a supermarket.

WHERE WE WANT TO GO



We'll be making progress if we **decrease** the number of households that can't easily access a supermarket.

Definition: # of households without a vehicle and beyond walking distance to a supermarket.

Source: Reference USA (2012); US Census, ACS 5-year estimates (2011).

Methods: Extract supermarkets and grocery stores from RefUSA by NAICS code. Map vehicle availability by block group using ACS data. Sum the total number of people living in households without a vehicle in block groups that do not lie within 0.4 miles (using network analyst) of a supermarket.

Frequency: Measured annually, with a 2-year lag due to data availability.

Are we preserving our farmland?

HOW IT ALIGNS WITH OUR VALUES
The more farmland we keep, the more resilient our food systems become.



WHERE WE ARE TODAY

397.1

square miles of land dedicated to farming.

WHERE WE WANT TO GO



We'll be making progress if we **increase** the amount of land dedicated to farming.

Definition: Acres of land dedicated to farming

Source: Parcel data (Erie Co. DEP, 2012 Niagara Co. DED, 2011) and USDA, National Resource Conservation Service (2013)

Methods: The area of land in farms includes all land parcels classified as agricultural for tax assessment purposes.

Frequency: Measured annually

Are we growing our agricultural economy?

HOW IT ALIGNS WITH OUR VALUES
More profitable food production and processing helps create healthier communities.



WHERE WE ARE TODAY

\$292.3
million

in total annual earnings for jobs in food production and manufacturing.

WHERE WE WANT TO GO



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

Definition: Annual earnings for jobs in food production sectors.

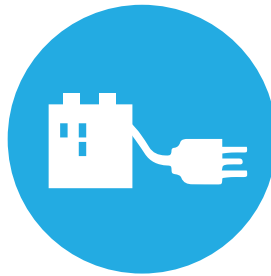
Source: NYS Department of Labor, Quarterly Census of Employment and Wages (2013).

Methods: The total annual wages for all jobs held in the following employment sectors: "Crop Production", "Animal Production and Aquaculture", "Support Services for Animal Production".

Frequency: Measured annually.

Are we conserving energy in our buildings?

HOW IT ALIGNS WITH OUR VALUES
Making buildings more efficient lowers carbon emissions and energy costs.



WHERE WE ARE TODAY

3.942
million

square feet of projects in the region are LEED-Certified.

WHERE WE WANT TO GO



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

Definition: Square footage of LEED-Certified projects.

Source: U.S. Green Building Council, Green Building Information Gateway (2014).

Methods: Download report by metro area from <http://www.gbiv.org>

Frequency: Measured annually.

Are we increasing generation of renewable energy?

HOW IT ALIGNS WITH OUR VALUES
The more energy from renewables, the less harmful emissions we produce.



WHERE WE ARE TODAY

84.7%

of all locally-generated energy comes from renewable sources.

WHERE WE WANT TO GO



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

Definition: Electricity generated from renewable sources.

Source: U.S. Energy Information Administration, Department of Energy (2012).

Methods: Retrieve data from EIA database for all Erie and Niagara counties. Total all energy production (kWh) of renewable sources, and divide this by total of all energy produced in the two counties.

Frequency: Measured annually.

Are we planning for climate change?

HOW IT ALIGNS WITH OUR VALUES
The more we prepare for climate change, the better we'll be able to handle its impacts.



WHERE WE ARE TODAY

9

Climate Smart Communities (e.g. municipalities and counties with a Climate Action Plan) exist in the region.

WHERE WE WANT TO GO



We'll be making progress if we **increase** the number of Climate Smart Communities.

Definition: Climate Smart Communities (Communities with a Climate Action Plan).

Source: NYS Department of Environmental Conservation (2014).

Methods: Surveying local municipalities. Retrieving records from NYS DEC database.

Frequency: Measured annually.

Are we building in a way that best prepares for climate change?

HOW IT ALIGNS WITH OUR VALUES
The less development on environmentally-sensitive areas, the better we can sustain an erratic climate.



WHERE WE ARE TODAY

43.6%

of all developed land is currently on environmentally sensitive areas.

WHERE WE WANT TO GO



We'll be making progress if we **decrease** the share of new development on environmentally-sensitive areas.

Definition: Percent of new development on environmentally-sensitive areas.

Source: US Geological Survey, 2011 National Land Cover Dataset (2014); FEMA, Q3 Flood Zone Data (1996); USGS, National Hydrography Dataset (2012).

Methods: This indicator estimates the percentage of all new development (by area) occurring on lands with an intrinsically-high ecological value, such as wetlands, floodplains, riparian areas and forestland. The numbers are calculated by totaling the area of land developed under each scenario that falls inside of wetlands, floodplains, forests, or within 100 feet of streams.

Frequency: Measured annually.

Are we reducing concentrated poverty?

HOW IT ALIGNS WITH OUR VALUES
The fewer people living in impoverished neighborhoods, the more opportunity there will be for all.



WHERE WE ARE TODAY

23.8%

of the region's residents live in neighborhoods with concentrated poverty.

WHERE WE WANT TO GO



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

Definition: Percent of regional population residing in census tracts with poverty rates above 20%.

Source: US Census Bureau, 5-year estimates (2012).

Methods: This indicator estimates the percentage of the region living in areas of concentrated poverty by dividing the total population of census tracts where the poverty rate is greater than 20% by the total regional population.

Frequency: Measured annually, 2-year lag due to data availability.

Is our regional economy becoming more competitive?

HOW IT ALIGNS WITH OUR VALUES
More businesses established in our region means more opportunity for jobs and a stronger tax base.



WHERE WE ARE TODAY

28,128

firms are located in the region.

WHERE WE WANT TO GO



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

Definition: Number of business establishments in the region.

Source: NYS Department of Labor, Quarterly Census of Employment and Wages (2013).

Methods: This indicator shows the number of firms in the region. For firms operating at more than one location, each individual establishment is counted, unless the payrolls are jointly maintained.

Frequency: Measured annually, 1-year lag due to data availability.

Are we keeping the finances of local governments in balance?

HOW IT ALIGNS WITH OUR VALUES
Keeping costs and revenues aligned indicates we are living within our means.



WHERE WE ARE TODAY

Total revenues are
0.3%

less than total costs for all local governments.

WHERE WE WANT TO GO



We'll be making progress if our total governmental revenues **and** costs are in balance.

Definition: Cost-to-revenue ratio.

Source: NYS Office of Comptroller, Municipal Government Finance Data for Fiscal Year 2011 (2012).

Methods: This indicator shows the number of firms in the region. For firms operating at more than one location, each individual establishment is counted, unless the payrolls are jointly maintained.

Frequency: Measured annually, 1 or 2-year lag due to data availability.

COMMITMENTS OF THE ONE REGION FORWARD IMPLEMENTATION COUNCIL

Establish an annual working agenda that outlines major objectives and areas of focus for a given year. Setting annual goals and identifying initiatives to focus on will help keep the network's focus squarely on action.



Issue Annual Progress Reports that measure indicator trends and recognizes local actions, project and policy changes that move the region forward.

Extend the bandwidth of "networked implementation" by continuing programs launched through this process (i.e. Citizen Planning School); identifying pilot projects to launch, adopt and support; and exploring creative, collaborative ways to gain traction on these broad implementation approaches (coordinating planning, smart investments, collaborative partnerships, capacity support, and community learning) as well as specific recommendations outlined under the "5 Big Ideas."

Revisit this plan every five years to make sure it remains relevant and useful to local implementation. Plan updates will respond to changing circumstances including shifts in key trends, progress (or regress) on major indicators, items checked off the network to-do list, evolving community attitudes, and so forth.

Appendix A

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Acknowledgements

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Project Leadership and Administration

Greater Buffalo-Niagara Regional Transportation Council

One Region Forward has been administered and managed by the Greater Buffalo-Niagara Regional Transportation Council (GBNRTC), the region’s Metropolitan Planning Organization. GBNRTC staff also has been coordinating the work of 1RF with their own ongoing transportation planning to ensure that all these efforts align in a way that advances regional mobility and access goals — like connecting quality affordable housing with good jobs.

Leadership:

Hal Morse

Executive Director
One Region Forward Steering Committee Chairperson

Kelly Dixon, AICP

Transportation Analyst
One Region Forward Manager

Plan Authorship, Planning, Research, and Engagement

University at Buffalo Regional Institute

This document is a product of extensive research, planning, and community engagement conducted by the University at Buffalo Regional Institute (UBRI) in conjunction with faculty, students and staff from UB’s School of Architecture and Planning. Working with partners from around the region, UBRI designed a process that brought together research and technical expertise with innovative approaches to planning and engaging the community.

Leadership:

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Steering Committee

One Region Forward has been directed by a steering committee composed of government, nonprofit, and academic organizations with capacity and experience in transportation, housing, economic development, community health, public engagement, and regional planning. The group met monthly through the planning process to oversee all activities.

Association of Erie County Governments

Represented by Supervisor Glen Nellis of the Town of Eden and Supervisor Dennis Powers of the Town of Elma

Belmont Housing Resources of WNY

Represented by Mike Riegel (Vice President of Housing Development)

Buffalo Niagara Medical Campus

Represented by William Smith (Director of Campus Access)

Buffalo Niagara Partnership

Represented by Laura St. Pierre Smith (Vice President) and Steve Ricca (Chairman of Development Advisory Council)

Buffalo Niagara Riverkeeper

Represented by Jill Jedlicka (Executive Director)

City of Buffalo

Represented by Brendan Mehaffy (Executive Director) and Bill Parke (Community Planner) of the Mayor's Office of Strategic Planning

City of Niagara Falls

Represented by Tom DeSantis (Senior Planner) and James Bragg (Planner)

Daemen College Center for Sustainable Communities and Civic Engagement

Represented by Tyra Johnson (Advisory Board member)

Empire State Development, WNY Region

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Erie County

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Greater Buffalo Niagara Regional Transportation Council (GBNRTC)*

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Local Initiative Support Corporation, Buffalo

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New York State Department of State, Division of Smart Growth

Represented by Paul Beyer (Director)

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Represented by Frank Billittier (Assistant Regional Design Engineer)

Niagara Falls Housing Authority

Represented by Willie Dunn (Service Coordinator)

Niagara County

Represented by Benjamin Bidell (Senior Planner, Department of Economic Development)

Niagara County Supervisors Association

Represented by Supervisor Ross Annable of the Town of Hartland

Niagara Frontier Transportation Authority (NFTA)*

Represented by Darren Kempner (Manager of Grants)

The John R. Oishei Foundation

Represented by Larry Cook (Program Officer)

University at Buffalo Regional Institute

Represented by Robert G. Shibley (Director), Bart Roberts (Research Assistant Professor) and Bradshaw Hovey (Senior Fellow)

VOICE Buffalo

Represented by Duane Diggs (President)

Western New York Environmental Alliance

Represented by Ryan McPherson (Chairperson)

Working Teams

Over 100 regional experts and citizen advocates worked together to develop the implementation strategies outlined in this plan. Their work was shared with our Working Team Contributors, citizens who enrolled to provide detailed feedback on the work in progress through the two-year process.

Climate Change Action Working Team: Aliesa Aldelman, *Wendel Companies*; Nate Drag, *Alliance for the Great Lakes*; Erin Heaney, *Clean Air Coalition of WNY*; Thomas Hersey, *Erie County*; Padma Kasthurirangan, *Niagara Wind & Solar*; Michael Licata, *TM Montante Solar*; Sean Myers, *NBT Solutions LLC*; Bill Nowak, *Consultant to Buffalo Geothermal Heating and Cooling*; Lou Paonessa, *Niagara Power Project, New York Power Authority*; Jonathan Schultz, *Niagara County Emergency Services Office*; Jim Simon, *UB Office of Sustainability*; Bill Smith, *Buffalo Niagara Medical Campus*; Kelly Tyler, *NYSERDA*; Terry Yonker, *Marine Services Diversified, LLC*; WNY Sustainable Energy Association Trust; WNY Environmental Alliance.

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Appendix B

Data Sources and Notes

WHERE ARE WE?

Where We Are Matters

p 8

ⁱ U.S. Census Bureau, 1970, 2010.

ⁱⁱ Ibid.

ⁱⁱⁱ U.S. Census Bureau, 2010-2012.

^{iv} US Census Bureau, American Community Survey, 5-year estimates, 2006 and 2012.

^v U.S. Department of Labor: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2010; US Census Bureau, 1970, 1980, 1990 & 2000.

^{vi} U.S. Census Bureau, 1970, 2010.

^{vii} Greater Buffalo Niagara Regional Transportation Council, 2011.

^{viii} US Census Bureau, 1970; US Census Bureau, American Community Survey, 1-Year Estimate, 2010.

^{ix} The aggregate direct expenditures per capita for all local governments in Erie and Niagara County grew by 6.74% from 1972 to 2011 (adjusting for inflation). Sources: New York State Office of the State Comptroller, Local Government and School Accountability: Financial Data: Data for Local Governments, 2011. Accessed January 3, 2013 at http://www.osc.state.ny.us/localgov/datanstat/finddata/index_choice.htm; US Census Bureau, 1970, and 2010; U.S. Department of Commerce: Social and Economic Statistics Administration: Bureau of the Census, 1972 Census of Governments Volume 5: Local Government in Metropolitan Areas, 1975. Accessed January 3, 2013 at <http://www.census.gov/govs/pubs/year.html#1970-1979>; U.S. Department of Labor: Bureau of Labor Statistics, Databases, Tables & Calculators by Subject: CPI Inflation Calculator, 2013. Accessed January 3, 2013 at http://www.bls.gov/data/inflation_calculator.htm

NOTES: For 2011, expenditures listed as “Charges to Other Governments” were subtracted from total expenditures (not including interfund transfers) from the NYSOC municipal finance data. Data was aggregated to derive region-wide figures before being divided by the regional population given by the 2010 US Census to yield the amount of local government spending per capita. For 1972, expenditures of school districts and special districts were subtracted from total direct general expenditure for each county given by the Census of Governments data. These figures were aggregated for the region and divided by the total population of the region as given by the 1970 US Census to produce the amount of local government spending per capita. After these calculations, dollar amounts were adjusted for inflation to represent a value equivalent to USD in 2012.

^x Niagara Frontier Transportation Authority, 1992-2012 Annual Ridership Data, 2013.

^{xi} U.S. Census Bureau, Building Permits Survey, 2012; American Community Survey, 2012 1-year estimates.

^{xii} In 1990, the median home value in first-ring suburbs of Buffalo Niagara was \$136,735 (after adjusting for inflation) - about \$10,000 more than in 2012 (\$126,988). Sources: U.S. Census Bureau, 1990; American Community Survey, 5-year estimates (2008-2012). NOTE: First-ring suburbs of Buffalo and Niagara Falls include the towns of Amherst, Cheektowaga, Hamburg, Niagara, Orchard Park, Tonawanda, and West Seneca.

^{xiii} Epstein, Jonathan D. “Region Leads the Nation In Real Estate Appreciation.” The Buffalo New, December 14, 2013.

^{xiv} USDA-National Agricultural Statistical Service, Census of Agriculture, 1976, 2009.

^{xv} Source: U.S. Geological Survey. (1997). 1992 New York Land Cover Dataset; U.S.D.A., National Agricultural Statistics Service, Research and Development Division, Geospatial Information Branch, Spatial Analysis Research Section. (2012). Cropland Data Layer; Erie County Department of Environment and Planning. (2012). Parcel Data; Niagara County Department of Economic Development. (2011). Parcel Data.

NOTES: GIS analysis overlaying parcel data with land cover data found over 55 square miles within Buffalo Niagara of former cropland (as identified by satellite imagery in 1992) not within current cropland and within residential lots where homes were built after 1992.

What Have We Been Doing? p 21

Change in Population and Developed Land, 1970-2010: US Census Bureau, 1970, 2010.

Commuting Modes, 1970 vs. 2010: US Census Bureau, 1970; US Census Bureau, American Community Survey, 1-Year Estimate, 2010.

Daily Vehicle Miles Traveled per Capita, 1970 vs. 2010: Greater Buffalo Niagara Regional Transportation Council, 2011.

Percent Change in New Homes and Vacant Housing Units, 1970-2010: US Census Bureau, 1970, 2010.

Acres of Farmland, 1969 vs. 2007: USDA-National Agricultural Statistical Service, US Census of Agriculture, 1976, 2009.

New Roads Built, 1990-2010: University at Buffalo Regional Institute, Independent analysis using U.S. Census Bureau TIGER\Line Roads Data, 1990 and 2010. Cost estimate from NYS Office of the State Comptroller, 2011, Local Government Snapshot: Local Government Spending on Highways. Accessed January, 2013 from www.osc.state.ny.us/localgov/pubs/research/snapshot/highwayspending.pdf

NOTES: Spatial roads data for the years 1990 and 2010 was retrieved from the U.S. Census Bureau in geographic information systems (GIS) format for the Buffalo-Niagara region. All line segments from the 2010 roads file that fell outside 100 feet of 1990 roads were selected. These road segments were compared with the 1990 roads layer, on a segment by segment basis, ensuring that all previously existing roads were excluded from the estimate of new roads. The aggregate length of roads constructed since 1990 within the two-county region was then calculated using ArcGIS software.

Local Government Debt-to-Revenue Ratio: NYS Office of the State Comptroller, 2012. Local Government Municipal Finance Data, Level One, FY 2011. Accessed February 2013 at http://www.osc.state.ny.us/localgov/datanstat/findata/index_choice.htm

WHERE ARE WE GOING?

Where Should We Go From Here? p 34

How the Business as Usual scenario was constructed:

The spatial projection of new homes assumes that over the next forty years each municipality will absorb the same proportion of the regional increase in new housing units that it did from 1990 to 2010, based off of trends from US Census data. The exact placement of new housing units within each municipality is based on the conditions that have been associated with new home construction from 1990 to 2010, such as more open green space, newer homes, lower vacancy rates, higher home values and lower property tax rates, as revealed through a spatial regression analysis that found these conditions to be correlated to an increase in the number of homes within census tracts from 1990 to 2010. New homes were placed according to land use data (from Erie County Department of Environment & Planning, 2012 and the Niagara County Department of Economic Development, 2011) and current zoning information (obtained from counties and municipalities), which was used to make an assumption on the type of home built at each parcel using allowable lot sizes of municipal zoning regulations.

The number of abandoned homes in the region was found by subtracting the 150,000 new homes projected to be built by 2050 from the number of total households projected to live in the region in 2050 (574,320) to find the number of households that would occupy homes that already exist (424,320). The remainder of the 473,720 housing units that are currently occupied (44,399) would be vacant. 7% of units were assumed to be vacant to allow for functional turnover rate in the local residential market, meaning 41,219 would be abandoned.

The spatial projection of abandoned homes assumes that over the next forty years each municipality will absorb the same proportion of the regional increase in abandoned units that it did from 1990 to 2010, based on trends from US Census data. The exact placement of abandoned units within each municipality is based off of the conditions that have been associated with intensifying abandonment in the past, such as lower home values, older housing, the number of non-white residents, and high vacancy rates, as found through a spatial regression analysis that revealed a correlation between these factors and an increase in the number of abandoned units (classified as vacant, not for rent or sale) at the census tract level from 1990 to 2010.

The number of new jobs within each type of municipality pivots off of the build-out of residential units. A ratio of jobs per housing unit is found using 2010 block-level Census data for each municipality type. The projection assumes that these ratios will be preserved in 2050. The number of new housing units within each type of municipality given by the residential build-out is multiplied by the current ratio of jobs to housing units within each

municipality type to estimate the number of new jobs to be located in each type of municipality in 2050. Jobs are then distributed amongst the three major industry sectors (industrial, office and retail) to preserve the current sector composition of jobs within each type of municipality (eg, if 50% of the jobs within first-ring suburbs in 2010 were retail jobs, 50% of the new jobs projected to be within first-ring suburbs in 2050 will also be retail).

The number of jobs per new commercial building within each generalized building type is found for the three broad industry sectors and multiplied by the projected number of jobs in each sector for each type of municipality to derive an estimate of the number of buildings holding jobs for each industry sector within each type of municipality. Projected locations of new commercial buildings follow zoning regulations. The placement of new commercial buildings within currently vacant lots favors parcels with lower property values, located near major commercial corridors, within existing sewer districts, in areas with a higher concentration of new homes, and in areas with a lower vacancy rates.

How the Three Alternative Scenarios were constructed:

All 115 citizen-created maps were digitized using ArcGIS software by geo-referencing high-resolution images of each map and recording the mapping activity elements (“place type” chips and markers) using a polygrid file of one-quarter square mile cells covering the region. All maps were grouped into one of the three alternative scenarios based on common tendencies and aggregated to give the collective arrangement of all mapping activity elements for each scenario. From this, the number of jobs and homes within each “place type” within different types of municipalities (e.g., cities, villages, first ring suburbs, outer suburbs and rural towns) was found for each scenario. This information was used to determine where projected new homes and jobs were placed in each scenario, and what development pattern they assumed.

Using Envision Tomorrow Plus (ET+) software (developed by Fregonese Associates of Portland, Oregon and the Metropolitan Research Center, available for download at <http://www.arch.utah.edu/cgi-bin/wordpress-etplus/>), building type models were designed using a variety of local data and aggregated up to prototypical development type models which corresponded to the “place type” pieces used by citizens in the mapping workshops. These locally-calibrated development types were “painted” in different configurations throughout the region for each scenario based on this literal interpretation of the aggregated placement of “place types” for each scenario. For more information on ET+ software, the local inputs used and the modeled indicators see “How Do Our Choices Play Out?” below.

How Do Our Choices Play Out? p 36

Percent of New Homes in Developed Area: This is the percentage of new homes, or jobs located within currently developed areas (USGS, 2011 National Land Cover Dataset, 2014). The number was calculated by multiplying the area of new development within developed areas by the housing density of the type of development built. This was divided by the total housing growth in each scenario to give a percentage.

Percent of New Jobs in Developed Area: Ibid.

Homes Left Abandoned: These estimates show the number of currently abandoned homes, along with homes projected to be abandoned under the “Business as usual” scenario that remain abandoned, or in other words, are not rebuilt, rehabilitated or re-occupied, under each scenario. Homes projected to be left abandoned in the “Business as usual” scenario were rebuilt or redeveloped in each alternative scenario based on the placement of new housing per scenario which was determined by participant feedback in the scenario mapping workshops.

New Jobs Brought Back to Former Industrial Sites: The number of jobs added to Brownfield Opportunity Areas [BOA’s] (registered under the New York State, Department of State’s BOA Program) was found based on the area of new development within these zones and the job density of the development types built within BOA’s under each scenario.

New paved surfaces: The area of new paved (or impervious) surfaces, including roads, sidewalks, and parking lots, was found by multiplying the land area of undeveloped “greenfield” land developed under each scenario by an estimate of percentage impervious cover for each type of development built on “greenfields” in each scenario.

Percent of new homes in walkable communities: This is the percent of new homes built in mixed-use forms of development where homes are in close proximity to jobs and amenities as opposed to neighborhoods with mostly just homes. For the “Business as usual” scenario, the type of home built assumes the allowable lot size given by municipal zoning regulations of each developed parcel. For the alternative scenarios, the type of home built at each lo-

cation was based on the type of development constructed in each scenario and the general types of homes within that form of development. The number of homes built in walkable communities was divided by the total number of new homes constructed to give a percentage.

Walkability: This shows a region-wide index of the “walkability” of new development on a 0 to 100 scale, with 100 representing the most “walkable” score possible. The calculation uses intersection density and the average distance of homes to amenities, such as retail, offices, schools, parks, as proxies for walkability.

Transit Proximity to New Homes: The number of new homes, or jobs added within ½ mile along a road of metro stops and bus stops where the wait between stops during peak week-day hours averages less than 15 minutes (NFTA, 2012). Using ArcGIS’ Network Analyst, areas experiencing new development that lie within ½ mile buffers along roads that connect to frequent transit stops were constructed for each scenario. The number of homes with transit access was calculated by multiplying the area of development within these buffers by the average density of each type of development. A number of existing, infrequent bus stops were converted into frequent bus stops under each alternative scenario based on the average extent of new transit connections made across the Scenario Planning Workshops’ citizen-created maps grouped under each scenario.

Transit Proximity to New Jobs: *Ibid.*

Daily Vehicle Miles Traveled (VMT) Per Capita: The total distance traveled by all vehicles across the region in one day divided by the total regional population. Number was found using the Envision Tomorrow Household 7D model which accounts for future changes in land use, transit service and road network. It estimates VMT using a set of land use and demographic variables, including average household size, employees per household, income, jobs accessible by transit and intersection density, that research has shown can be used to help predict the distance and number of trips taken by automobiles within a given area.

Lane Miles of New Road: The length of new roads constructed, in miles, multiplied by the number of lanes in new roads (for example, one mile of a new road that has two lanes would equal two new lane miles). The number of lane miles under each scenario was calculated based on the area of currently undeveloped, open land experiencing new development under each scenario and an estimate of the number of lane miles per unit area within the type of development built on undeveloped land. An estimate of lane miles per acre within each development type was found by manually calculating the number of road lane miles within existing local examples of development types using ArcGIS software.

Percent of Open Space Conserved from Development: Found by adding up the area of new development under each scenario within vacant parcels (Erie County Department of Environment and Planning, 2012, and Niagara County Department of Economic Development, 2011) that fall outside of the developed land area (USGS, 2011 National Land Cover Dataset, 2014) and dividing this value by the total area of existing vacant parcels in undeveloped areas.

Current and Potential Prime Farmland Lost to Development: The total area of new development under each scenario that takes place on top of either current farmland (US Department of Agriculture, Natural Resource Conservation Service, “Common Land Unit and Farm Service Areas for Erie and Niagara County, NY, Restricted Use”, 2012) or on soils classified as “prime farmland”, or “prime farmland if drained” (US Department of Agriculture, Natural Resource Conservation Service, “Soil Survey Geographic Database for Erie and Niagara County, NY”, 2011).

Acres of Development on Environmentally-Sensitive Areas: An estimate of the number of acres of new development on lands with an intrinsically-high ecological value, such as wetlands, floodplains, riparian areas and forestland. Calculated by totaling the area of land developed under each scenario that falls inside of wetlands (USGS, 2011 National Land Cover Dataset, 2014), floodplains (100-year floodplains delineated by Federal Emergency Management Agency, Digital Q3 Flood Zone Data, 1996), within 100 feet of streams (NYS Department of Environmental Conservation, National Hydrography Dataset, 2012), or forests (USGS, 2011 National Land Cover Dataset, 2014).

Energy Savings per Household (Compared to Existing Conditions): This is based on the types of homes built in each scenario and general characteristics of housing, such as square footage, and proximity to services and transit, that have knowable impacts on energy consumption. Assumptions were based on regional averages for residential energy use per household from the US Energy Information Administration’s Residential Energy Consumption Survey. These were applied to building types, and then aggregated to development types before being summated at the regional level for each scenario. The total residential energy usage was divided by the number of households and compared to the model output of existing conditions to give the overall percent change in energy use per household.

Local government cost to revenue ratio: Calculated using the Envision Tomorrow software's Fiscal Impact Tool extension which bases its methods on the Federal Reserve Fiscal Impact Tool. It is a regional analysis that aggregates all incorporated jurisdictions and provides a standardized method for conducting planning-based fiscal assessments. The FIT estimates of local revenues and cost come from the Census of Government finance data (2010). Other local inputs include the county population, annual taxable sales, property and sales tax rates (weighted average), property assessment ratios (weighted average), the new population and employment added to the region by 2050 from the scenario assumptions, and the monetary value of new development by land use type (from ET+).

Future revenue of local governments: Regional weighted averages for property tax, sales tax, income tax and non-tax revenue (sewerage, utilities, intergovernmental funds, etc....) were applied to the new population, employment and building values added in each scenario. Future sales tax revenue is projected by multiplying an estimate of the total payroll (given by Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2012) of regional employees by an estimate of the percent of consumer dollars spent that are subject to sales tax (US Census Bureau, County Business Patterns, 2010). Property tax revenue was calculated by multiplying an estimate of the market value of the property constructed (using regional average construction costs per square foot from rsmeans.com and assessed land value from parcel data) in each scenario by the property tax rate (using regional weighted averages found from NYS Office of the Comptroller data on Property Tax Levies (2012)) by a regionally-averaged assessment ratio (74% for residential properties, and 54% for commercial properties). Income tax revenue was projected by multiplying the average annual wage of new employment by the number of employees by a weighted average of income tax rate. Non-tax revenue was projected by multiplying the current non-tax revenue per capita by the projected regional population in 2050. All projections assume a constant rate of increase in employment and sales tax revenue from the present until the year 2050.

Future expenditures of local governments: These include both one-time expenditures on new infrastructure as well as on-going expenditures on infrastructure maintenance and government operations. Capital outlay costs for new infrastructure were calculated using assumptions of construction costs for new roadway (\$1,700,000 per lane mile, Arkansas DOT), sewerage (\$162 per lineal foot, Department of Public Works, Ipswich, MD and cost-helper.com) utilities (\$600,000 per mile, Western Massachusetts Electric Company), and water lines (\$208 per lineal foot, homewyse.com). Operations and maintenance costs track the costs of education, hospitals, roads, police, fire, parks, sewerage, solid waste and utilities (US Census Bureau, Census of Local Governments, 2010). To estimate increases in the future costs of operations and maintenance, the current operation and maintenance costs per capita were multiplied by the percent change in average annual capital outlay. The level of service is fixed and assumes a constant rate of increase in population and operations and maintenance costs until the year 2050.

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"Urbanized Land" Map Notes:

1970: A raw satellite image of the region from 1975 (obtained from the USGS/NASA Global Land Survey program) was used to estimate the extent of developed land. "Ground-truth" points known to have been developed in 1975 were used as training samples to inform a Maximum Likelihood Classification of the image derived through an Image Classification function of ArcGIS Desktop Software (Release 10, Earth Systems Research Institute). This method was found to classify developed areas with 84% accuracy. The estimate of developed land extent was merged with an approximation of the US Census' designation of urbanized land which defines urbanized areas as places with population densities of 1,000 people per square mile. Using the Kernel Density function of ArcGIS Software, areas with more 370 residential parcels built before 1970 (as given by NYS Real Property Tax Data) per square mile were found and extracted as an approximation of areas with population densities above 1,000 people per square mile (based on the average household size in 2010, or 2.7 persons per household, which was used for consistency with the accompanying maps).

These two layers were combined and scrubbed to produce the visual shown.

1990: Areas classified as developed (including developed open space) by USGS' 1992 NLCD (published in 2000) were merged with an approximation of the US Census' designation of urbanized land (defined as areas with more than 1,000 people per square mile). Using the Kernel Density function of ArcGIS Software, areas with more 370 residential parcels built before 1990 (as given by NYS Real Property Tax Data) per square mile were found and extracted as an approximation of areas with population densities above 1,000 people per square mile (based on the average household size in 2010, or 2.7 persons per household, which was used for consistency with the accompanying maps). These two layers were combined and scrubbed to produce the visual shown.

2010: This visual was produced through the same methods as the 1990 graphic using the USGS' 2012 NLCD (published in 2014) and the density of all residential parcels built before 2010 (as given by NYS Real Property Tax Data).

ⁱⁱUSGS National Land Cover Data classifies all areas of the conterminous US into distinct categories of land cover. Versions of this data set for 1992 (published 2000) and 2011 (published 2014) were analyzed in GIS to summate the total land area classified as developed within Buffalo Niagara. This area was divided by the population estimates of the two counties taken by the US Census Bureau during July of each year.

ⁱⁱⁱResidential structures built after 1970 were selected by attribute information in the Real Property Data. GIS was used to count the number of these parcels that intersected: (1) areas classified as "Prime Farmland" or "Prime Farmland if Drained" by USGS, SSURGO data, (2) 100-year flood plains delineated by FEMA (1996), and (3) areas classified as being forests or wetlands in 1992 by the USGS' NLCD (2000).

^{iv}Spatial roads data for the years 1990 and 2010 was retrieved from the U.S. Census Bureau in geographic information systems (GIS) format for the Buffalo-Niagara region. All line segments from the 2010 roads file that fell outside 100 feet of 1990 roads were selected. These road segments, representing roads likely to have been constructed since 1990, were compared with the 1990 roads layer, on a segment by segment basis, ensuring that all previously existing roads were excluded from the estimate of new roads. The aggregate length of roads constructed since 1990 within the two-county region was then calculated using ArcGIS software.

^vGIS analysis was used to sum the acreage of all public land protected by local, state or federal government, and land under conservation easements given by the National Conservation Easements Database and the WNY Land Conservancy.

ⁱAmerican Automobile Association Newsroom, "Your Driving Costs: How much are you really paying to drive?", 2013. Accessed October, 2014 at <http://newsroom.aaa.com/wp-content/uploads/2013/04/YourDrivingCosts2013.PDF> Estimated total annual cost of owning a small sedan is given as \$7,962, and includes costs for fuel, maintenance, tires, insurance, fees, depreciation and financing.

ⁱⁱNiagara Frontier Urban Area Freight Transportation Study Final Report, 2010. Accessed October, 2014 at www.gbnrtc.org/files/6213/2769/5475/Final_Report.pdf

ⁱⁱⁱThe Network Analyst extension of ArcGIS Software was used to delineate areas within one half mile of a NFTA Bus or Metro stops along a road. The percentage of the region's residents and employment within these areas was estimated using spatial data on population (US Census Bureau, TIGER\Line Shapefiles, 2010) and jobs (US Census Bureau, Location Employment Dynamics, 2011) both given at the census block-level. The population density and employment density were calculated for each census block. The percentage of each block that fell within one-half mile of NFTA stops was multiplied by the calculated density to estimate the number of people and jobs within access to transit.

^{iv}Niagara Frontier Transportation Authority, 2013-2014 Annual Performance Report, Evaluating Key Performance Indicators. Accessed October, 2014 at <http://metro.nfta.com/pdfs/2014AnnualReport.pdf>

^vAmerican Petroleum Institute, State Gasoline and Tax Report, 2014. Accessed October, 2014 at <http://www.api.org/oil-and-natural-gas-overview/industry-economics/fuel-taxes>

^{vi}New York State Office of the Comptroller, The Dedicated Highway and Bridge Trust Fund: A Shrinking Investment in New York's Future, Accessed February 2014 at <http://www.osc.state.ny.us/reports/trans/dhbt020413.pdf>

^{vii}Center for Transportation Excellence, "Transportation Ballot Measures", 2014. Accessed October, 2014 at <http://www.cfte.org/elections>

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ⁱ In 1990, the median home value in first-ring suburbs of Buffalo Niagara was \$136,735 (after adjusting for inflation) - about \$10,000 more than in 2012 (\$126,988). Sources: U.S. Census Bureau, 1990; American Community Survey, 5-year estimates (2008-2012). NOTE: First-ring suburbs of Buffalo and Niagara Falls include the towns of Amherst, Cheektowaga, Hamburg, Niagara, Orchard Park, Tonawanda, and West Seneca.

ⁱⁱ The proportion of homeowners with affordable housing costs excludes households whose housing costs as a percentage of income were “not computed” or listed as having “zero or negative income” by the US Census Bureau. Additionally, those rental households listed as having “No Cash Rent” (these are housing units likely owned by family or friends of the occupants who provide their tenants with housing free of charge) were counted as affordable housing units on the basis that, if one is not required to pay rent, their housing is affordable regardless of income.

ⁱⁱⁱ The number of “other” vacant units in first-ring suburbs increased from 1,053 in 1990 to 2,812 in 2010. Calculation totals the number of vacant units not listed as for rent or sale and intended for year-round occupancy within the towns of Amherst, Cheektowaga, Hamburg, Orchard Park, Lewiston, Lockport, Niagara, Tonawanda, West Seneca and Wheatfield (not including villages and cities within these towns) using census tract-level data.

^{iv} “Homes Built After 1970 and Abandoned Homes” Map Notes Homes built after 1970 were found using the “property class code” and “year built” attribute information of the real property tax parcel data from the NYS Dept. of Taxation and Finance (2010). The approximate location of current abandoned homes shown on the map is based on the number of housing units classified as “other vacant” (i.e., not for rent or sale but intended for year-round occupancy) given by the US Census (2010) at the census-tract level. The abandoned homes shown within each census tract on the map is equal to the number given by the US Census (2010) for the corresponding census tract. Using real property tax parcel data from the NYS Dept. of Taxation and Finance (2010) and census data at the block group level, individual residential parcels were scored for their likelihood of being abandoned based on the conditions that have been correlated with intensifying abandoned in the past (such as lower home values, older housing, and high vacancy rates) which were determined by an exploratory spatial regression analysis at the census tract level that found which variables correlated most strongly with increases in the number of “other vacant” units from 1990 to 2010. Parcels most likely to be abandoned within each census tract based on these scores are shown.

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ⁱ Areas classified as “Pasture/Hay” or “Row Crops” in the 1992 National Land Cover Dataset that fell outside of areas labeled as cropland in the 2012 Cropland Data Layer, parcels classified as agricultural for tax purposes (Erie County Dept. of Environment and Planning, 2012; Niagara County Dept. of Economic Development, 2011), and additional areas registered under the USDA Farm Service Agency program (USDA, NRCS, 2012), were extracted and clipped to residential parcels constructed since 1992 found by selecting by property class codes and year built attributes, from parcel data (Niagara Co (2011), Erie County (2012).

ⁱⁱ GIS analysis calculated the area of soils classified as “Prime Farmland” within Buffalo Niagara by the USDA, NRCS SSURGO Data, and the percentage of this land that fell within parcels classified as agricultural for tax purposes [Property Codes 100-199 and 241] and additional areas registered under the USDA Farm Service Agency.

ⁱⁱⁱ Jobs in food production include the following employment sectors: “Crop Production”, “Animal Production and Aquaculture”, “Support Services for Animal Production”, “Agricultural Implement Manufacturing”, “Farm and Garden Machinery and Equipment Merchant Wholesalers”, “Farm Supplies Merchant Wholesalers”. Jobs in food processing include the following employment sectors: “Food Manufacturing”, “Beverage Manufacturing”. Jobs in food retail include the following employment sectors: “Food and Beverage Stores”, “Food Services and Drinking Places”, “Grocery and Related Product Merchant Wholesalers”, “Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers”, “Gasoline Stations with Convenience Stores”, “Community Food Services”, “Other Miscellaneous Nondurable Goods Merchant Wholesalers”, and “Food (Health) Supplement Stores”.

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- ⁱ National Oceanic and Atmospheric Administration, National Climate Data Center, 2013. Accessed April, 2014 at www.ncdc.noaa.gov/oa/ncdc.html.
- ⁱⁱ Collins, M., R. Knutti, J. Arblaster, J.-L. Dufresne, T. Fichet, P. Friedlingstein, X. Gao, W.J. Gutowski, T. Johns, G. Krinner, M. Shongwe, C. Tebaldi, A.J. Weaver and M. Wehner, 2013: Long-term Climate Change: Projections, Commitments and Irreversibility. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- ⁱⁱⁱ U.S. Energy Information Administration, Department of Energy, International Energy Statistics, Total Carbon Dioxide Emissions from the Consumption of Energy (Million Metric Tons), 2013.
- Notes: The average percent of world emissions originating from the US between 2000 and 2011 was calculated as 20.8%.
- ^{iv} City of Buffalo, "Traffic Signal Synchronization Project Timeline", 2011. Accessed October, 2014 at https://www.ci.buffalo.ny.us/Home/City_Departments/Public_Works_Parks_Streets/TrafficSignalTimeline
- ^v Meyer, Michael D., 2008. "Design standards for US transportation infrastructure: the implications of climate change." Washington, DC: Transportation Research Board.

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Percent of Development within Urbanized Areas serviced by a sewer district: 68% represents the total proportion of the regional land area of all developed parcels (not classified as vacant, agricultural or environmentally-protected land by parcel data from Erie Co. DEP, 2012 and Niagara Co. DED, 2011) that falls within urbanized areas (US Census, 2010) that are also serviced by sewer districts (obtained from a variety of county and municipal sources). Moving forward, this indicator will measure the percentage of all newly developed area (found by overlaying parcels classified as vacant in the previous year with those that change to a form of development in the following year) that falls within the current urbanized, sewered area.

Percent of jobs in downtowns, Bronwfield Opportunity Areas or near Main streets: Using ArcGIS Software, census block-level employment data (US Census Bureau, Location Employment Dynamics, 2011) was clipped to the shapes of downtowns (various sources, 2012), BOAs (NYS Dept. of State, 2012) and within quarter-mile buffer of "Main Streets" (defined by local stakeholders, 2012). The number of jobs within these areas was estimated by multiplying job density per block by the area of the clipped blocks. This was divided by the total number of jobs in the region.

Open Spaces Conserved from Development: Using ArcGIS software, all parcels classified as vacant, agricultural or protected in parcel data were merged with other conserved and protected lands (The Conservation Registry, National Conservation Easement Database, Conservation Easements, 2012 and WNY Land Conservancy Property Boundaries, 2013). Moving forward, this area will be recalculated and compared with the 2014 benchmark.

Linear Miles of Shoreline with Public Access: All publicly-owned parcels were selected by property class from county parcel data (Erie Co. DEP, 2012 and Niagara Co. DED, 2011). Public parcels which intersect any major water body were extracted. The length of public shorelines, as well as the total length of major shorelines (USGS, NHD, 2012), was calculated using GIS software.

Daily Vehicle Miles Traveled per Capita: The total regional vehicle miles traveled given by GBNRTC data (2011) was divided by the total regional population as given by US Census, ACS, 5-year estimates (2011).

Percent of Workers Commuting via Alternative Modes of Transportation: U.S. Census Bureau. American Community Survey 1-year estimates (2010). Found from ACS' "Means of transportation to work" (T128) for the Buffalo-Niagara Falls metropolitan region.

Percent of homes and jobs within areas accessible to transit stops: The Network Analyst extension of ArcGIS Software was used to delineate areas within one half mile of a NFTA Bus or Metro stops (2013) along a road. The percentage of the region's residents and employment within these areas was estimated using spatial data on population (US Census Bureau, TIGER\Line Shapefiles, 2010) and jobs (US Census Bureau, Location Employment

Dynamics, 2011) both given at the census block-level. The population density (people per acre) and employment density (jobs per acre) was calculated for each census block. The percentage of each census block that fell within one half mile of NFTA stops was multiplied by the calculated density to estimate the number of people and jobs within access to transit.

Linear Miles of Dedicated Bike Paths, Shared Bike Lanes and Multi-use/Recreational Trails: Greater Buffalo Niagara Transportation Council (2014). All dedicated bike lanes, shared bike paths and multi-use/recreational trails were digitized and the length, in miles, was calculated using ArcGIS software.

Number of residential and commercial addresses determined “undeliverable” by US Postal Service: Data from <http://www.huduser.org/portal/usps/login.php> for the fourth quarter of 2013 was downloaded. Census tracts within Buffalo Niagara were extracted and the total number of business addresses and residential addresses within classified as vacant were totaled.

Percent of Homes built within walking distance to a “Main Street,” downtown or commercial corridor: Percentage of new homes (found using the year built attribute of parcel data from NYS Office of Real Property Services) built within a quarter-mile of town and village “main streets” (defined through stakeholder input, 2012), downtowns (various sources, 2012), and transit access areas (within half mile along a roadway of frequent metro rail and bus stops given by NFTA, 2013).

Percentage of income the average household spends on housing and transportation costs: HUD Locational Affordability Portal, 2014 (incorporating data from ACS 5-yr estimates; LODES Census Block Data from OnTheMap; National Transit Database; Consumer Expenditure Survey. Using the Location Affordability Portal provided by HUD (at <http://www.locationaffordability.info/lai.aspx>), the percentage of income spent by the median-income family on housing and transportation was found.

Number of Households without a vehicle and beyond walking distance to a supermarket: Reference USA (2012); US Census, ACS 5-year estimates (2011). Supermarkets and grocery stores were extracted from the RefUSA database by NAICS code. Vehicle availability by block group using ACS data was mapped. The total number of people living in households without a vehicle in block groups that do not lie within 0.4 miles of a supermarket was estimated using ArcGIS Network Analyst.

Land dedicated to farming: Parcel data and USDA, National Resource Conservation Service. Using ArcGIS software, the area of land in farms, including all land parcels classified as agricultural for tax purposes and additional areas registered under the USDA Farm Service Agency program was calculated.

Annual earnings for jobs in food production and manufacturing: New York State, Department of Labor, Quarterly Census of Employment and Wages, 2013 (p). Using annual QCEW records for the Buffalo-Niagara Falls metropolitan region (at <http://labor.ny.gov/stats/lsqcew.shtm>), the “Total Wages” was summed for the following sectors: “Crop Production”, “Animal Production and Aquaculture” and “Food Production”.

Square Footage of LEED-Certified projects: U.S. Green Building Council, Green Building Information Gateway (2014). According to report for the Buffalo-Niagara Falls metropolitan region from <http://www.gbig.org>

Percentage of Locally-Generated Energy from Renewable Sources: U.S. Energy Information Administration, Department of Energy. (2012). Reporting programs (Form 923) for all electricity generators. Data was retrieved for all commercial energy providers in Erie and Niagara counties. All energy production (kWh) of renewable sources (wind, solar, geothermal and hydroelectric) was totaled, and divided by total energy generation for all facilities in Buffalo Niagara.

Climate Smart Communities (Municipalities and Counties with a Climate Action Plan): NYS DEC (2014) List of Climate Smart Communities: New York State’s Climate Partners. Accessed October, 2014 from <http://www.dec.ny.gov/energy/56876.html>

Percent of new development on environmentally-sensitive area: Calculated by totaling the area of developed land (parcels that are not vacant, agricultural or protected) that falls inside of wetlands (USGS, 2011 National Land Cover Dataset, 2014), floodplains (100-year floodplains delineated by Federal Emergency Management Agency, Digital Q3 Flood Zone Data, 1996), within 100 feet of streams (NYS Department of Environmental Conservation, National Hydrography Dataset, 2012), or forests (USGS, 2011 National Land Cover Dataset, 2014). Moving forward, this metric will show the percent area of all new development on environmentally-sensitive land.

Percent of the region's population living in neighborhoods with concentrated poverty: ACS 5-year estimates, 2007-2012, Social Explorer Tables, US Census Bureau. The total population residing in census tracts where over 20% of the population lives under the federal poverty level.

Number of firms in the region: NYS Department of Labor, Quarterly Census of Employment and Wages, 2013 (p). This indicator shows the total number of business establishments in the region. For firms operating at more than one location, each individual establishment was counted, unless the payrolls are jointly maintained.

Combined cost-to-revenue ration for all local governments: NYS Office of the State Comptroller, 2012. Local Government Municipal Finance Data, Level One, FY 2011. Accessed February 2013 at http://www.osc.state.ny.us/localgov/datanstat/findata/index_choice.htm. Total expenditures (including debt payments and other uses) for all local and county governments divided by total revenues (including state and federal aid) for all local and county governments. Use negative values to indicate when costs exceed revenues.

Appendix C

Acronyms

AOC	Area of Concern
BNMC	Buffalo Niagara Medical Campus
BNP	Buffalo Niagara Partnership
BOA	Brownfield Opportunity Areas
CDC	Community Development Corporations
GBNRTC	Greater Buffalo Niagara Regional Transportation Council
GHG	Greenhouse gases
HUD	US Department of Housing and Urban Development
LISC	Local Initiatives Support Corporation
NFTA	Niagara Frontier Transportation Authority
NYPA	New York Power Authority
NYSDOT	New York State Department of Transportation
PUSH - Buffalo	People United for Sustainable Housing - Buffalo
RAP	Remedial Action Plan
RPSD	Regional Plan for Sustainable Development
TDR	Transfer of Development Rights
UBRI/ UDP	University at Buffalo Regional Institute and Urban Design Project
WNY REDC	Western New York Regional Economic Development Council
WNYEA	Western New York Environmental Alliance

Appendix D

Glossary of Terms

100 year flood	<p>The magnitude of a flood which has a one percent chance of occurring in any given year. The term can be misleading. It describes the probability of such a flood, not its actual frequency. A 100 year flood can happen two years in a row.</p> <p><i>UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government</i></p>
500 year flood	<p>The magnitude of a flood that has a 0.2 percent chance of occurring in any given year. The term is potentially misleading in the same way as the 100 year flood.</p> <p>http://www.fema.gov/floodplain-management/flood-zones#0</p>
Abandoned Housing	<p>A building that has no identifiable owner. This could be due to the owner not being able to maintain or pay for the building and deciding to walk away, or due to the owner dying with no known inheritors.</p> <p>http://chicagobuildings.org/faq.html#difference-between-abandoned-and-vacant</p>
Adaptive Re-use	<p>"Converting obsolete or historic buildings from their original or most recent use to a new use. For example, an old manufacturing site could be converted into apartments or retail space."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Agri-tourism	<p>Agricultural tourism is a commercial enterprise at a working farm, ranch or agricultural plant conducted for the enjoyment or education of visitors, and that generates supplemental income for the owner. Agritourism can include farm stands or shops, U-pick, farm stays, tours, on-farm classes, fairs, festivals, pumpkin patches, Christmas tree farms, winery weddings, orchard dinners, youth camps, barn dances, hunting or fishing, guest ranches, and more.</p> <p>http://sfp.ucdavis.edu/agritourism/</p>
Anchor Institution	<p>Institutions such as hospitals, universities and other organizations that have long-term commitments to place and are often central participants in community and economic development.</p> <p>http://www.icic.org/ee_uploads/publications/ICIC_RESEARCH_anchor_institutions_r2.pdf</p>
Bioswales	<p>Low-lying landscape features designed to collect water and retain it in place while it seeps into the ground as a means to filter out pollution and silt, minimize flooding, and protect critical infrastructure.</p> <p>http://buildgreen.ufl.edu/Fact_sheet_Bioswales_Vegetated_Swales.pdf</p>
Blue/green economy	<p>"An important part of the response to global climate change that refers to redesigning our economy to use less energy, produce less waste, protect natural resources, especially water, and produce products that also help us produce green energy or reduce consumption of energy."</p> <p>http://uploads.oneregionforward.org/content/uploads/2014/05/Session2ToolKit_final.pdf</p>
Brownfield	<p>"An area with abandoned, idle, or under-used industrial and commercial facilities where expansion, redevelopment, or reuse is complicated by real or perceived environmental contamination."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Carbon	<p>Shorthand for carbon dioxide (CO₂), which is the primary greenhouse gas and is emitted through human activities, mainly by the combustion of fossil fuels for energy.</p> <p>http://www.epa.gov/climatechange/ghgemissions/gases/co2.html</p>
Carbon Accounting	<p>Methods and processes by which organizations account for and report on their greenhouse gas emissions.</p> <p>http://www.vercoglobal.com/sustainability-services/carbon-accounting-and-reporting</p>
Carbon Footprint	<p>The total amount of greenhouse gases that are emitted into the atmosphere each year by a person, family, building, organization, or company. A person's carbon footprint includes greenhouse gas emissions from fuel that an individual burns directly, such as by heating a home or riding in a car. It also includes greenhouse gases that come from producing the goods or services that the individual uses, including emissions from power plants that make electricity, factories that make products, and landfills where trash gets sent.</p> <p>http://www.epa.gov/climatechange/glossary.html</p>

Climate Change	<p>"Refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among other effects, that occur over several decades or longer. Current concern about climate change focuses on changes caused in large part by emission of greenhouse gases leading to an overall warming and instability of the climate."</p> <p><i>U.S. Environmental Protection Agency. (2014, March 18). Climate change: Basic information. Retrieved from http://www.epa.gov/climatechange/basics/</i></p>
Community Garden	<p>"Places where neighbors and residents can gather to cultivate plants, vegetables, and fruits and, depending on local laws, keep bees and raise chickens or other livestock and poultry."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Community Risk Assessments	<p>A participatory process for assessing hazards, vulnerabilities, risks and ability to cope toward preparing coping strategies and finally a risk reduction options implementation plan by the local community.</p> <p><i>http://r4d.dfid.gov.uk/Output/191151/</i></p>
Complete Streets	<p>Streets that are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.</p> <p><i>http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/complete-streets-faq</i></p>
Conservation Easement	<p>A means to conserve natural lands whereby a property owner may cede development rights to a land conservancy or government while continuing to own and use the property. Typically, the easement is perpetuity and runs with the property, not the owner.</p> <p><i>http://landtrust.org/ProtectingLand/EasementInfo.htm</i></p>
e-Vehicle	Electric car
Emissions	<p>The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere.</p> <p><i>http://www.epa.gov/climatechange/glossary.html</i></p>
First Ring Suburb	<p>A term used to describe suburban communities that share a border with a central city. Local examples include Kenmore, Cheektowaga, and West Seneca.</p>
Floodplains	<p>"The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the floodplain subject to a one percent chance of flooding in any given year is designated as an "area of special flood hazard" by the Federal Insurance Administration."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Food Security	<p>The ability of people to have access to sufficient, safe, nutritious food to maintain a healthy and active life</p> <p><i>http://www.who.int/trade/glossary/story028/en/</i></p>
Food System	<p>Refers to the interlinked network of processes, actors, resources, policies, and regulatory tools required to produce, process, distribute, access, consume, and dispose of food—and its connection to other urban systems (such as land, housing, transportation, parks and recreation, etc.)</p> <p><i>Hodgson, Kimberley. (2013) Planning for Food Access and Community-Based Food Systems: A National Scan and Evaluation of Local Comprehensive and Sustainability Plans. Executive Summary American Planning Association. Retrieved from http://www.planning.org/research/foodaccess/pdf/foodaccessreport.pdf</i></p>
Form based codes	<p>"A method of regulating development to achieve a specific urban form by controlling physical form primarily, with a lesser focus on land use. Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Fossil Fuels	<p>"Carbon-rich deposits in the earth, such as petroleum (oil), coal, or natural gas, derived from the remains of ancient plants and animals and used for fuel."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Gray Infrastructure	<p>"The system of constructed "hard" infrastructure elements. They include the traditional infrastructure components that improve safety, health, and quality of life. They facilitate economic activity and connect us to other communities. Examples include roads, and storm and sanitary sewers. "</p> <p><i>http://www.cityofbondurant.com/webres/File/Comprehensive%20Plan/Bondurant-FY13%20CCP%20Grant%20Application%20Strategic%20Plan.pdf</i></p>

Graywater	The relatively clean waste water from baths, sinks, washing machines, and other kitchen appliances that can often be used for irrigation or treated on site, saving water, energy or both. <i>http://www.oxforddictionaries.com/us/definition/american_english/gray-water</i>
Green Code	An historic update of Buffalo's development framework that will target investments, facilitate job creation, restore the environment, and improve quality of life for residents. <i>http://uploads.oneregiionforward.org/content/uploads/2014/05/Session3ToolKit_FINAL_5_561.pdf</i>
Green Infrastructure	A stormwater management tool that takes advantage of the natural processes of soils and plants in order to slow down and clean stormwater and keep it from overwhelming the City's sewer system. Examples include Rain Gardens, permeable paving, and green roofs. <i>http://sfwater.org/index.aspx?page=667</i>
Greenhouse Gases	"Gases that trap heat in the atmosphere. These include carbon dioxide (CO2), Methane (CH4), Nitrous oxide (N2O), and Fluorinated gases. Human activity contributes to the production of these gases. The gases in turn make the planet warmer and ""thicken the Earth's blanket." <i>U.S. Environmental Protection Agency. (2013, September 09). Overview of greenhouse gases. Retrieved from http://www.epa.gov/climatechange/ghgemissions/gases.html</i>
Home Rule	The legal authority given by states to cities, municipalities, and/or counties to pass laws and govern themselves as they see fit -- especially in regard to this plan for land use regulation -- so long as they obey the state and federal constitutions. <i>http://www.nattleboro.com/sites/nattleboroma/files/file/zoning_planning_0101.pdf</i>
Hydraulic Fracturing	A process in which fractures in rocks below the earth's surface are opened and widened by injecting chemicals and liquids at high pressure: used especially to extract natural gas or oil. <i>http://dictionary.reference.com/browse/hydraulic+fracturing</i>
Infill	New development in existing urban areas, typically homes or other buildings constructed on vacant lots where other structures were previously demolished. <i>http://www.nattleboro.com/sites/nattleboroma/files/file/zoning_planning_0101.pdf</i>
Land Bank	An entity, typically an agency of local government, established to purchase, hold, prepare and resell land and abandoned property in support of neighborhood redevelopment efforts. <i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms © 2010 by The Institute for Local Government"</i>
LEED Standards	LEED (Leadership in Energy and Environmental Design) is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. <i>http://www.bu.edu/sustainability/what-were-doing/green-buildings/leed/</i>
Metropolitan Area	"The term metropolitan area refers to a region consisting of a densely populated urban core and its less-populated surrounding territories, sharing industry, infrastructure, and housing." <i>http://pubs.usgs.gov/circ/1373/pdf/Circular1373.pdf</i>
Micro-grids	A localized grouping of electricity sources and loads that normally operates connected to the traditional centralized grid (macrogrid), but can disconnect and function autonomously as an electrical island. <i>http://building-microgrid.lbl.gov/about-microgrids</i>
Mixed-use Development	Development that blends residential, retail, commercial office, institutional, cultural and where appropriate, industrial uses. It is a commonly used approach to creating urban districts that are both busy round the clock (because different uses are active at different times of day) and efficient (because they connect uses people need on a daily basis and reduce the need for transportation). <i>American Planning Association. (2013). Mixed use development. Retrieved from http://www.planning.org/nationalcenters/health/mixedusedevelopment.htm</i>
MMBtu	One million British thermal units (Btu). One Btu is the heat required to raise the temperature of one pound of water by one degree Fahrenheit. <i>http://www.eia.gov/tools/faqs/faq.cfm?id=45&t=8</i>
Natural Gas	Underground deposits of gases consisting of 50 to 90 percent methane (CH4) and small amounts of heavier gaseous hydrocarbon compounds such as propane (C3H8) and butane (C4H10). <i>http://www.epa.gov/climatechange/glossary.html</i>

Ozone	<p>"The protective layer of the earth's atmosphere, about 15 miles above the ground that absorbs some of the sun's ultraviolet rays, thereby reducing the amount of potentially harmful radiation that reaches the earth's surface."</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Rain Barrel	<p>"A system that collects and stores rainwater from your roof that would otherwise be lost to runoff and diverted to storm drains and streams."</p> <p>http://www.epa.gov/region03/p2/what-is-rainbarrel.pdf</p>
Rain gardens	<p>A planted depression or a hole that allows rainwater runoff from impervious urban areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed. This reduces rain runoff by allowing stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished groundwater).</p> <p>http://www.el-cerrito.org/index.aspx?NID=772</p>
Renewable and/or Green Energy	<p>Energy generated from solar, wind, geothermal and hydro-electric sources that are effectively unlimited and produce no greenhouse gases (as compared with energy from coal, oil, gas and uranium whose supply is finite and produce greenhouse gases or other dangerous wastes).</p> <p><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms© 2010 by The Institute for Local Government"</i></p>
Riparian Buffers	<p>Vegetated land areas next to rivers and streams that protect water resources from nonpoint source pollution and provide bank stabilization and aquatic and wildlife habitat.</p> <p>http://www.soil.ncsu.edu/publications/BMPs/buffers.html</p>
shared service agreements	<p>Shared services agreements, also known as inter-municipal cooperation and consolidation, are when governments from different municipalities consolidate overlapping layers of government into a single service in order to gain economies of scale, lower costs and eliminate inefficiencies. Agreements are intended to assist local governments deal with fiscal stress, declining or static tax bases, stagnant levels of state aid, and escalating healthcare and employee benefit costs all while facing demands for continued services and pressures on the local property tax base.</p> <p>http://www.osc.state.ny.us/localgov/pubs/research/cooperation1.pdf</p>
Sharrow	<p>Is shorthand "shared lane bicycle marking." This pavement marking includes a bicycle symbol and two white chevrons and is used to remind motorists that bicyclists are permitted to use the full lane.</p> <p>http://ttm.osu.edu/bike-sharrows</p>
Smart Growth	<p>A placed-based approach to planning and design for communities which encourages mixed use of land, transportation and housing, compact development, and strengthening existing qualities of communities which improve the quality of life.</p> <p><i>"Environmental Protection Agency. (2013) About Smart Growth. Retrieved from http://www.epa.gov/smartgrowth/about_sg.htm"</i></p>
Sprawl	<p>"A common term used to described the dispersed pattern of development associated with low-density housing, highway-oriented commercial development, and growth away from urban centers into rural areas. In some cases, suburban sprawl is accompanied by disinvestment or decline in urban centers."</p> <p><i>"Cornell University Department of Development Sociology. (2010). The definition of sprawl. Retrieved from http://cardi.cornell.edu/cals/devsoc/outreach/cardi/programs/land-use/sprawl/definition_sprawl.cfm"</i></p>
Tax Increment Financing	<p>A public financing method that captures all or part of the future increase in property tax revenue expected from new development to help pay for the development itself, its infrastructure or other community-improvement projects.</p> <p>http://www.co.weber.ut.us/commission/redevelopment_agency.php</p>
Transit Oriented Development	<p>Forms of development that concentrate housing and jobs in close proximity to transit service -- most notably rail transit stations -- both to provide service to residents and employees and to build transit ridership. TOD typically includes a mix of higher density housing, office and retail in a walkable neighborhood environment.</p> <p>http://www.ctod.org/faqs.php</p>
Urban Farming	<p>The practice of producing food in a city or heavily populated town or municipality as a commercial enterprise -- as distinguished from community gardening.</p> <p>http://www.greengrow.org/urban-farm/what-is-urban-farming/</p>

Urbanized area	<p>According to the 2010 Decennial census the term urbanized areas or UAs refer to urban areas that contain 50,000 or more people.</p> <p><small>http://www.gpo.gov/fdsys/pkg/FR-2011-08-24/pdf/2011-21647.pdf</small></p>
Vacant Housing	<p>An empty building that is not in use, but the owner is known. In most cases the building is foreclosed or owned by a bank.</p> <p><small>http://chicagobuildings.org/faq.html#difference-between-abandoned-and-vacant</small></p>
Watersheds	<p>"The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a reservoir, lake, or sea"</p> <p><small><i>"UNDERSTANDING THE BASICS OF LAND USE AND PLANNING: Glossary of Land Use and Planning Terms" © 2010 by The Institute for Local Government</i></small></p>

Appendix E

Plan Library

The process and plan reconnaissance for coming to an initial set of “Vision and Value” statements for One Region Forward:

In 2012, research staff from the UB Regional Institute conducted a comprehensive search and review of public planning documents in the Buffalo Niagara region. A content analysis was performed for more than 160 plans for counties, cities and towns, districts, neighborhoods, waterfronts and watersheds, the region as a whole. The analysis process included: read and summarize each plan (summaries for each can be found on www.oneregionforward.org/planning-library); identify fundamental visions and goals which are prominent in the existing planning documents; identify key sites and sectors which are common throughout the existing plans and proposals; and highlight key concepts and identify how these concepts serve a Regional goal. Based on that analysis, a series of themes were generated and “word clouds” were produced to represent the frequency of terms or themes that existed across these statements. In turn, each word cloud was synthesized into brief statements of core values and presented to the community for feedback.

People were asked to read, rate, and comment on the statements – which they did, during the Community Congresses held in January 2013, as well as during meetings of the One Region Forward Local Government Council and Private Sector Council, and Online through July 2013. Through “clicker” voting during the four in-person sessions and online voting afterwards about 300 participants rated the statements on a five-point scale from “right on the mark” to “totally missing the mark.” Overall all ten statements were affirmed as “right on the mark” or “mostly on the mark” by strong majorities. Small minorities –generally less than one in ten participants – rated the statements as “mostly missing the mark” or “totally missing the mark.”

During discussions and an online comment period, individuals made a total of 466 specific comments, offering additions, corrections, suggestions, and objections. We used both the ratings and comments to revise the statements. The revised statements, with documentation on how they were changed can be found at A Report on the Regional Vision and Values: What We’ve Heard through Year One of One Region Forward at www.oneregionforward.org/regional-vision-values.

A detailed list of the plans that went into this analysis can be found below.

Regional Plans

- Regional - The WNY Regional Economic Development Strategic Plan (2011)
- Regional - Niagara Region Transportation Strategy Update (2011)
- Regional - Revealing Niagara: A Citizen Vision for Heritage and Cultural Tourism in the Bi-National Niagara Region (2002)
- Regional - Rethinking the Niagara Frontier: A Report on the Continuing Bi-National Forum (2001)
- Regional - The Great Lakes Restoration Initiative Action Plan (2009)
- Regional - The International Watersheds Initiative: Implementing a New Paradigm for Trans-boundary Basins (2009)
- Regional - Impact of Urban Areas on Great Lakes Water Quality (2009)
- Regional - The 14th Biennial Report on Great Lakes Water Quality (2009)
- Regional - The NYS Park System: An Economic Asset to the Empire State (2009)
- Regional - The 2009 New York State Rail Plan (2009)
- Regional - Strategic Plan for State Forest Management (SPSFM)/Generic Environmental Impact Statement (2011)
- Regional - Coordinated Human Services Transportation Plan (2011)
- Regional - Transportation Improvement Program 2011-2015 and Long Range Transportation Plan (2010)
- Regional - Buffalo Niagara: Where Industry Creates Energy (2009)
- Regional - The WNY Environmental Alliance - Our Shared Agenda for Action (2009)
- Regional - 2008 Bicycle & Pedestrian Master Plan (2008)
- Regional - The Western New York Southtowns Scenic Byway (2007)
- Regional - Revisioning Brownfields: A Regional Strategic Approach (2007)
- Regional - The Niagara River Greenway Plan and Final Environmental Impact Statement (2007)
- Regional - The Framework for Regional Growth (2006)
- Regional - Building UB: The Comprehensive Physical Plan (2006)
- Regional - The Buffalo Niagara Cultural Tourism Initiative (2005)

Erie County Plans

Erie County - The Community Development Block Grant Final 2012 Action Plan (2012)
Erie County - The Comprehensive Economic Development Strategy (2011)
Erie County - The Comprehensive Three Year Local Plan 2005-2008 (2005)
Erie County - The Consolidated Annual Performance and Evaluation Report (2012)
Erie County - The Erie County Agricultural and Farmland Protection Plan (2012)
Erie County - The Erie County Parks System Master Plan (2003)
Erie County - Erie County's Road to a Bright Future (2009)
Erie County - The Consolidated Plan for the Amherst, Cheektowaga, and Tonawanda (2010)
Erie County - The Draft Regional Comprehensive Plan and Draft Generic Environmental Impact Statement for the Towns of Aurora, Elma, Holland, Wales and the Village of East Aurora (2002)
Erie County - Sowing the Seeds for Southtowns Agribusiness (March 2009)
Erie County - Tourism Toolkit for the Southtowns (October 2007)
Alden (Town) - The Town of Alden Comprehensive Plan (2009)
Alden (Town) - The Town of Alden Water District Number 5 Plan (2009)
Alden (Village) - The Village of Alden Comprehensive Plan (2000)
Amherst (Town) - The Town of Amherst (2012-2017) Capital Improvement Program (2011)
Amherst (Town) - The Town of Amherst Bicentennial Comprehensive Plan (2007)
Amherst (Town) - The Town of Amherst Recreation & Parks Master Plan (2004)
Amherst (Town) - The Master Plan and Final Environmental Impact Statement for Amherst State Park (2003)
Angola (Village) - The Village of Angola Comprehensive Plan (2003)
Aurora (Town) - The Aurora Open Space Plan (2010)
Boston (Town) - The Town of Boston Comprehensive Plan: A Vision for the Year 2020 (2002)
Brant (Town) - The Town of Brant and Village of Farnham Master Plan (2003)
Buffalo (City) - Queen City in the 21st Century: Comprehensive Plan (2006)
Buffalo (City) - Queen City Waterfront (2007)
Buffalo (City) - Queen City Hub: A Strategic Regional Action Plan for Downtown Buffalo. (2003)
Buffalo (City) - Buffalo Niagara Medical Campus Master Plan Update (2010)
Buffalo (City) - The Black Rock Canal Park Feasibility Analysis (2010)
Buffalo (City) - The Buffalo Building Reuse Project Report (2012)
Buffalo (City) - The Buffalo Green Code Draft Land Use Plan (2012)
Buffalo (City) - The Buffalo Harbor Bridge Final Scoping Report (2010)
Buffalo (City) - The Buffalo Harbor Bridge Placemaking Report (2011)
Buffalo (City) - The Buffalo Municipal Housing Authority Perry Choice Neighborhood Planning Initiative (2011)
Buffalo (City) - Buffalo Olmsted Park System: Plan for the 21st Century (2008)
Buffalo (City) - The Buffalo Promise Neighborhood Needs Assessment Study (2011)
Buffalo (City) - The Buffalo River Restoration Feasibility Study (2011)
Buffalo (City) - Updated Addendum to Stage 2 Remedial Action Plan Report Buffalo River AOC (2011)
Buffalo (City) - Proposed Remedial Action Plan—Buffalo Lakeside Commerce Park, Parcel 4 Site (2009)
Buffalo (City) - Queen City Gardens Plan (2009)
Buffalo (City) - South Buffalo Brownfield Opportunity Area—Nomination Document (2009)
Buffalo (City) - "Building a Neighborhood of Choice: A Neighborhood Plan for the Riverside Planning Community" (2007)
Buffalo (City) - Celebrating Buffalo's Cultural Diversity: A Vision for the Michigan Street Heritage Corridor (2011)
Buffalo (City) - Green Infrastructure Solutions to Buffalo's Sewer Overflow Challenge Draft Feasibility Study (2011)
Buffalo (City) - Groundwork Buffalo – Feasibility Study (2009)
Buffalo (City) - "Preserving Our Heritage and Planning Our Future" (2007)
Buffalo (City) - The Larkin District Plan (2006)
Buffalo (City) - The Lower West Side: Strategies for Neighborhood and Community Development (1994)
Buffalo (City) - The Lower West Side Neighborhood Stabilization Demonstration Project: Housing Design Review Guidelines (2002)

Cheektowaga (Town) - The Town of Cheektowaga Comprehensive Plan and Generic Environmental Impact Statement (2010)

Clarence (Town) - The Town of Clarence Agricultural and Farmland Protection Plan (2012)

Clarence (Town) - The Town of Clarence Master Plan 2015 (2001)

Clarence (Town) - Town of Clarence Parks & Recreation Master Plan (2005)

Clarence (Town) - The Supplemental Draft Generic Environmental Impact Statement for Clarence Hollow Pollution Abatement Project (2007)

Colden (Town) - The Town of Colden Master Plan 2002 (1992)

Concord (Town) - The Town of Concord and Village of Springville Joint Comprehensive Plan (1999)

Depew (Village) - The Proposed Remedial Action Plan for Depew Village Landfill (2008)

East Aurora (Village) - The Village of East Aurora Community Forestry Management Plan ()

Eden (Town) - The Town of Eden 2015 Comprehensive Plan (2000)

Evans (Town) - The Town of Evans Comprehensive Plan (1999)

Evans (Town) - The Town of Evans Local Waterfront Revitalization Program (1986)

Evans (Town) - The Town of Evans Stormwater Management Program Plan (2007)

Evans (Town) - The Lake Erie Beach Neighborhood Revitalization Strategy (2010)

Grand Island (Town) - The Town of Grand Island Local Waterfront Revitalization Program (2006)

Hamburg (Town) - The Town of Hamburg 2007 Comprehensive Plan Update (2007)

Hamburg (Town) - The Town of Hamburg Five Year Consolidated Plan (2010)

Hamburg (Town) - The Town of Hamburg Local Waterfront Revitalization Program (2011)

Hamburg (Village) - The Village of Hamburg Comprehensive Plan Update (2010)

Hamburg (Village) - The Village of Hamburg Strategic Plan (2002)

Holland (Town) - The Town of Holland Town Park Master Plan (1994)

Kenmore (Village) - The Comprehensive Plan for the Village of Kenmore Business District (2003)

Lackawanna (City) - The City of Lackawanna Comprehensive Plan 2020 (2001)

Lackawanna (City) - RESTORE III - Lackawanna Redevelopment Plan (2010)

Lackawanna (City) - City of Lackawanna Local Waterfront Revitalization Program (1989)

Lancaster (Town) - The Town of Lancaster Stormwater Management Plan (2010)

Lancaster (Town) - The Town of Lancaster, Village of Lancaster, and Village of Depew Comprehensive Plan (2000)

Marilla (Town) - The Town of Marilla Comprehensive Plan (1998)

Newstead (Town) - The Town of Newstead and Village of Akron Combined Comprehensive Plan (2001)

North Collins (Town) - The Town of North Collins Comprehensive Plan (1996)

Orchard Park (Town) - The Town of Orchard Park Comprehensive Plan (2007)

Orchard Park (Town) - Orchard Park Economic Development Committee Strategic Plan (2008)

Orchard Park (Town) - Town and Village of Orchard Park, New York Land Use Study: The Orchard Park Plan (2002)

Sardinia (Town) - The Town of Sardinia Comprehensive Plan (2003)

Tonawanda (City) - City of Tonawanda Comprehensive Plan and Final Generic Environmental Impact Statement (2002)

Tonawanda (Town) - The Town of Tonawanda Old Town Neighborhood Plan (2009)

Tonawanda (Town) - Tonawanda Brownfield Opportunity Area Program, Pre-Nomination Study (2011)

Tonawanda (Town) - The Tonawanda Waterfront Rezoning Study and Land Use Plan (2002)

Tonawanda (Town) - The Town of Tonawanda Comprehensive Plan (2005)

Tonawanda (Town) - The Town of Tonawanda Local Waterfront Revitalization Program (1993)

Tonawanda (Town) - The Town of Tonawanda Sheridan Parkside Village Courts Development Plan (2003)

Tonawanda (Town) - The Town of Tonawanda's Proposed Third Program Year Action Plan (2012)

West Seneca (Town) - The Town of West Seneca Comprehensive Plan (2005)

Williamsville (Village) - Village of Williamsville Community Plan and Draft Generic Environmental Impact Statement (2008)

Williamsville (Village) - Village of Williamsville Water Mill Final Re-use Report (2009)

Niagara County Plans

Niagara County - Niagara Communities Comprehensive Plan 2030 (2009)
Niagara County - The Comprehensive Economic Development Strategy for Niagara County (2010)
Niagara County - 2012 Niagara County Economic Development Address (2012)
Niagara County - The Niagara County Agricultural & Farmland Protection Plan (1999)
Niagara County - Niagara Falls International Airport Bi-National Air Cargo Gateway Study (2006)
Niagara County - The Niagara National Heritage Area Study Act (2005)
Niagara County - Transit North Historic Canalway Corridor Plan (2008)
Niagara County - The Niagara County Business Development & Commercial Revitalization Study (2005)
Niagara County - The Niagara County Comprehensive Emergency Management Plan (2007)
Niagara County - The Niagara County Stormwater Management Program Plan (2010)
Niagara County - The Eighteenmile Creek Restoration Project Plan (Phase II Restoration) (2011)
Barker (Village) - The Village of Barker Capital Improvement Plan (2011)
Cambria (Town) - Town of Cambria Comprehensive Plan (1997)
Hartland (Town) - The Comprehensive Plan for the Town of Hartland (1998)
Lewiston (Town) - Town of Lewiston Comprehensive Plan Update (2011)
Lewiston (Town) - Town of Lewiston Comprehensive Plan and Draft Generic Environmental Impact Statement (2000)
Lewiston (Village) - The Village of Lewiston Master Plan (2004)
Lewiston (Village) - The Village of Lewiston Local Waterfront Revitalization Program (2011)
Lockport (City) - The City of Lockport Comprehensive Plan (1998)
Lockport (City) - The City of Lockport Brownfield Opportunity Area Draft Pre-Nomination Study (2008)
Lockport (City) - Proposed Remedial Action Plan for Eighteenmile Creek Corridor Site (2010)
Lockport (Town) - The Canalside Wine Emporium Project (2009)
Lockport (Town) - The Town of Lockport Southwest Sector Plan (1992)
Lockport (Town) - The Town of Lockport Design Guidelines for Commercial Site Plans (2009)
Middleport (Village) - The Village of Middleport Local Waterfront Revitalization Program (2002)
Newfane (Town) - Town of Newfane 2015 Master Plan (1998)
Newfane (Town) - The Town of Newfane Local Waterfront Revitalization Program (1997)
Niagara Falls (City) - The Comprehensive Plan for City of Niagara Falls (2009)
Niagara Falls (City) - The Buffalo Avenue Heritage District Revitalization Strategy (2009)
Niagara Falls (City) - The Highland Community Area BOA Nomination Document (2011)
Niagara Falls (City) - Proposed Remedial Action Plan for Frontier Chemical – Royal Avenue (2011)
Niagara Falls (City) - The Buffalo Avenue Industrial Corridor Proposed Brownfield Opportunity Area (2008)
Niagara Falls (City) - The Highland Avenue BOA Community Participation Plan (2009)
Niagara Falls (City) - The City of Niagara Falls USA Niagara River Greenway Vision and Project Proposals (2006)
Niagara Falls (City) - Achieving Niagara Falls' Future: An Assessment of Niagara Falls' Waterfront Planning (2002)
Niagara Falls (Town) - Town of Niagara Comprehensive Plan (1972)
North Tonawanda (City) - The City of North Tonawanda Comprehensive Plan (2008)
North Tonawanda (City) - The Local Waterfront Revitalization Program for North Tonawanda (1988)
Pendleton (Town) - The Town of Pendleton Comprehensive Plan for 2025 (2008)
Porter (Town) - The Comprehensive Plan for the Town of Porter (2004)
Porter (Town) - The Management Action Plan for the Former Lake Ontario Ordnance Works (2009)
Royalton (Town) - The Town of Royalton Comprehensive Plan (2007)
Somerset (Town) - The Town of Somerset Comprehensive Plan (2003)
Somerset (Town) - The Town of Somerset Local Waterfront Revitalization Program (2005)
Wheatfield (Town) - The Town of Wheatfield Comprehensive Plan (2004)
Wheatfield (Town) - The Town of Wheatfield Local Waterfront Revitalization Program (2012)
Wilson (Town) - Town and Village of Wilson Comprehensive Plan (1966)
Youngstown (Village) - The Village of Youngstown Local Waterfront Revitalization Program (1989)
Youngstown (Village) - The Village of Youngstown Master Plan (1972)

Appendix F

Community Engagement

Empowering and engaging the people of Buffalo Niagara has been a critical part of the process to map a roadmap for driving positive, sustainable change in our region and its diverse communities. Through community presentations, tabling at local events, meetings large and small, and all sorts of other in-person engagement activities, we talked to over 5,000 citizens through this process. Below is a list of all engagement activities through the process.

October, 2014	October 14, 2014	C-SAAHN 'IMAGINE' Lecture Series
	October 4, 2014	Citizen Planning School, IDEA SUMMIT, Buffalo, NY
September 2014	September 27, 2014	Buffalo Civic App Symposium: "Opportunities in Open Data"
	September 16, 2014	UB Sustainable Living Fair, Amherst, NY
	September 13, 2014	Music is Art Festival, Buffalo, NY
	September 6, 2014	Citizen Planning School, IDEA WORKSHOP, Buffalo, NY
August 2014	August 17, 2014	Hardline with Dave Debo, WBEN Radio, Airwaves of Buffalo Niagara
	July 24, 2014	Vision Niagara, Buffalo, NY
	July 23, 2014	NYS Council on Food Policy Annual Summer Meeting, Buffalo, NY
	July 22, 2014	Community Congress Open House #2, Buffalo, NY
	July 21, 2014	Community Congress Open House #1, Lockport, NY
June 2014	June 29, 2014	South Buffalo Farmer's Market, Buffalo, NY
	June 28, 2014	City of Night, Buffalo, NY
	June 28, 2014	Taste of Diversity, Buffalo, NY
	June 21, 2014	Party for the Planet, Buffalo, NY
	June 7, 2014	Elmwood- Bidwell Farmer's Market, Buffalo, NY
	June 3, 2014	How To Measure Development - One Region Forward : Economics of Sustainability Series, Buffalo, NY
May 2014	May 22, 2014	Joint Meeting of Erie County Association of Governments and Niagara County Supervisors Association, Niagara Falls, NY
	May 20, 2014	Orchard Park Economic Development Committee, Orchard Park, NY
	May 17, 2014	Citizen Planning School Session #3, Buffalo, NY
	May 3, 2014	Citizen Planning School Session #2, Buffalo, NY
April 2014	April 12, 2014	Citizen Planning School Session #1, Buffalo, NY
March 2014	March 25, 2014	Tools and Technology for Scenarios and Plans, Buffalo, NY
	March 20, 2014	Scenario Planning Workshop on the Road hosted by Self Advocacy Association of NYS - WNY Region, Buffalo, NY
	March 20, 2014	Scenario Planning Workshop on the Road hosted by Southtowns Planning and Development Group and the Southtowns Coalition, Eden, NY
	March 19, 2014	Scenario Planning Workshop on the Road hosted by WNY Environmental Alliance, Buffalo, NY
	March 19, 2014	Scenario Planning Workshop on the Road hosted by UB Educational Opportunity Center, Buffalo, NY

	March 17, 2014	Scenario Planning Workshop on the Road hosted by Niagara County Planning Board, Sanborn, NY
	March 13, 2014	Scenario Planning Workshop on the Road hosted by Parkside Community Association, Buffalo, NY
	March 11, 2014	Buffalo Rotary Club
	March 11, 2014	Amherst Chamber of Commerce Emerging Business Leaders Coffee Connections
	March 10, 2014	Scenario Planning Workshop on the Road hosted by United Way of Buffalo, Buffalo NY
	March 10, 2014	Scenario Planning Workshop on the Road hosted by Lockport Main Street Association, Lockport, NY
	March 7, 2014	Scenario Planning Workshop on the Road hosted by Tapestry Charter School, Buffalo, NY
	March 7, 2014	Western New York Service Collaborative Presentation, Buffalo, NY
	March 6, 2014	Scenario Planning Workshop on the Road hosted by hosted by the Hamlin Park Taxpayers Association, Buffalo, NY
	March 3, 2014	Scenario Planning Workshop on the Road hosted by University at Buffalo's Undergraduate Academies, Amherst, NY
February 2014	February 27, 2014	Scenario Planning Workshop on the Road hosted by Young Nonprofit Professional's Network of Greater Buffalo, Buffalo, NY
	February 26, 2014	People and Possibilities- Niagara Falls Public Access Television, Niagara Falls, NY
	February 26, 2014	Scenario Planning Workshop on the Road hosted by Buffalo State College's Geography Department, Buffalo, NY
	February 25, 2014	Building Economic Resilience to Disasters in the Buffalo Niagara Region, Niagara Falls, NY
	February 13, 2014	Fillmore Corridor Neighborhood Coalition, Buffalo, NY
	February 11, 2014	Local Government Council and Private Sector Council Joint Event, Buffalo, NY
	February 8, 2014	Scenario Planning Workshop on the Road hosted by Clarence IDA, Clarence, NY
January 2014	January 27, 2014	University at Buffalo Sustainability Academy, Amherst, NY
	January 22, 2014	Smart Growth in Village Centers Forum, Williamsville, NY
	January 22, 2014	Young Nonprofit Professional Network of Greater Buffalo, Buffalo, NY
	January 21, 2013	Scenario Planning Workshops hosted by Junior League of Buffalo, Six locations across the region (3 in Buffalo, 2 in Clarence, 1 in Orchard Park)
	January 15, 2014	Lockport Community Service Provider Coalition , Lockport, NY
	January 8, 2014	GBNRTC Planning and Coordinating Committee, Buffalo, NY
December 2013	December 19, 2013	WNY Chapter of New York State Commercial Association of Realtors, Amherst, NY
	December 16, 2013	Scenario Planning Workshop on the Road #1 hosted by Chris Miller, Buffalo, NY
	December 12, 2013	A Curbside Chat with Chuck Marohn, Buffalo, NY
November 2013	November 16, 2013	Nov 2013 Community Congress: Scenario Planning Workshop #5, Lewiston, NY
	November 15, 2013	Nov 2013 Community Congress: Scenario Planning Workshop #4, Lockport, NY
	November 14, 2013	Nov 2013 Community Congress: Scenario Planning Workshop #3, East Aurora, NY
	November 13, 2013	Nov 2013 Community Congress: Scenario Planning Workshop #2, Buffalo, NY
	November 12, 2013	Nov 2013 Community Congress: Scenario Planning Workshop #1, Amherst, NY
	November 6, 2013	League of Women Voters of Buffalo Niagara - Government Committee, Buffalo, NY
October 2013	October 30, 2013	Blasdell Farmer's Market, Blasdell, NY
	October 24, 2013	Buffalo Food Policy Summit - Policymakers Summit, Buffalo, NY
	October 23, 2013	2nd Buffalo Food Policy Summit, Buffalo, NY

	October 12, 2013	Kenmore Farmer's Market, Kenmore, NY
	October 4, 2013	2013 Conference on the Environment: A Bi-National Sustainability Summit, Buffalo, NY
September 2013	September 28, 2013	9th Annual Western New York Environmental Summit, Buffalo, NY
	September 26, 2013	Buffalo Board of Block Clubs, Buffalo, NY
	September 26, 2013	Buffalo Niagara 360 Kickoff Celebration, Buffalo, NY
	September 19, 2013	Erie County Village Mayors Association, Depew, NY
	September 18, 2013	UB Sustainable Living Fair, Amherst, NY
	September 14, 2013	Lockport Community Market, Lockport, NY
	September 7, 2013	Elmwood-Bidwell Farmer's Market, Buffalo, NY
August 2013	August 24, 2013	Elmwood Avenue Festival of the Arts, Buffalo, NY
	August 21, 2013	Buffalo Promise Neighborhood Community Fun Day, Buffalo, NY
	August 17, 2013	2nd Annual City of Night, Silo City, Buffalo, NY
	August 14, 2013	Matt Urban Hope Center-Mobile Safety Net Team Outreach
	August 10, 2013	47th Annual Lewiston Art Festival, Lewiston, NY
	August 7, 2013	Open Buffalo Presents Young Invincibles, Buffalo, NY
July 2013	July 18, 2013	Leadership Niagara, Amherst, NY
	July 15, 2013	WBNY 91.3 FM Environmental Show, Buffalo, NY
	July 8, 2013	WNY Higher Education Network in Sustainability, Amherst, NY
June 2013	June 29, 2013	Taste of Diversity, Buffalo, NY
	June 27, 2013	Resources for Proactive Preservation and Redevelopment, Buffalo, NY
	June 22, 2013	Buffalo Zoo Party for the Planet, Buffalo, NY
	June 20, 2013	Association of Erie County Governments, Brant, NY
	June 20, 2013	The Foundry Community Meeting, Buffalo, NY
	June 19, 2013	Funders Network for Smart Growth and Livable Communities Meeting, Buffalo, NY
	June 15, 2013	Juneteenth Festival, Buffalo, NY
	June 14, 2013	Amherst Chamber of Commerce Public Affairs Committee, Williamsville, NY
	June 13, 2013	Business Alliance for Local Living Economies Conference, Buffalo, NY
	June 1, 2013	Springville Dairy/Ag Festival, Springville, NY
May 2013	May 30, 2013	Alden Community Meeting, Alden, NY
	May 23, 2013	Wheatfield Town Board and Planning Board, Wheatfield, NY
	May 18, 2013	Designing to Live Sustainably: Imagine Buffalo, Buffalo, NY
	May 10, 2013	University at Buffalo School of Architecture and Planning Commencement Luncheon, Buffalo, NY
April 2013	April 28, 2013	Relay for Renewables - A Renewable Energy Fair, Appelton, NY
	April 24, 2013	Royalton Town Board and Zoning Board, Royalton, NY
	April 22, 2013	Strand in the Place Where You Live - University at Buffalo Earth Day event, Amherst, NY
	April 19, 2013	Niagara Business Associates, Buffalo, NY
	April 16, 2013	Hilbert College, Corporate Social Responsibility and Sustainability Class, Hamburg, NY
March 2013	March 25, 2013	Urban Land Institute - Sustainable Infrastructure, Spotlight on Leadership, Buffalo, NY
	March 15, 2013	Village Center and Urban Core Revitalization, Buffalo, NY

	March 14, 2013	WNY Green Infrastructure Forum, Buffalo, NY
February 2013	February 26, 2013	WNY Grantmakers, Amherst, NY
	February 12, 2013	Erie County Village and Town Clerks, Buffalo, NY
	February 2, 2013	Community Congress meeting #2, Niagara Falls, NY
January 2013	January 29, 2013	Community Congress meeting #1, Buffalo, NY
	January 29, 2013	Niagara Erie Regional Coalition, Buffalo, NY
	January 25, 2013	Hamburg Development Corporation, Hamburg, NY
	January 24, 2013	Air and Waste Management Association, Buffalo, NY
November 2012	November 20, 2012	Erie County Environmental Management Committee, West Seneca, NY
	November 14, 2012	One Region Forward Private Sector Council, Buffalo, NY
	November 13, 2012	One Region Forward Local Government Council, Buffalo, NY
	November 10, 2012	Western New York Environmental Alliance Annual Congress, Buffalo, NY
October 2012	October 18, 2012	Niagara County Supervisors Association, Lockport, NY
	October 16, 2012	Western New York Regional Economic Development Council Smart Growth Working Group, Buffalo, NY
	October 11, 2012	International Council of Shopping Centers Buffalo Meeting, Buffalo, NY
September 2012	September 29, 2012	Daemen College Environmental Summit , Buffalo, NY
	September 26, 2012	Preservation Plus Conference, Buffalo, NY
	September 26, 2012	National Brownfields Workshop, Buffalo, NY
	September 20, 2012	Upstate New York American Planning Association Conference, Cortland, NY
July 2012	July 11 2012	Joint Meeting of the Village of East Aurora Planning Commission and Town of Aurora Planning Board, East Aurora, NY
May 2012	May 16, 2012	Western New York Environmental Alliance Urban Regeneration Group, Buffalo, NY
April 2012	April 27, 2012	Western New York Regional Economic Development Council Smart Growth Working Group, Buffalo, NY

Appendix G

List of Organizations

Throughout the One Region Forward planning process a broad base of organizations were engaged to help guide the plan. At Community Congress sessions, our lecture series, Citizen Planning School, Local Government and Private Sector council meetings, working team meetings and more, over 700 organizations helped shape One Region Forward. We made an attempt to catalog all the organizations that helped shape the process.

Academic Institutions or Foundation

American Chemical Society**	M&T Charitable Foundation	Trocaire College
Baird Foundation	Mandala School	University at Buffalo
Brock University	Niagara County Community College	University at Buffalo Academies
Buffalo Public Schools	Niagara Falls City School District	University at Buffalo Coalition for Leading Ethically in Academic Research
Castellani Art Museum of Niagara University	Niagara Falls High School	University at Buffalo IDEA Center
City Honors School	Niagara Frontier Center- College Achievement Requires Engaged Students	University at Buffalo Law School
City Vision College	Niagara University	University at Buffalo Liberty Partnerships
College Achievement Requires Engaged Students (CARES)	Oakmoss Education	University at Buffalo Office of Sustainability **
Community Foundation for Greater Buffalo**	Open Buffalo	University at Buffalo Regional Institute * **
Cornell University	Orleans Niagara Boces	University at Buffalo School of Architecture and Planning
Daemen College	Paleontological Research Institution	University at Buffalo School of Management
Daemen College Center for Sustainable Communities and Civic Engagement (CSCCE)*	Partners for a Livable Western New York	University at Buffalo Society of Feminists
Daemen Society Work Alliance	ReNU Niagara**	University at Buffalo's Department of History
Ecosystem Restoration Through Interdisciplinary Exchange (ERIE)	Small Business Development Center at SUNY Buffalo State	University at Buffalo's Teacher Education Institute
Global Concept Charter School	Student Social Work Organization of Buffalo State College	University District Community Development Association**
Lasalle Middle School	SUNY Buffalo State	Western New York Prosperity Scholars
Local Initiatives Support Corporation Buffalo (LISC)* **	SUNY Buffalo State, Volunteer and Service-Learning Center	Williamsville School Board
Lockport School District	Tapestry Charter School	
	The Baird Foundation	
	The John R. Oishei Foundation-Mobile Safety Net * **	

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Business and Private Sector Organizations

Adler Services	Cantor Fitzgerald	Greenman-Pedersen, Inc.
Advanced Business Connection	Carmina Wood Morris, P.C.	Hamlin Park Taxpayers Association
Akron Chamber of Commerce	Cascades Recovery - Buffalo Office	Harris Beach PLLC
Akron Sports, Inc.	Cazenovia Recovery Systems, Inc.	Hart Corporation
All Communications Network	CBRE Buffalo Commercial Real State	Hart Lyman Companies, LLC
Alternative Press	Century 21 Real Estate	Hastings + Cohn Real Estate
American Egg Board	Charles Gordon Architecture	HDS Industrial Design & Drafting, Inc.
Anspach Meeks Ellenberger LLP**	Chuck Banas Consulting	Healthminds**
Applied Sciences Group, Inc.	Ciminelli Real Estate Corporation	Home Buyers Marketing II**
Architectural Resources	Cincinnati Center City Development Corporation (3CDC)	Horn Companies, LLC
Arden Hill Life Care Center	Citigroup	Hylan Asset Management
Ardent Commercial Real Estate Advisors	City Craft Ventures	Ingram Micro
Arista Development & Real Estate	CL How Farm	Innovative Realty Services, Inc.
Art's Cafe	Clarence Chamber of Commerce	International Council of Shopping Centers (ICSC)
Automatic Data Processing	Community Bank N.A.	International Imaging Materials, Inc. (IIMAK)
AXA Advisors	Community Beer Works**	J. Fiorie & Company
Barker Business and Professionals Association	Concept Construction Corporation	Jaeckle Fleischmann & Mugel, LLP**
Barone Architecture and Consulting, PLLC	Conestoga Rovers & Associates	James & Associates
Barone Building Company	Cushman & Wakefield-Pyramid Brokerage Company	James A. Rumsey Architect
Benchmark & Turnkey Companies	David Homes	Jazz Gas
Benderson Development	DEL Resource	Joy Kuebler Landscape Architect, PC
Bergmann Associates	Depew/Cheektowaga Taxpayers Association Inc.	Kavinoky Cook, LLP**
BHNT Architects, PC	Design Synergies Architecture P.C.**	Kean Wind Turbines, Inc.
Bison Contracting & Builders Supply	Eastern Hospitality Advisors	Key Bank**
Black Capital Network	eco_logic STUDIO, architecture & engineering, PLLC	KHEOPS Architecture, Engineering and Survey, DPC
Black Chamber of Commerce	Ecology & Environment, Inc.	Kideny Architects
Black Dog Strategy & Brand	Ellicott Development Company	Kreher's Farm Fresh Eggs
Blue Sky Design Supply	Evans Bank	LaBella Associates, D. P.C.
Bohler Engineering	Fairmount Properties	Larkin Center of Commerce
Buffalo Clean Energy	First Niagara Bank	Larkin Development Group
Buffalo Geothermal Heating and Cooling**	Flight of Five Winery	LEED Concepts - LEED AP Sustainability Consulting
Buffalo Motor Works	Flynn Battaglia Architects	Life Work Transitions
Buffalo Niagara 360	Foit-Albert Associates	Lippes Mathias Wexler Friedman LLP
Buffalo Niagara Enterprise	Fully Forward	LiRo Engineers, Inc.
Buffalo Niagara Partnership Development Advisory Committee*	G.S.M. Construction Corp.	Lockport Main Street Association
Buffalo Rising	GAR Associates	Lougen, Valenti, Bookbinder & Weintraub, LLP
Buffalo Tours	General Motors - Tonawanda Engine	M&T Bank
Buffalo-Niagara Association of Realtors	Gin-Sue Enterprises, LLC	Main Street Business & Professional Association (Niagara Falls)
Building Controls & Services, Inc.	Goudy Real Estate Group	Manguso Development Company, LLC
C&S Companies	Grasser & Associates, LLC	Manzella Marketing Group
Calamar Enterprises	Grayline	Marie's Sewing Center
Caliber Commercial Brokerage, LLC	Greater Lockport Development Corporation*	
Cannon Design		

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Marine Services Diversified, LLC**	Ran Webber Design Studio	The DiMarco Group, LLC
McCullum Orchards	Realty USA	The Economic Development Corporation for Erie County (ECIDA)
McCullagh Coffee	Residence Inn	The Howard Group
McGuire Group	Rich Products	The Knoer Group, PLLC
Merchants Insurance Group	Rite Aid	The OSC Group
Merrill Lynch - Bank of America Corporation	Royal Bank of Canada	The Pike Company
Militello Realty	Royal Realty Development	The Rose Hill Group of WNY, Ltd.
Modern Corporation	Rupp, Baase, Pfalzgraf, Cunningham & Coppola LLC	TM Montante Development**
MPS Architecture	Rycon Construction, Inc.	Tonawanda News
National Fuel Gas Distribution	Sanborn Farm Museum	TriMain Center
National Grid	Sandis Family Restaurant	Turner Construction
National Power Source	Sarah G. Carney LLC	Turnkey Environmental Restoration, LLC
NBT Solutions LLC**	Saratoga Associates	TVGA Consultants
New York Business Development Corporation	Savarino Companies	U.S. Energy Partners
Niagara County Historical Society	Schneider Development	Uniland Development Company**
Niagara Gazette	Schuste Software	United Parcel Service
Niagara River Region Chamber of Commerce	Seneca One Realty, Buffalo Place	UNYSE Environmental Consultants
Niagara Wind & Solar**	Siemens Building Technologies, Inc.	Urban Land Institute of WNY
NorthMarq Capital	Singer Farms**	Urban3
Northtown, Inc.	Skeo Solutions	Watts Architecture and Engineering, P.C.
Nussbaumer & Clarke, Inc.**	SolEpoxy	Wendel Companies**
O'Brien & Gere	Sunshine Xchange	Willdan Energy Solutions
Old Time Roots	Supermarket Management, Inc.**	Windsor Village
Oz Central of New York, LLC	Supply Chain Optimizers**	Windsor Village boutique shopping, entertainment and accommodations development
Paint of WNY	Sutton Real Estate Company, LLC	WWS Planning
Parkitects, Inc.	T.Y. Lin International Group	Zamkro Development
Parsons Brinckerhoff, Inc.	Tapecon, Inc.	
Phillips Lytle, LLP	Ten Thousand Villages	
Preservation Studios	The Black Chamber of Commerce of WNY	
	The Buffalo News	

Community Organizations (cultural, advocacy, or other nonprofits)

1415 Community Organization, Inc.	American Association of University Women (AAUW)	AmeriCorps VISTA
21st Century Park on the Outer Harbor	American Cancer Society	Anne Frank Project
AARP**	American Farmland Trust**	Arden/Newburgh Block Club
Adirondack Mountain Club	American Federation of State, County and Municipal Employees	Artfarms
Akron Newstead Rotary	American Planning Association - Western New York Upstate Chapter	Arts Services Initiative of Western New York**
Albright-Knox Art Gallery	American Red Cross	Aurorans for Climate and Energy Sense (ACES)
Allentown Association	AmeriCorps Builds Lives through Education (ABLE)	Bailey/Brinkman Block Club
Alliance for the Great Lakes**		Baker Homes Tenant Council, Inc.
Alliance of Riverside Block Clubs		
Alpha Kappa Chi		

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Be Active	Child & Family Services	Fruit Belt-McCarley Gardens Housing Task Force
Belmont Housing Resources for WNY, Inc.* **	Citizen Action Organization	Garden Walk Buffalo
Bennett Village Block Club	City of Night Coordination Committee	Girl Scouts of WNY
Binational Alliance	Clean Air Coalition	Gloria J. Parks Community Center
Bi-national Niagara Greenway Marathon Event	Climate Reality Leadership Corps	Go Bike Buffalo**
Bissell Avenue Block Club #2	Coalition for Economic Justice**	Grace Episcopal Church
Board of Governors for the Network of Religious Communities	Coalition of Black Trade Unionists	Grace Guest House, Inc.
Brinton Street Block Club	Coalition on West Valley Nuclear Wastes	Greater Buffalo Cultural Alliance (GBCA)
Broadway Fillmore Alive	Colden Citizens for a Community Trail	Greater Buffalo Sports & Entertainment Complex
Brush Up Buffalo	Columbus Park Association	Green Buffalo Runner
Bryant, Oakland Summer Street Association	Community Concepts	Green Team Committee Delaware Tower
Buffalo Arts Studio	Community Missions of Niagara Frontier**	Greenprint Niagara
Buffalo CarShare**	Connelly Street Block Club	GrowWNY
Buffalo Citybration	Continental 1	Guild Care
Buffalo ExPat Network	Courtland Avenue Block Club	Habitat for Humanity
Buffalo First	Creekwoods Association	Hamburg Chamber of Commerce (town and village)
Buffalo Harbor Sailing Club	Days Park Block Club	Heart of the City Neighborhoods, Inc.**
Buffalo Hearing and Speech Center	Delaware Park South Neighborhood Association	Hearts and Hands: Faith in Action**
Buffalo Institute of Urban Ecology, Inc.	Designing to live sustainably (d2la)	Hertel-North Buffalo Business Association
Buffalo Neighborhood Alliance	Dorie Miller Rifle and Pistol Club	Hooray for Decay Composting
Buffalo Niagara Riverkeeper* **	East Aurora Co-Op	Housing Opportunities Made Equal (HOME)**
Buffalo Olmsted Parks Conservancy**	East Lovejoy Coalition of Neighbors	Hudson Street Revitalization Project
Buffalo Philharmonic Orchestra (BPO)	Economic Justice Action Group (EJAG)	IBEW Local 41
Buffalo Place Inc.	ELIM Christian Fellowship	IBEW Local 97
Buffalo Quaker Meeting	Elmwood Village Association	Imagine: Hamburg
Buffalo ReformED	Emerging Leaders in the Arts Buffalo (ELAB)	International Institute of Buffalo - Refugee Resettlement Agency
Buffalo Urban Development Corporation (BUDC)**	Emmanuel United Methodist Church	Isaiah 61 Project, Inc.
Buffalo Urban League of Young Professionals	Erie County Coalition for Restorative Justice	It Takes A Village Action Organization
Buffalo Urban League, Inc.	Evangelical Lutheran Church of America	Jericho Road Ministries
Buffalo Wind Action Group	Family & Children's Service of Niagara	Journey's End Refugee Services
Buffalo's Neighborhood Postcard Project	Family Promise of WNY	Judges Raw Black Club
Campaign for Greater Buffalo History, Architecture, and Culture	Fannie Mae Upstate New York Community Business Center	Junior League of Buffalo
Canopy of Neighbors	Field & Fork Network**	Keep Western New York Beautiful (KWNYB)
Carnegie Art Center	Fillmore Corridor Neighborhood Coalition (FCNC)	Labor Council for Latin American Advancement
Castle Place Block Club	Fillmore-Leroy Area Residents, Inc. (FLARE)	Lakewood Ave Block Club
Catholic Charities Multisystemic Therapy (MST)	Food & Water Watch and WNY Drilling Defense	Leadership Niagara
Catholic Charities of Buffalo	Food for All**	League of Women Voters
Catholic Charities Women, Infants and Children (WIC) Program	Freedom, Rights, Education & Empowerment (FREE)	Learning Sustainability Campaign
Center for the Study of Art, Architecture, History and Nature (C_SAAHN)	Friends of Mike's Pond	Leroy Avenue Block Club
	Friends of Night People	Lexington Co-op
	Friends Of Times Beach Nature Preserve	Linwood Preservation District and Friends Neighborhood Association

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Literacy New York Buffalo-Niagara, Inc.	Roosevelt Block Club	VOICE Buffalo* **
Livingston Homeowners Association	Ruhland Avenue Block Club	Volunteer Lawyers Project
Manhart Street Block Club	Rusty Nickel Coop	Wade Avenue Block Club
Martha Avenue Block Club	Seneca-Babcock Community Association	Weinberg Campus
Martin Luther King Jr Community Development Corporation	Shea’s Performing Arts Center	Wellness Institute of Greater Buffalo**
Massachusetts Avenue Project**	Sierra Club	West Side Community Services
Memorial Park Block Club	Silo City	West Side Neighborhood Housing Services
Memorial Park Neighborhood	Small Town Civics	Western New York Area Labor Federation**
Merrimac Street Block Club	Soka Gakkai International USA	Western New York Drilling Defense
Merry-Wood Block Club Association	SOLE of Buffalo	Western New York Environmental Alliance (WNYEA)* **
Mt. Olive Missionary Baptist Church, Inc.	South Fillmore Block Club	Western New York Environmental Alliance Parks and Recreation Working Group
National Association for the Advancement of Colored People (NAACP)	Southtowns Community Enhancement Coalition	Western New York Food Bank
National Garden Festival	Springville Center for the Arts	Western New York Land Conservancy**
Nazarene Messianic Party	Springville/Concord Elder Network	Western New York Peace Center
Neighborhood Legal Services, Inc.**	St. Johns Outreach Center	Western New York STEM Hub
Niagara Community Forum	St. Mark Open Door	Westminster Economic Development Initiative
Niagara Falls Block Club Council	Street Synergy	Williamsville Lehigh Valley Depot
Niagara Falls Rotary Club	Strengthening Families Program	Wind Action Group
Niagara Greenspace Consortium	Sugar City	Young Men’s Christian Association
Nickel City Housing Co-Op	Sustainable Earth Solutions	Young Nonprofit Professional’s Network of Greater Buffalo
Nickel City Housing Cooperative	The Belle Center	Youth Mentoring Services Niagara County
North Buffalo Community Organization (NorthBuffalo.org)	The Good Neighborhood	YWCA of Niagara County
North Lincoln Parkway Block Club	The Learning Sustainability Campaign	
Parkdale Community Garden	The Neighbors Block Club	
Parkside Community Association	The Niagara Arts and Cultural Center	
Partnership for the Public Good	The Niagara Ministerial Council	
Peace of the City	The Nickel City Housing Cooperative	
People Inc.	The Service Collaborative of Western New York	
People United for Sustainable Housing Buffalo (PUSH Buffalo)**	Theatre of Youth	
Planned Parenthood of Central and Western New York	Tifft Nature Preserve	
Potomac “400” Block Club	Toastmasters International	
Preservation Buffalo Niagara	Trinidad Neighborhood Association	
Prince of Peace Lutheran Church	U Community Health Organization, Inc.???	
Prospect Hill Neighborhood Alliance	U.S. Green Building Council New York Upstate Chapter	
Queen City Rail Trails	United Way of Buffalo and Erie County	
Rediscover Riverside	University Community Farmers Market	
Region 9 Re-leaf Planning Committee	University Heights Baptist Church	
Re-tree WNY	University Heights Collaborative	
Richardson Center Corporation	Upstate New York Transplant Services	
Ride for Roswell	Urban League	
Riverside/Black Rock Good Neighbors Planning Alliance	Urban Roots	
	Veterans Voices of WNY	
	Vision Niagara	

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Government (local, state, county or federal)

Akron (Village)	Buffalo Sewer Authority**	Erie County*
Akron Fire Company	Buffalo State Collage	Erie County Council for the Prevention of Alcohol and Substance Abuse (ECCPASA)
Akron Planning Board (Village)	Buffalo Urban Renewal Agency (BURA)	Erie County Department of Environment and Planning**
Akron Zoning Board of Appeals	Cambria (town)	Erie County Division of Sewerage Management
Alden (Town)	Cattaraugus County	Erie County Environmental Education Institute
Alden (Village)	Cazenovia Community Resource Center	Erie County Industrial Development Agency
Alden Chamber of Commerce	Cheektowaga (Town)**	Erie County Legislature District 2
Alden Economic Development Committee	Cheektowaga Planning Board	Erie County Legislature District 6
AmeriCorps	Cheektowaga Town Committee	Erie County Office of Economic Development
Amherst (Town)	Cheektowaga Zoning Board of Appeals	Erie County Water Authority**
Amherst Chamber of Commerce	Citizens for Regional Transit**	Evans (Town)
Amherst Committee on Disabilities	City of Buffalo - Division of Citizen Services	Evans Planning Board
Amherst Democratic Committee	Clarence (Town)	Evans Planning Department
Amherst Energy Advisory Committee	Clarence Democrats	Food Policy Council of Buffalo and Erie County**
Amherst Industrial Development Agency	Clarence Industrial Development Agency	Food Systems Planning and Healthy Communities Lab
Amherst Planning Board	Clarence Planning Board	Good Neighbors Planning Alliance
Amherst Planning Department	Clarence Zoning Board of Appeals	Gordon Strategic Planning
Amherst Traffic Safety Board	Clean Air Coalition of WNY**	Grand Island (Town)
Amherst Youth Board	Clean Cities of WNY	Grand Island Conservation Commission
Amherst Zoning Board of Appeals	CNG for Upstate NY	Grand Island Town Council
Assemblyman Dennis Gabryszak's Office	Colden (town)	Grand Island Zoning Board of Appeals
Assemblyman John Ceretto's Office	Colden Planning Board (town)	Grassroots Gardens of Buffalo**
Association of Erie County Governments*	Coldwell Banker Commercial	Greater Buffalo-Niagara Regional Transportation Council (GBNRTC)**
Aurora (Town)	Community Health Center of Buffalo (CHCB)	Groundwork Buffalo
Aurora Planning & Conservation Board	Concord (Town)	Hamburg (Town)
Aurora Zoning Board of Appeals	Concord Planning Board	Hamburg (Village)
B Team Buffalo	Congressman Brian Higgins's Office	Hamburg Planning Board (Town)
Barker (Village)	Cornell Cooperative Extension of Niagara County**	Hamburg Planning Commission***(Village)
Brant (Town)**	East Aurora (Village)	Hamburg Preservation Commission (Village)
Buffalo & Erie County Botanical Gardens	East Aurora Historic Preservation Commissions	Hamburg Zoning Board of Appeals (Town)
Buffalo (City)* **	East Aurora Pedestrian Bicycle Board	Hartland (Town)
Buffalo (City) Office of Strategic Planning	East Aurora Planning Commission**	Highland Community Revitalization Committee, Inc.
Buffalo (City) Planning Board	East Aurora Zoning Board of Appeals	Holland (Town)
Buffalo (City) Preservation Board	East Buffalo Neighbor Planning Association-Broadway Fillmore Alive	Holland Zoning Board of Appeals
Buffalo Audubon Society	Eden (Town)*	Homeless Alliance of Western New York**
Buffalo Central Terminal Restoration Corporation	Eden City Council	Horizon Performance Solutions, LLC
Buffalo Employment & Training Center	Eden Planning Board	
Buffalo Municipal Housing Authority**	Elbridge (Town)	
Buffalo Museum of Science	Elma (Town)	
Buffalo Niagara Builders Association	Empire State Development Corporation*	
Buffalo Niagara Medical Campus (BNMC)* **		
Buffalo Niagara Partnership (BNP)* **		
Buffalo Promise Neighborhood		

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Hyde Park Business & Professional Assoc.	New York State Homes and Community Renewal	North Tonawanda Community Development (City)**
Kaleida Health	New York State Senate	NYS Agricultural Society
Kenmore Planning Board (Village)	New York Sustainable Agriculture Working Group	NYS Documentary Heritage Program (DHP)
Kenmore Village Improvement Society (KVIS)	Newstead (Town)	Orchard Park (Town)
Kenmore Zoning Board (Village)	Newstead Town Board	Orchard Park (Village)
Ken-Ton Chamber of Commerce	Niagara Beautification Commission	Orchard Park Economic Development Committee
Kleinhans Community Association	Niagara County*	Orchard Park Planning Board (Town)
Lackawanna (City)	Niagara County Department of Economic Development**	Pendleton Zoning Board of Appeals (Town)
Lackawanna (City)	Niagara County Department of Social Services*	Public Policy and Education Fund of New York
Lancaster Area Chamber-Commerce	Niagara County Emergency Services Office**	Revitalize Springville
Learning Disabilities Association of WNY	Niagara County Employment and Training	Royalton (Town)**
Lehigh Valley Depot Committee	Niagara County Industrial Development Agency	Sardinia Zoning Board of Appeals
Lewiston (Village)	Niagara County Legislature	Senator Kirsten Gillibrand’s Office
Lewiston Council on the Arts	Niagara County Planning Board	Seneca Commission for Economic Development
Lewiston Historic Preservation and Planning Commission (Village)	Niagara County Sewer District**	Serve New York VISTA
Lockport (City)	Niagara County Social Services	Southtowns Rural Transit Corporation Inc.**
Lockport (Town)	Niagara County Supervisors Association*	Springville (Village)
Lockport (Town) Economic Development	Niagara County Veteran Services	Springville Area Chamber of Commerce**
Lockport Care Net	Niagara Falls (City)*	Springville Griffith Institute School District
Lockport Community Development (City)	Niagara Falls (City) - Office of Planning	State Senator George Maziarz’s Office
Lockport Industrial Development Agency (Town)	Niagara Falls City Council	State Senator Patrick Gullivan’s Office
Lockport Police Department (City and Town)	Niagara Falls City Government	The Wellness Institute of Greater Buffalo
Lockport Public Library	Niagara Falls Housing Authority*	Tonawanda (Town)
Lovejoy Council District	Niagara Falls Memorial Health Home Director	Tonawanda Economic Development (Town)
Marilla (Town)	Niagara Falls Memorial Medical Center (NFMCC)	Tonawanda Environment Commission (Town)
Marilla Zoning Board of Appeals (Town)	Niagara Falls Planning Board	Tonawanda Planning Board (Town)
Mayor’s Citizen’s Participation Academy	Niagara Falls Planning Board (City)	Tonawanda Zoning Board of Appeals (Town)
Medina Canal Task Force	Niagara Falls, NY Chamber of Commerce	United States House of Representatives
Mental Health Association of Niagara County	Niagara Frontier Transportation Authority (NFTA)* **	USA Niagara Development Corporation**
Natural Resources Defense Council	Niagara Military Affairs Council (NIMAC)	Visit Buffalo Niagara
Neighborhood Heal Center (St. Mary’s Hospital)	Niagara Organizing Alliance for Hope (NOAH)	Watch Wilson Grow
New York Power Authority**	Niagara Orleans Central Labor Council	West Seneca (Town)
New York State Association of Commercial Realtors - WNY Chapter	Niagara Region State Parks Commissioner	West Seneca Environmental Commission (Town)
New York State Department of Environmental Conservation	Niagara River Greenway Citizen’s Advisory Committee	West Seneca Planning Board (Town)
New York State Department of State, Division of Smart Growth*	Niagara Science Museum	West Seneca Zoning Board of Appeals (town)
New York State Department of the State	Niagara Tourism & Convention Corporation	Western New York Emerald Ash Borer Task Force
New York State Department of Transportation (NYSDOT)*	North Castle (Town)	
New York State Energy Research and Development Authority (NYSERDA)**	North Tonawanda (City)	

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Western New York Regional Economic
Development Council
Western New York Restorative Justice
Western New York Sustainable Energy
Association Trust**
Wheatfield (Town)
Wheatfield Agriculture Focus Group
(Town)
Wheatfield Economic Development
Committee (Town)
Wheatfield Fire Advisory Board (Town)
Wheatfield Greenspace Focus Group
(Town)
Wheatfield Planning Board (Town)
Wheatfield Recreation Department (Town)
Williamsville (Village)**
Wilson (Village)
Wilson Planning Board (Village)

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Appendix H

Seneca Nation & One Region Forward

The Seneca Nation of Indians is a valued One Region Forward partner and is working on a number of sustainability initiatives in the Western New York region. The following background and project information submitted by the Seneca Nation of Indians served to inform the planning process and was incorporated into the Regional Plan for Sustainable Development document.

Seneca Nation of Indians: Brief History and Culture

The Seneca were the largest of six Native American nations which comprised the Iroquois Confederacy, or Six Nations, a democratic government that pre-dates the U.S. Constitution. Once occupying vast territory beyond its current political boundaries, the historical Seneca occupied territory throughout the Finger Lakes area in Central New York, and in the Genesee Valley in Western New York, living in longhouses on the riversides. The Seneca Nation of Indians reorganized its tribal government structure in 1848 with the adoption of a formal written constitution that provides leadership by elected officials through a democratic process. Because they are the westernmost of the Six Nations, the Seneca are known as the “Keeper of the Western Door.”

The Seneca Nation currently has a total enrolled population of 8,128 members, with 4,131 members residing on the Allegany and Cattaraugus Territories (Seneca Nation of Indians Tribal Enrollment, July 2014). Many Seneca members live off-territory, with a significant number residing in the Western New York Region and many in other parts of the country. Approximately 11,800 tribal people (non-enrolled Seneca and members of other Tribes) live on or near the Seneca territories and are within the Seneca’s operating service area, receiving health and other support services from Seneca programs.

Today the Seneca Nation supports its own people and benefits surrounding communities with a variety of cultural, educational and economic efforts. Its varied enterprises include world-class casino gaming, hospitality and entertainment (which employ over 3,500 people), a chain of four convenience stores, construction management, and diverse business ventures.

Language, song, art, dance, and sports are all vital aspects of Seneca culture. A Faithkeepers’ School supports and ensures the ongoing practice of traditional teachings, arts, knowledge and the living culture of the Longhouse ways. The vibrancy of the rich Seneca heritage is evident in the ongoing ceremonies, practices, and cultural events that are infused with dance, music and song, arts, crafts and traditional foods that honor and celebrate Seneca culture.

Seneca Nation Leading the Way to Build a Healthier, More Sustainable Future

From an early age, Seneca and the other Haudenosaunee people recognize the importance of our surrounding environments, noting the delicate balance of every aspect. The Ganö:nyök or Thanksgiving address is recited regularly at any gathering of people as a reminder of all there is to be thankful for and to bring about a Good Mind encouraging responsible actions.

It has been said that you can't know where you're going until you know where you've been. Through cultural teachings, the Seneca Nation adheres to a philosophy that incorporates seven generations into its approach to providing for the welfare of its people. This generational approach includes the past, the present and the future. The Nation is putting this philosophy into action with services, programs and projects aimed at encouraging healthy lifestyles, and promoting renewable uses of our precious resources.



SEVEN GENERATIONS
 THOSE WHO HAVE PASSED
 GRANDPARENTS
 PARENTS
 YOU
 CHILDREN
 GRANDCHILDREN
 THOSE YET TO BE BORN

1. Seneca Wind Project: Nearly ten years ago, the Seneca Nation initiated the process to establish and implement a strategic energy plan. Planning for the project involved three distinct phases: Phase 1 was the visioning process, Phase 2 involved an energy audit and resource assessment, and Phase 3 provided for organizational development. By completing all three of these planning components, the Seneca Nation has positioned itself to implement a comprehensive energy plan. The Nation is committed to fostering the efficient utilization of its renewable resources by improving energy infrastructure; minimizing environmental impacts; building and training an educated workforce in the energy sector; and supporting the development of a sustainable, diversified, and vibrant economy.

In 2014, the Seneca Nation received a \$1.5 million grant award (FY 2014 U.S. DOE Community-Scale Clean Energy Projects in Indian Country Grant Program) to design and install a 1.7 MW wind turbine to provide electricity to tribal buildings and generate approximately 5.5 kWh of power on the Cattaraugus Territory. Additionally, this project will formalize the role of providing electric distribution services by Seneca Energy, LLC, a newly formed tribally-chartered utility corporation.

2. Seneca Transit System: In June 2013, the Seneca Nation Council approved a supplemental Report to the Tribal Transit Service Study which was initiated in June 2009 with the approval of the Final Report for the SNI Transit Study. The Nation has participated with other Southern-tier agencies to bring limited Transit service to the Allegany Territory since 2011, but began offering its own Seneca Transit System (STS) between the Allegany and Cattaraugus territories in July of 2012. Further expansion of 6 roundtrips per weekday and Saturday service will begin in February of 2014. Future plans include establishment of a Transit Center in the Irving area of the Cattaraugus Territory and additional routes to better link the Territories and the Southern-tier to the Buffalo Niagara urban area.

3. Food is our Medicine: In response to the crisis of diabetes and related health issues among its members, the Seneca Nation has joined with the Seneca Diabetes Foundation to establish the Food Is Our Medicine (FIOM) Project. The overall goal of FIOM is to restore the health and wellbeing of the Seneca Community by reintroducing Native American food systems, Native models of nutrition, indigenous land management, and sustainable food production practices. FIOM is a grassroots initiative rooted in Seneca tradition. The project's goal is to have members of the Seneca community experience the gift of health by cultivating their own gardens, participating in ongoing community-based horticultural events, learning sacred traditions from the Elders, and fostering the cultural education of the children for seven generations. FIOM initiatives include the Elders' Sharing Circle, community gardens for Seneca children, FIOM 5K Run/Walk, the Seneca Nation Native Planting Policy, the Seneca Nation Farmers Market, and the FIOM documentary film series.

Collectively, these efforts are helping to improve the quality of life for Nation members and neighboring communities.



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