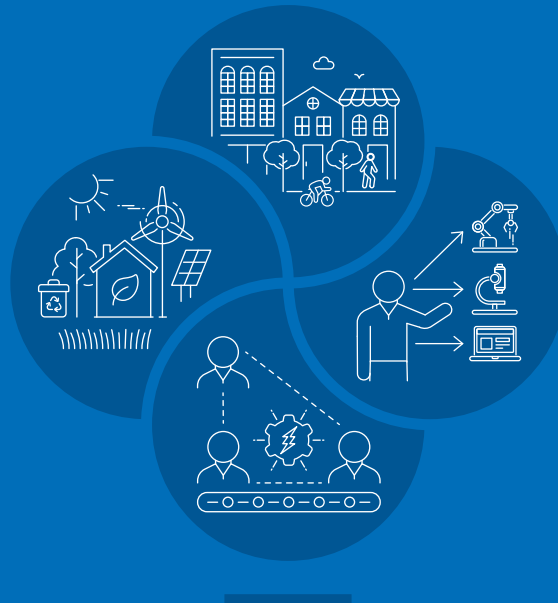


UBRI



Supporting stronger regional economies for all.

REGIONAL-INSTITUTE.BUFFALO.EDU

University at Buffalo Regional Institute,
State University of New York at Buffalo, School of Architecture and Planning. 2020.
"UBRI Impact Report: Supporting Stronger Regional Economies for All."



University at Buffalo

Regional Institute

School of Architecture and Planning

The UB Regional Institute (UBRI) is a local and national award-winning research center working with the University at Buffalo School of Architecture and Planning, supporting stronger regional economies for all. UBRI has been working in the region with the School for over 30 years, pursuing public scholarship with community constituencies at the intersection of public policy, urban planning, urban design, architecture, and real estate development. We understand that together these ways of working are an essential part of the solution to build stronger regional economies with better places for all people.

UBRI guides decision making, design, and strategic planning with implementation assistance for our local, regional, state, and national partners. We take an objective approach to understanding complex issues, and we translate this understanding into useful and relevant information for the communities we serve. We are grounded in the disciplines of research and analysis. We contribute to evidence-based planning and design and work with our partners to implement, evaluate, and collectively solve problems to ensure stronger economic futures for all.

LAURA QUEBRAL, Director

ROBERT G. SHIBLEY, Professor and Dean

UBRI has a broad understanding of the complex and interconnected factors that make up healthy economies.

Community leaders and policy makers plan to grow, support and sustain a 21st century economy. UBRI's work plays a pivotal role in economic development strategy through a strong portfolio of relevant quantitative and qualitative research. UBRI's projects range in scale from analysis of regional and local economies using key indicators; to identifying strengths and opportunities to leverage growth; to economic impact analyses of programs and institutions to better understand their roles in the larger economic ecosystem. Our work examines and explains complex and shifting economic landscapes leading to smarter investments to continue upward trajectories.

UBRI focuses on regional economic development strategy around four interconnected pillars:



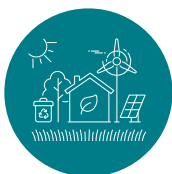
PLACEMAKING | We plan for great places.

Placemaking is critical to our ability as a region to attract new companies, cultivate a talented workforce and grow existing businesses. The region's architecture and built environment must create accessible job centers and vibrant, livable communities, serviced and connected by sustainable infrastructure.



WORKFORCE | We strategically grow the workforce pipeline.

A flexible, inclusive and industry-driven workforce training and talent attraction environment prepares workers for success and helps businesses thrive, while addressing the barriers to economic self-sufficiency for the region's unemployed and underemployed populations.



SUSTAINABILITY | We promote economies and environments for current and future generations.

Sustainability encompasses environmental design that fosters the conservation of resources and promotes public health; social well-being that encourages equitable access to opportunities, empowers communities; and economic wellness that achieves shared prosperity for all.



INNOVATION | We foster innovation to keep the region moving forward.

Innovation strategies generate more startup enterprises by facilitating applied research & development and support systems for entrepreneurs and small businesses, while strengthening networks of collaboration for growth.



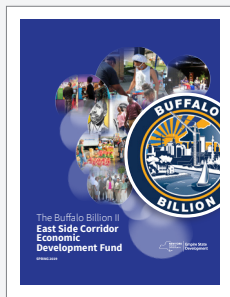
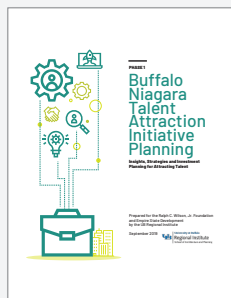
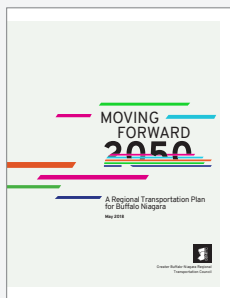
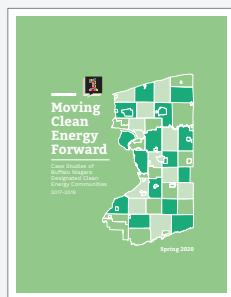
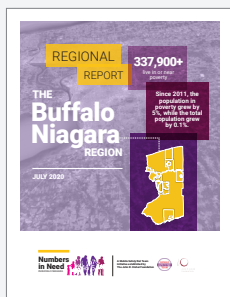
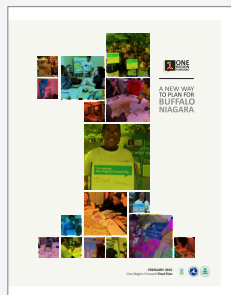
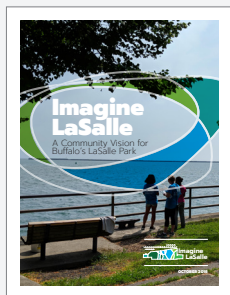
How do we support stronger regional economies with shared prosperity and economic opportunity for all?

2020 was a year of real change.

Major global and national events—the COVID-19 pandemic and social unrest caused by racial injustices—had unprecedented ripple effects on regional economies. In the past decade, key indicators showed Buffalo Niagara heading in the right direction after years of economic decline and stagnation.

With new widespread and long-lasting economic and social turmoil challenging our region, we are thinking about economic resiliency in a new way. That doesn't mean abandoning the key pillars—placemaking, workforce, sustainability and innovation—that steered us in the right direction through our past economic recovery. In fact, the foundation has only become more important.

2020 was a year to reflect on this moment of global and national change with new and unfamiliar paradigms, and focus on economic resiliency strategies so our region can emerge even stronger than before.



What we do.

We help communities make informed decisions through:

DATA

We perform objective data collection, analysis, and evaluation to help communities understand where they are today, and guide strategic decision-making and evidence-based planning and design for the future.

ENGAGEMENT

The best information comes from those closest to the subject matter. We ensure broad and meaningful public participation around planning and design, and facilitate informed and active civic discussion.

STRATEGY

We develop strategic action plans so communities can address needs and grow opportunities uncovered through data and engagement.

PROBLEM-SOLVING

We anticipate and resolve challenges and provide specific technical assistance to build capacity within communities.

COMMUNICATIONS

We help communities tell their own stories. We make complex data understandable and present information clearly and effectively to drive action.

How we do it.

We collaborate with others in placemaking, innovation, workforce and sustainability.

UBRI serves residents, businesses, governments, nonprofits and philanthropic organizations. Working alongside community members, foundation staff, government officials and policy leaders, we draw from diverse perspectives and offer innovative and individualized solutions to drive change and progress for our funders, clients and partners.

We connect the dots for maximum collective impact to build effective ecosystems.

Regional economic growth will not happen if we work in silos. We work across initiatives—promoting and connecting strategies, and focusing on building the larger ecosystem that will be critical for long term growth. Our networks within the university, businesses, nonprofits, foundation community and public sector, and our deep local knowledge and history of regional planning make us uniquely positioned to take on this role. We look at the big picture, find efficiencies, facilitate learning opportunities, and capitalize on the areas where it makes the most sense to work collaboratively. There are individual organizations and agencies doing great work. As planners and designers, we don't do all the work ourselves, but we work to empower others who are experts in the field and embedded in the community to maximize collective action. This has led to some of the most comprehensive, collaborative, strategic and effective approaches in recent years.

We empower the voices of the community.

Sustaining broad support and ongoing input for projects requires effective engagement with the community. This is accomplished through clear and compelling communication, but even more importantly, by providing opportunities for citizens to provide meaningful input. We use a variety of methods to gather community input including stakeholder meetings, focus groups, community workshops, surveys and many others. We maximize participation through methods such as multilingual surveys; leveraging networks of partner community groups; and creating engaging materials. Through feedback from citizens and stakeholders, we strive to tell an authentic story that elevates the importance of the community's role in transforming the economy.



UBRI team engaging community members for Building Together, a community visioning initiative led by Erie County Medical Center and focused on reusing a 17-acre brownfield adjacent to the hospital campus.

Connecting the dots to support stronger regional economies for all.

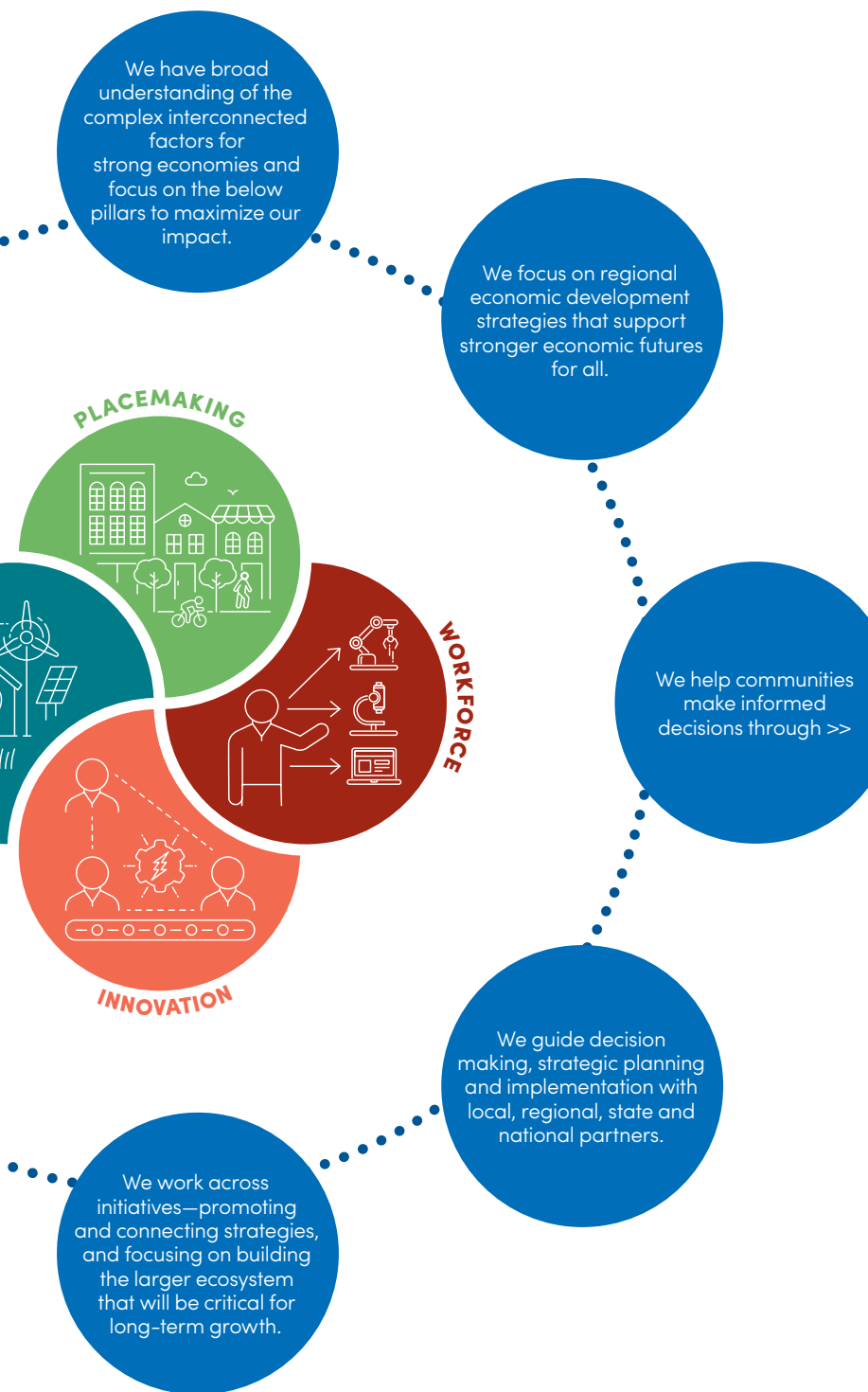
How we do it.

We connect the dots for maximum collective impact to build effective ecosystems.

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We empower the voices of the community.





DATA

Objective data collection, analysis and evaluation.

ENGAGEMENT

Broad public participation and facilitation of informed/ active civic discussions.

STRATEGY

Strategic action plan development and implementation.

PROBLEM-SOLVING

Anticipating and resolving challenges.

COMMUNICATIONS

Storytelling and presenting complex, actionable information clearly and effectively.

PLACEMAKING

Planning for and designing great places has always been at the heart of UBRI's work. In its early years, UBRI's placemaking efforts, grounded in community engagement and consensus building, helped shift thinking. Working together with our partners and the community, we began promoting our region's unique assets—its natural resources, strategic location, unique architecture and historic commercial corridors and neighborhoods—to bring density back to the urban core. Today, placemaking is increasingly valued as a way to attract new companies and a talented workforce and grow existing businesses. People are attracted to great places. The region's built environment must create accessible job centers and vibrant, livable communities, serviced and connected by sustainable infrastructure. UBRI plans with our regional partners in the short and long term to make the right design and placemaking moves to ensure that revitalization efforts continue and that people know Buffalo Niagara as a great place to live, work and grow a business.



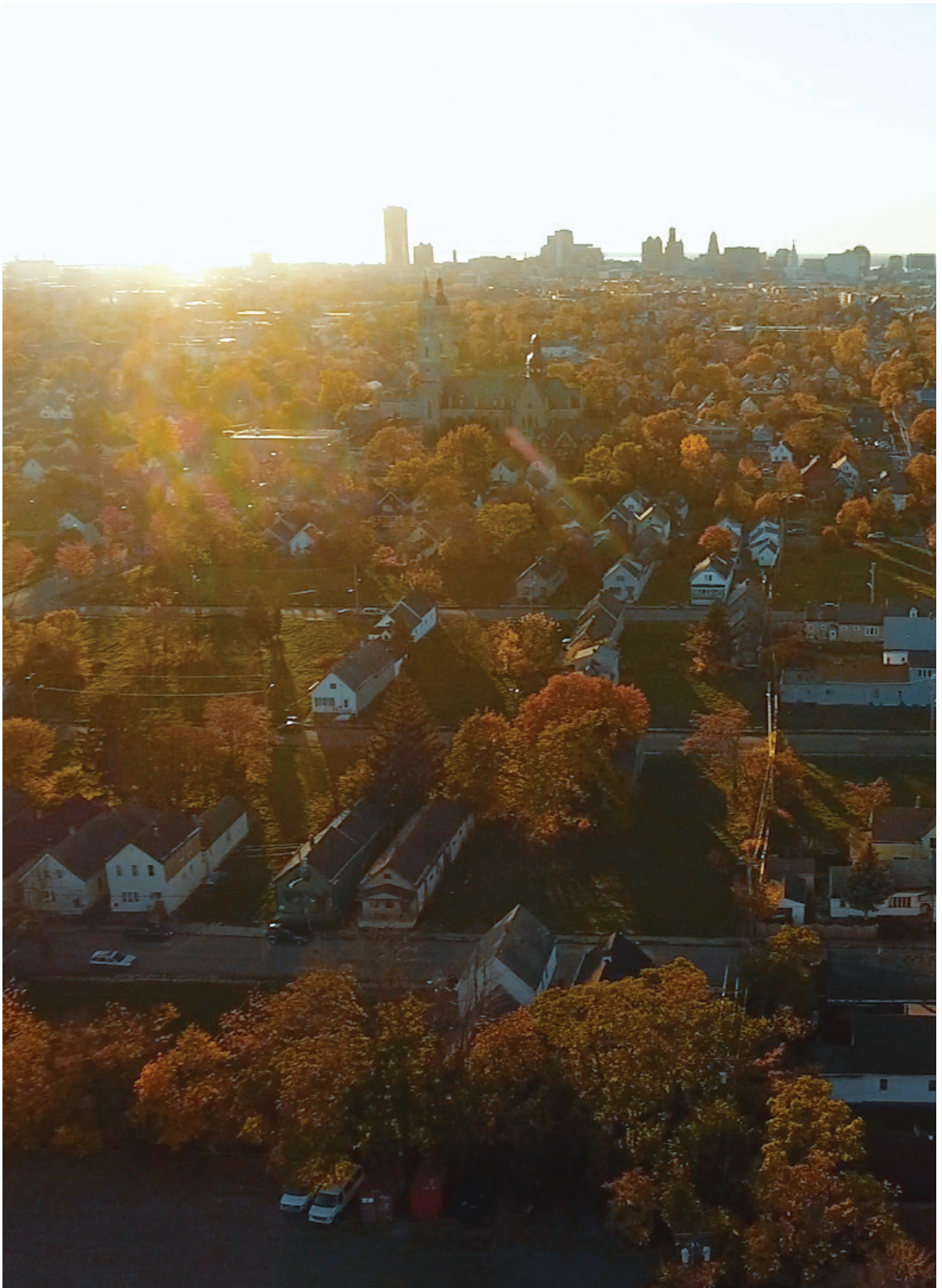
Planning great places.

Strengthening the core.

Our efforts focus on redeveloping downtown cores of cities, towns, and villages, revitalizing diverse communities and better connecting them with employment centers, and enhancing access to open spaces and waterfronts while protecting natural resources. Strategies promote traditional main streets and walkable commercial corridors that foster mixed-used development to support small business growth. We're helping to better connect people to jobs by planning for sustainable infrastructure that promotes walkability and transit connections, and transit-oriented development (TOD). The region is prioritizing investments in public spaces and waterfronts that add value to communities by contributing to a sense of place. These spaces are increasingly important to residents for safe exercise, relaxation, and recreation. In the most disadvantaged neighborhoods, it's critical to invest in community anchors, infrastructure and capacity building to ensure change is driven by the community. These, and other transformational ecosystem moves that focus on strengthening anchor institutions, repurposing former industrial lands and preserving historic buildings, promote economic resilience.

Growing the economy by attracting companies and talent.

At UBRI, we continue to be committed to designing and implementing placemaking efforts that create strong, resilient communities through data-driven decision making, best practices research, public engagement, and strategic planning. By working to transform our region into a vibrant, thriving place with modern amenities and infrastructure, high-quality services, and well-designed, friendly neighborhoods that connect people with jobs, we will help create an economic climate conducive to attracting private investment, entrepreneurial activity and a robust workforce.



PLACEMAKING

East Side Avenues

As part of Governor Andrew M. Cuomo's Buffalo Billion investment plan, \$65 million is dedicated to the revitalization of Buffalo's East Side through transformational capital investments and urban design in nine targeted areas along four East Side Commercial Corridors. Understanding the tremendous opportunity to leverage New York State's \$65 million East Side Corridor Economic Development Fund, private and philanthropic organizations created a pooled \$8 million East Side Collaborative Fund to support operations, programs, capacity building, and community infrastructure associated with five capital initiatives. In a coordinated effort led by UBRI, these public and private funders work together with community nonprofits to foster revitalization activities that improve commercial properties, support small businesses, promote historic preservation, train building owners in commercial real estate development, ensure community anchors remain accessible and vibrant, and enhance the streetscape along the corridors.



Students from the Community-Based Real Estate Development Training program participating in an urban tour.

To make a difference, we would have to do things differently.

This was a unique moment in time. The path to East Side Avenues had to be different, or we wouldn't have the impact the community truly deserved. First, we targeted places in order to maximize our impact. The East Side of Buffalo is a big place. By analyzing data and recent investments and talking with the community, the team identified nine key places along four commercial corridors where additional investments and urban design could make a big difference. We listened to the community. We reached out to neighborhood stakeholders to hear what they'd like to see happen and what real estate projects they believe are important for promoting economic change. Based on all of this information, we helped build a portfolio of projects that invests in capital improvements to community anchors and infrastructure, combined with capacity building programs that strengthen the work of existing community organizations.

Public resources wouldn't be enough. It would take all of us—public, private and foundations—pulling in the same direction. To date, 14 foundations and corporations joined this endeavor and committed to an unprecedented five years of funding. Finally, we needed a Project Implementation Team (PIT) to oversee all of the programs. The PIT, led by UBRI, ensures that appropriate supports such as infrastructure, staff and funding are in place; assists with strategic planning, program design and problem solving; and reports on progress. All of this created a one-of-a-kind collaborative effort to spark transformational change and lasting impact.

A future shaped by the community.

Initial and ongoing community engagement was the most important piece of this project.

This wasn't a traditional grant program with a formal application process. We needed to be more flexible, and, in a way, more experimental, to fund the best, community driven-projects. We spent time with community members—businesses, community groups and nonprofits—through a series of one-on-one conversations and listening sessions. This created a much deeper understanding of the barriers to economic development unique to this community, and how we could create programs to alleviate them, while building trust with the community. All ideas, no matter the stage, were shared and included in our final report. When funding decisions were made, we created broad partnerships with trusted community partners with strong neighborhood ties to implement the capital projects and programs that we heard people needed.

Changing the conversation about the East Side.

The team developed a marketing communications plan to support and create awareness of our activities and progress.

One of the most important elements of the communications strategy was to tell the story of the community's role in transforming the East Side and elevate the importance of their work. With our partner, Riveter Design, we created an intensive storytelling program that lifts up the voices of the people living and working on the East Side. East Side business owners and community members were featured in an inaugural storytelling video series on the newly built website: www.eastsideavenues.org. Even in East Side Avenues' nascent stage, there are signs that perceptions about the East Side are changing.

Project impact

East Side Avenues leveraged \$8+ million from 14 private foundations and corporations as a result of the state's \$65 million investment. Our nonprofit partners leveraged nearly \$1 million in the first year of the program.

The team built a one-of-a-kind, replicable partnership model.

East Side Avenues reached thousands of people through earned media, paid media, digital media, and other communications. Perceptions of the East Side are changing: there are new conversations about potential investments; program interest is far exceeding expectations; local news outlets are covering East Side projects in a positive way; and momentum is driving traffic to the website.

The program's non-profit partners are reflecting on the needs of their organizations and are finding new talent that is energizing and strengthening each organization as it grows. After completing organizational assessments, they are learning more about how to increase their capacity and expand their capabilities and programs.

There are 30 East Side Avenues projects in progress.

Hundreds of people were engaged in East Side Avenues as applicants, program participants, program coordinators, mentors, instructors, developers/tour guides, and attendees/presenters at public meetings.

More community needs are emerging. ESA is beginning to catalyze longer-term programs that provide additional community benefits.



PLACEMAKING

Imagine LaSalle

Imagine LaSalle is a community-driven initiative to guide the transformation of Buffalo's former LaSalle Park into the Ralph C. Wilson, Jr. Centennial Park. The effort was catalyzed in 2018 when the Ralph C. Wilson, Jr. Foundation announced it would commit \$100 million to support parks and trails in Western New York, including \$50 million for the redesign of LaSalle Park in Buffalo.

UBRI, with support from faculty from the School of Architecture and Planning, led community engagement and conducted research that would serve as groundwork for the plan and redesign of the park. UBRI is managing the multi-year, inclusive community engagement process to ensure broad and meaningful community input is used to shape the park's design and future. Michael Van Valkenburgh Associates, a world-renowned landscape architecture firm, is leading the design of the reimagined park.



Community members explore proposed enhancements to the park at a March 2019 design workshop held at Waterfront Elementary School.



An expansive play garden will be a central gathering place of the reimagined park. Families and children help imagine what the park's play garden will look like through hands-on activities at our September 2019 family and kids workshop.



Involving youth from The Belle Center's summer camp and after-school program has helped ensure young people from the neighborhood are shaping the park's future.

In the initial phase of the project, UBRI, with help from UB planning and architecture faculty and UB students, led a focus group of park users and collected hundreds of surveys and gathered community input. We partnered with the City of Buffalo and key stakeholders to collect data and synthesized extensive public input to produce the *Imagine LaSalle Community Vision Report*. The report summarizes what the community feels is most important—from active recreation areas, to accessibility and safety—and is being used to inform the park's design.

Discovering the community's vision.

One of UBRI's core roles in *Imagine LaSalle* was engaging a wide variety of community members around the design of the park to ensure it reflects the vision of neighborhood residents, park users, and stakeholders. We identified the values of the people who depend on this public space to provide essential quality of life benefits. UBRI's involvement included convening a focus group of 22 community members representing diverse backgrounds and interests. Drawing on their unique connections and experiences with the park, the group walked through the former LaSalle Park to identify key themes about the park's unique assets and areas in need of improvement. They brought that same energy and critical eye as they explored inspirational parks in three different U.S. urban settings—New York City, Chicago, and Cincinnati. Youth from The Belle Center, a community center within a 10-minute walk of the park, also took a close look at the former LaSalle Park to identify strengths, weaknesses, and future possibilities. Equipped with digital cameras, students took pictures around the park and wrote about them. Nearly 1,200 Western New Yorkers also weighed in through a community survey. And, more than two dozen community groups supported outreach by getting the word out or hosting the survey team at local or regional gathering places.

Connecting the dots and more.

As urban planners and designers, it's second nature to connect people to the waterfront. Park plans include new and improved points of multi-modal access that emphasize the connection between the park and the community, especially for those without cars, including the construction of a world-class pedestrian bridge over I-190. Buffalo's public waterfront should be easily accessible to all residents, regardless of socioeconomic status, ability, or mode of transportation. Stronger connections between the former LaSalle Park and adjacent neighborhoods will serve to create a public space that celebrates the diversity of city residents. UBRI is also connecting groups and community members to help keep the project moving forward—from park user groups to conservationists to City officials and key stakeholders.

Long-term engagement.

UBRI's role extends beyond the 2018 Community Vision Report. Throughout the design phase UBRI continues to engage the community to ensure the park's design is directly informed by residents and stakeholders, through numerous workshops, design input sessions, project updates, and a travelling model exhibition. Park construction, which is anticipated to begin in 2022, will be strategically scheduled to minimize disruptions to existing park uses through continued public collaboration.

As the design progresses, we will continue to take inspiration from the community to ensure Ralph C. Wilson, Jr. Centennial Park stands as a landmark to quality design in service to the public.

Project impact

Imagine LaSalle is one of the largest scale, community-informed private investments ever made to a public space in Western New York.

Upon completion, the Ralph C. Wilson, Jr. Centennial Park will transform Buffalo's waterfront by introducing a world class public park linked in strategic ways to nearby neighborhoods, downtown, and other waterfront assets like Canalside.

Working with our partners, UBRI brought the appropriate regulatory agencies and stakeholders to the table to create an expedient process.

UBRI's community engagement process to inform the park's design was robust and inclusive so those who use the park now (nearby neighborhood residents, local organizations, and cultural event organizers) can benefit most from this transformation.

**Additional UBRI projects
connecting the dots in
PLACEMAKING**



BBF funding helped with the historic renovation of a vacant 19,530 square foot building at 510 Washington Street in downtown Buffalo. The new Alexandre Apartments features retail space on the first floor and market-rate loft apartments on floors two through seven.



An aerial view of the elevated rail corridor being reimagined as The Riverline, overlooking the Buffalo River

The Better Buffalo Fund **Small scale focus. Large scale change.**

The Better Buffalo Fund is all about neighborhood-based economic development. It was an opportunity to work with the State on investments extending to neighborhoods across the City.

We knew there needed to be a focus on strengthening neighborhood business districts, creating job opportunities where people live, and attracting young people who want to live in vibrant places. The Better Buffalo Fund is a grant and revolving loan fund that supports redevelopment projects that encourage density and growth along transportation corridors and revitalize neighborhood commercial districts. The goal is to create vibrant, mixed-use, high-density neighborhoods and stronger transit and transportation access connections between neighborhoods and employment centers. Governor Andrew M. Cuomo committed \$40 million to the Better Buffalo Fund through the Buffalo Billion initiative.

After four rounds of the program, UBRI assisted ESD in awarding more than \$31.9 million to 51 projects. These projects are transforming the urban landscape—renovating more than 554 residential units and more than 514,200 square feet of store front and commercial space, while also leveraging more than \$253 million in private investment. Elements of the BBF model have been replicated in other grant and loan programs including East Side Corridor Economic Development Fund programs. BBF projects built momentum, drawing attention to need and opportunity, and spurred private additional spinoff investment in targeted geographies ripe for economic growth.

The Riverline Equitable Development Framework **Leveraging a reimagined urban greenway to promote equity.**

The Riverline is a former elevated rail corridor adjacent to downtown Buffalo and the Buffalo River being transformed by the Western New York Land Conservancy, following a community created vision, into a vibrant and engaging one and a half mile-long nature trail and greenway.

Turning a former railway into a world-class open space is just a part of that opportunity. The Riverline's potential to enhance the quality of life for area residents in three historic neighborhoods (the Old First Ward, Perry, and the Valley) provides even greater opportunity. In partnership with community members and local organizations, UBRI worked with The Land Conservancy and Make Communities to create an Equitable Development Framework for The Riverline. The framework is a product of a multi-year community engagement effort and research on neighborhood conditions and best practices for equitable design and development of city based trails and greenways. Equitable development aims to reduce disparities and promote vibrant, healthy communities by prioritizing the concerns of groups historically left out of planning and development decisions.

This approach can help prevent economic, cultural, social, political, and physical displacement in the face of a changing neighborhood. The Equitable Development Framework is designed to evolve in response to challenges and opportunities as the project unfolds. The approach outlined by the framework helps ensure that all residents, regardless of race, ethnicity, income, age, or ability, can benefit from investments in The Riverline and nearby neighborhoods. By taking an approach grounded in equity, The Riverline aspires to become a model for other cities looking to ecologically restore and reactivate underused infrastructure to revitalize surrounding neighborhoods in a way that puts community needs, concerns, and benefits first, front, and center.

WORKFORCE

People drive the economy. Our region has to stay focused on building the right workforce pipelines, now and for the future, or we will lose jobs in existing industries and be unable to attract new businesses. UBRI has been at the workforce development table for many years. We worked to build a track record of sound research methodologies and best practices to help the region create a flexible, inclusive and industry-driven workforce training and talent attraction environment that prepares workers for success and helps businesses thrive. Beginning with the 2010 Labor Market Assessment and initial Buffalo Billion research in 2011, UBRI began to leverage its learnings to pursue a wider range of talent and workforce research and projects that focus on understanding the landscape of workforce training to support regional target industries; aligning workforce training with employer needs; in-migration, talent attraction and retention; unemployment and underemployment; and barriers to work. UBRI is helping the region prepare an appropriately skilled workforce to meet labor needs while addressing the barriers to economic self-sufficiency for the region's unemployed and underemployed populations.



Building the pipeline.

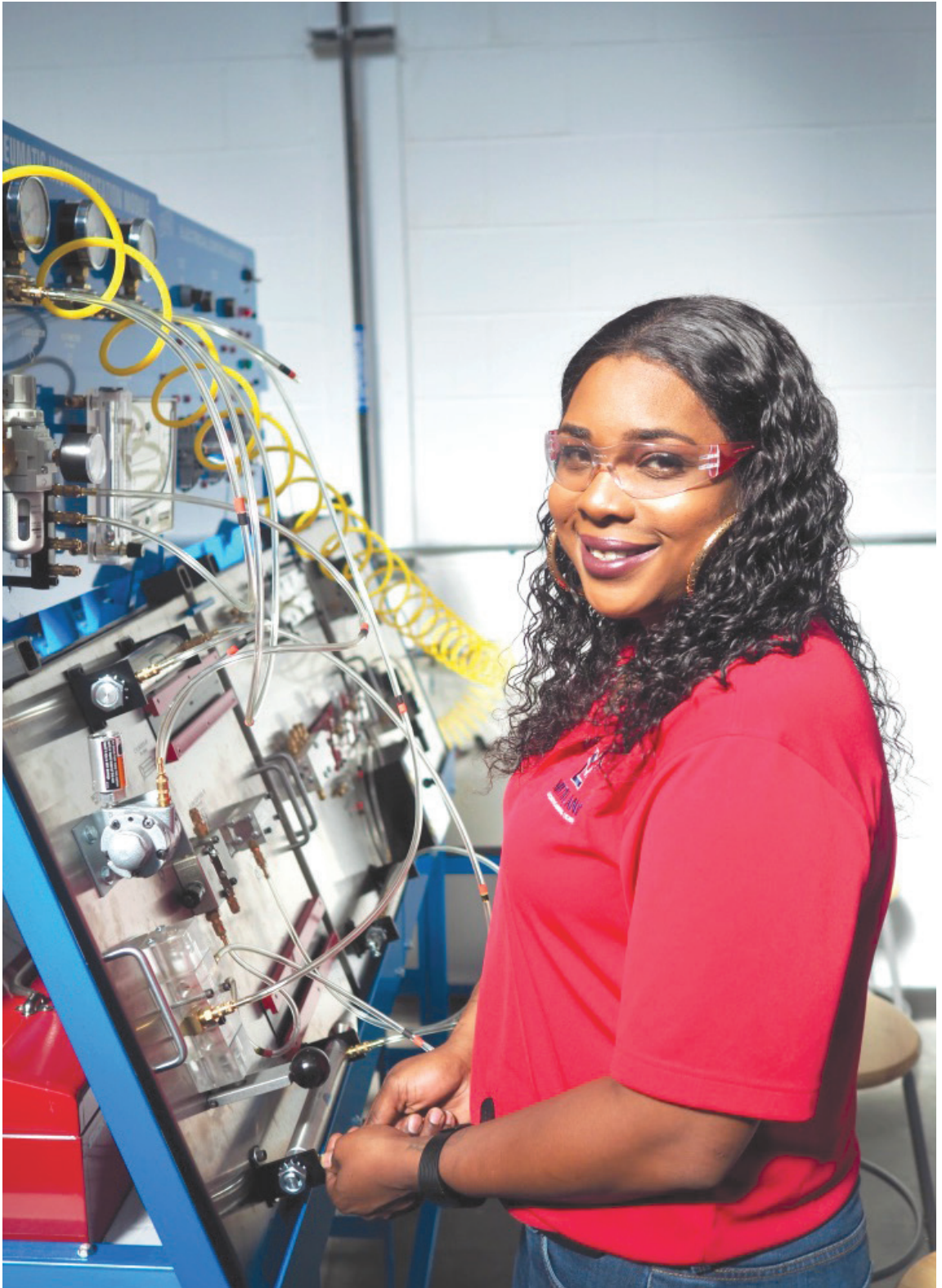
Developing tomorrow's workforce.

In recent years, the region experienced overall job growth, but also faced challenges in deploying all segments of its labor force, especially those with lower educational attainment. An under-supply of young, skilled workers raises concerns about future productivity and growth potential in a number of the region's largest industries, like manufacturing and tech jobs. To fill potentially thousands of job openings available to workers at all education levels in the coming years, employers need help to rapidly identify pools of skilled workers and training programs that meet their needs. To do this, UBRI is supporting public and private sector leaders to increase targeted, employer-driven training; improve skills certifications and industry job ladders for new and existing workers; and reduce geographic and socio-economic isolation from jobs to build a strong workforce and address looming retirement cliffs.

Job training and upskilling existing workers is critical, but can only address part of the need. The region also needs to grow its labor pool by retaining college graduates, recruiting expats and new residents, and increasing overall in-migration. UBRI is part of a regional effort to create the infrastructure and programs needed to grow and retain a talented workforce to reverse Western New York's labor pool decline and ensure that regional employers have access to the talent they need to fill job openings and grow their businesses to support and accelerate the regional economy.

Connecting key players to maximize impact.

A collaborative, unified effort to invest in people will provide an increased, positive economic impact on the region. Workforce development and talent attraction are complicated endeavors that benefit from the expertise of industry, higher education, business groups, nonprofits and foundations. UBRI assists in bringing these groups together to demonstrate the power of thinking and acting collectively to design and implement evidence-based, flexible, inclusive, and industry-driven talent attraction and workforce training programs that increase economic opportunities and promote economic resilience.



WORKFORCE

Northland Workforce Training Center

The Northland Workforce Training Center (NWTC) is Buffalo Billion's signature workforce investment initiative designed to upskill and right-skill workers to fill the job needs of advanced manufacturing. Opened in 2018, the NWTC uses a comprehensive model to provide the skills, education and supports for job seekers, while meeting the needs of industry and attracting and retaining businesses in Buffalo Niagara. The 90,000 square foot facility serves as an anchor asset for the Northland Corridor project, which includes the redevelopment of vacant and underutilized properties on Buffalo's East Side, by establishing an integrated workforce-and-employment campus. The Northland Corridor is fast becoming a model for how an industry-driven public-private-community collaborative can impact both workforce training and neighborhood redevelopment.

◀ A Northland Workforce Training Center student training to be a mechatronics technician.



Students learning at the Northland Workforce Training Center which opened in 2018.



The Northland Workforce Training Center offers opportunities to job seekers and pathways to employment.

Driven by industry.

Early on, our research indicated two things: 20,000 job vacancies were projected in the next ten years in the region's advanced manufacturing sector due to an aging workforce with a looming retirement cliff.

This under-supply of skilled manufacturing talent impedes productivity and growth potential for this important tradable sector.

At the same time, training and education providers either weren't teaching the right skills to fill jobs, or were, but didn't have the capacity to keep up with demand. UBRI and O-H Community Partners engaged regional stakeholders (e.g. manufacturers, workforce development and community organizations, educational providers, and government entities) to begin to understand and design employer-driven training programs.

A workforce training center was envisioned—one that aligned skills to industry demand and could adapt as industry needs evolved. This engagement explored the utilization of stackable credentials to form career pathways from entry level positions to more advanced, higher-skilled positions to rapidly upskill and right-skill anyone looking for a career in manufacturing. This research was instrumental in developing an industry advisory group which would become the NWTC Board, formalizing the NWTC's focus areas, and solidifying the right training partners for the NWTC.

Removing barriers to manufacturing careers.

Providing training that aligned with industry demand wasn't enough. The NWTC needed to specifically target unemployed and underemployed segments of the population, especially traditionally underrepresented groups, to create equity and higher-paying job opportunities for all. We learned from engaging with regional stakeholders and looking at best practices that we needed a multi-pronged approach that involved not only training, but also robust recruitment and assessment, wrap-around services (such as transportation, childcare, and social services), and job placement and retention. UBRI and O-H Community Partners worked with Empire State Development to develop a business plan to identify the right partners to successfully implement these elements. Key to this model is a collaboration of local nonprofits who provide students with the tools and resources to best address challenges to career goals. They use an assessment process to offer individualized career pathways for students from all backgrounds and experience levels. All students are assigned a Career Coach that remains connected to the student after he or she transitions to employment for three years after being hired full-time. This comprehensive and inclusive approach works because it is employment-focused and results-oriented.

Expanding training and employment where it's needed most.

The place chosen for a signature workforce training center was critical to the economic development strategy. If it wasn't widely accessible to populations most in need of training and didn't act as a catalyst for revitalizing a neighborhood, it would truly be a missed opportunity for the region. UBRI provided the research and technical support that led to the site selection and initial purchase of 35 acres of abandoned and underutilized property in the Northland Corridor on Buffalo's East Side to transform the neighborhood into a new manufacturing and training hub with the NWTC as its anchor. The Northland Corridor is one of the most extensive industrial areas in terms of size and density in the City of Buffalo. Historically, it was developed as a center for manufacturing but left abandoned industrial plants that plagued the surrounding residential and commercial neighborhood for decades. But it wasn't just this large swath of former industrial land that made the area ripe for redevelopment. The Northland Corridor provides important north-south connections to some of the City's employment hubs. It is located near workforce training assets that became pipelines for the NWTC. It has an accessible labor force, existing employers, and is in close proximity to walkable residential neighborhoods serviced by community assets such as churches, schools, public transportation, and Olmsted-designed Fillmore Avenue. The NWTC, joined by Buffalo Manufacturing Works in 2019, is redesigning the area as a manufacturing hub attracting private development, creating employment and training opportunities for local residents, and spurring revitalization of the surrounding neighborhood.

Project impact

The Northland Corridor involves over \$100 million in funding from local, state and federal sources. It continues to grow its footprint and partnerships.

It serves more than 200 students with 60% minority and 15% female representation.

Compared to 2-year colleges across the US, NWTC students are more racially and ethnically diverse, are more likely to complete the program, are more likely to earn higher incomes, and are less burdened by student debt.

Data sources: U.S. Department of Education, College Scorecard Data, 2020; Northland WTC Annual Report, 2018-2019.

81% of NWTC graduates were placed in employment with average starting salaries of \$36,000 annually. These placements have a combined economic impact of more than \$2.5 million in wages added back into our local economy annually. In addition to wages and benefits, NWTC graduates have a career pathway that leads to economic stability.

Data source: Northland Workforce Training Center

NWTC is a model for how a public/private partnership can provide workforce development services that are industry-driven and employment-focused. NWTC was invited to join a national cohort of eight leading workforce organizations to advance an inclusive future for manufacturing.

Over 9,000 jobs in the regional economy are affected by the training opportunities at NWTC.

Data sources: NYS Department of Labor, Occupational Employment Statistics, Western New York Region, retrieved July 2020.



WORKFORCE

Workforce Development Challenge

The Workforce Development Challenge (WDC) is a fund that supports not-for-profit organizations conducting high-impact, results-oriented workforce training in the region's target industry sectors. The WDC invests in innovative approaches to workforce training for underserved populations that ensure the region's workforce pipeline is being responsive to industry demands. It helps increase the capacity of community-based trainers who have proven track records, trust, and outstanding abilities for outreach and recruitment. It supports target sectors ripe for growth, while providing career ladder opportunities for entry-level and mid-skill workers. WDC funds best practice models that maximize collaboration between business and workforce trainers.

◀ Training programs funded by the Workforce Development Challenge prepare underemployed and unemployed populations for careers in in-demand industries.



WDC funds are helping PUSH Buffalo increase the capacity of their Community Hiring Hall to train and place workers in the renewable energy sector.



Harvest House is using WDC funds to establish an Innovative Health Career Center which expands their program offerings in various healthcare training topics.

Addressing regional workforce needs beyond manufacturing.

In Phase I of the Buffalo Billion, workforce development efforts were largely focused on growing the much needed workforce pipeline in the manufacturing sector. But we learned from our Buffalo Billion and Labor Market Assessment research that many other industry sectors in the region were experiencing growth and needed to fill thousands of job openings across the region annually. The region also continues to face a looming retirement cliff that will impact the labor supply. We learned that employers in high-demand, higher-paying industries needed to rapidly identify pools of skilled workers and training programs to meet their needs. Over the long-term, they needed to influence the skills of the workforce pipeline. We found that the majority of companies in Buffalo Niagara reported a number of hard-to-fill jobs or hard-to-find skills, suggesting the supply of labor could be better matched to industry needs. Jobs that are difficult to fill today and skills that are difficult for employers to find are challenges that will be compounded as industries across the region grow.

Capitalizing on the existing ecosystem of nonprofit workforce trainers.

The ecosystem of workforce development and training opportunities is complex. Research commissioned by Invest Buffalo Niagara identified over 200 workforce trainers across the eight-county Western New York region. Approximately 70 are nonprofit and private community-based organizations in Buffalo. Some are engaged in impressive work but are often constrained by limited funding and restrictions that come with public and private funding sources. The majority are operating at or over capacity, and support services that alleviate barriers to training are often limited. We saw the incredible value these organizations bring to our community. We used the WDC as a way to gauge and reward the real superstars in the training realm; and, using larger (\$250,000 minimum) and less restrictive grants, significantly upscaled those with excellent outcomes. By targeting nonprofit trainers, we fostered the ability to attract co-funding opportunities from like-minded local foundations and corporations.



Erie 2-Chautauqua-Cattaraugus BOCES Educational Foundation's WDC-funded project is providing career pathways in the healthcare industry.

Rewarding innovation.

The Workforce Development Challenge was posed as a “challenge” to the community because we wanted to reward the most innovative approaches to training and placement. The most innovative approaches were designed around meaningful industry partnerships that would inform curricula based on emerging industry needs. They would involve strategies around promotion and recruitment; hands-on training like apprenticeships, internships and mentorships; and would result in job placement with industry partners. Given that our target demographic was the underemployed and unemployed, we wanted to see innovative ways for including wraparound services and success skills that would lead to high training completion rates and long-term job retention. The most favorable applications are those addressing industry and community need—at the same time.

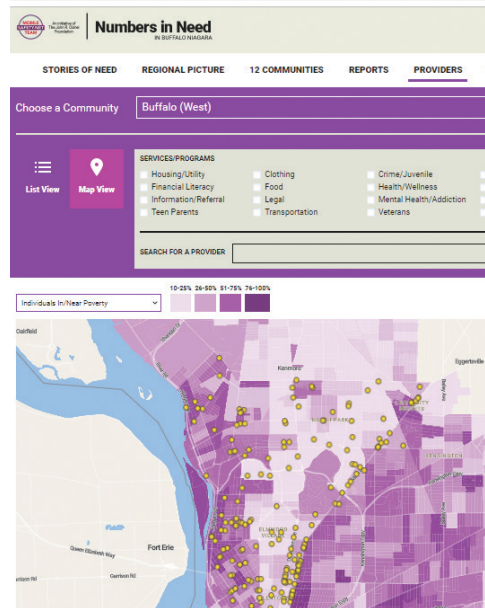
Project impact

Through two rounds of the program, 10 winners received \$5.66 million in grant funds. A third round will be launched in early 2021 to further assist with COVID-19 economic recovery efforts.

The Ralph C. Wilson, Jr. Foundation contributed an additional \$1.5 million to the \$10 million fund to build on the program's success.

Projects have been funded in the program's target industry sectors—advanced manufacturing, health and life sciences, tourism, clean energy, agriculture and tech-focused training—pointing to the need and opportunity for targeted, industry-driven workforce training across different areas of the economy.

Additional UBRI projects connecting the dots in WORKFORCE



Providers Tool at www.numbersinneed.org



A look at the comprehensive suite of reports UBRI produced for the 2017 Labor Market Assessment.

Numbers in Need

Assessing poverty and factors that contribute to economic vulnerability.

A collaboration between UBRI and The John R. Oishei Foundation's Mobile Safety-Net Team, Numbers in Need is an online resource developed to support community leaders, human service providers, the foundation community, and others in understanding the most pressing needs relating to poverty and economic vulnerability in the Buffalo Niagara region.

Research findings in 12 representative urban, suburban and rural communities—home to more than half of the Buffalo Niagara region's residents who live in or near poverty—offer insights and lessons for all communities in the region and beyond. Numbers In Need tracks data and provides much needed tools for poverty and related factors to identify levers that can help combat poverty at the community and regional level. Insights from residents and providers convey the perspectives of vulnerable populations from communities and the service providers who work there. Informed by the data, Numbers in Need offers best practice strategies and models that can positively impact

the economy through stronger career pipelines for youth, reduced barriers to training for adults, high opportunity neighborhoods, expanded service hubs, entrepreneurship and pathways out of poverty for economically vulnerable populations. If a stronger safety net with reduced barriers and wraparound services for training helped half of adults in Buffalo Niagara get a high school equivalency, postsecondary training and/or an associate's degree, their combined annual earnings could increase by nearly \$1 billion, with economic impacts to individuals, families, communities and taxpayers.

Labor Market Assessment (LMA)

Analyzing our labor force's capacity to drive a 21st century economy.

Commissioned by Invest Buffalo Niagara, UBRI conducted an updated and expanded labor market study to support an understanding of the regional economy and workforce across the eight counties of Western New York.

The study updates the work UBRI completed in 2010 (Who's Our Economy?), focusing on research for attracting new businesses, aligning workforce training with employer needs, and planning for business development; but features new information on talent attraction and retention, underemployment, the landscape of workforce training to support regional target industries, employer-union success stories, and labor cost trends. The research provides insights for a wide-range of users—from current and prospective employers, to workforce trainers, to individuals seeking employment or career advancement.

Industry and employment data shed light on Buffalo's Niagara's labor market; but to fully understand the complexities, UBRI supported this quantitative data with innovative methods to capture data not readily available such as surveys, interviews and roundtable discussions. UBRI drilled down into seven target industry sectors to unlock information on industry subsector, geographic concentrations, top occupations and wage data, specialized skills and knowledge areas needed, related degrees granted, and job projections.

SUSTAINABILITY

Sustainability means creating communities, economies, and environments that allow current and future generations to thrive. The practice of sustainability creates resiliency so that communities can more effectively rebound from economic downturns, public health crises, natural disasters, and other critical events. Sustainability follows three core principles: environmental sustainability that fosters the conservation of resources and promotes public health; social well-being that encourages equitable access to opportunities and empowers communities; and economic wellness that achieves shared prosperity for all.



Promoting economies and environments.

Big thinking meets long-term planning.

In an effort that began in 2012, One Region Forward is the centerpiece of UBRI's sustainability planning endeavors and continues to guide regional sustainability thinking. Supported by the U.S. Department of Housing and Urban Development, One Region Forward, a Regional Plan for Sustainable Development, was a three-year, collaborative, broad-based effort to guide and promote sustainable development, land use, transportation, housing, energy and climate, access to food, and more for Buffalo Niagara. It is a reaction to the serious challenges the Buffalo Niagara region faces—stagnant population, a long-struggling economy, urban sprawl without growth, costly and inefficient infrastructure, and a burdensome legacy of environmental degradation. It combines data-driven research and public engagement with planning and action to help us meet the environmental, social and economic challenges of the 21st century.

Providing tools and aligning resources.

One Region Forward was a major step for the sustainability of the region, but the positive trajectory could be halted or reversed without a way to keep the community informed and engaged. One Region Forward as a plan and an initiative is not designed to be prescriptive, but rather, is a series of tools to support local decision-making. UBRI collaborated with UB faculty on two technical strategy documents (a climate change strategy document and a food access and justice strategy document) as part of One Region Forward. Our focus today is to help the community (citizen champions, nonprofits, and local governments) create and utilize compelling data in their work to influence positive change in our region. We support collaborative partnerships, community learning and capacity building that better align local planning efforts and public/private investments with our region's shared sustainability vision.

Working on promoting Clean Energy across the County

2 all electric and 3 hybrid vehicles added.

15 charging stations installed

60 County owned properties Benchmarked



EV Charging Station Logo, Chestnut Bridge Park



EV Charging Station, Como Lake Park



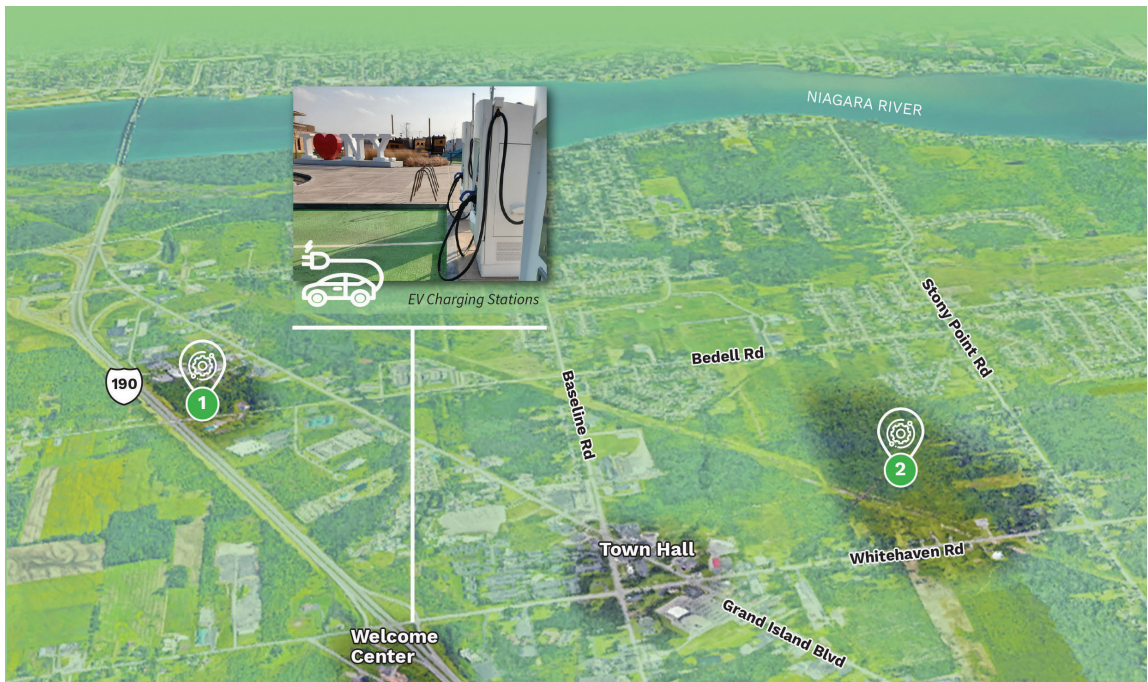
2 MW solar array at the Correctional Facility in Alden

SUSTAINABILITY

NYSERDA's Clean Energy Communities Program

In 2016, the New York State Energy Research and Development Authority (NYSERDA) launched the Clean Energy Communities program to help local NYS municipalities embrace clean energy projects, practices and policies. The program encourages municipalities to track and reduce municipal energy consumption and helps residents access alternative energy sources to create a more sustainable region. UBRI helps communities participate in the NYSERDA Clean Energy Communities program by providing hands-on technical assistance to municipalities taking "High Impact Actions" to earn Clean Energy designation. The assistance provided is based on the needs of each community and includes identifying and assessing clean energy opportunities; developing marketing strategies and materials for community campaigns; compiling, organizing, and analyzing data related to municipal energy use; and tailoring local laws and policies to make clean energy more accessible to businesses and homeowners. UBRI is providing local communities with the resources to implement projects that save energy costs, create jobs, and contribute to regional and statewide sustainability goals.

◀ Erie County map analysis from the "Moving Clean Energy Forward" report. Map of EV Charging Stations and County-owned buildings benchmarked for Energy Consumption.



Grand Island aerial map analysis identifying different environmental High Impact Actions from the "Moving Clean Energy Forward" report.

Advancing One Region Forward's vision.

Community action that advances clean energy supports the regional vision defined by **One Region Forward**. Assisting local municipalities through the Clean Energy Communities program is part of UBRI's ongoing commitment to assist with the implementation and tracking of progress for One Region Forward. This work recognizes that moving One Region Forward occurs at various geographic scales and through actions that work for many diverse local communities.

Using data to reduce energy consumption.

Facilitating data-driven decisions is fundamental to UBRI's approach. For this program, we're helping local municipalities measure and track energy consumption at their buildings so they can identify energy- and cost-saving measures. From 2017 to 2019, we helped 10 municipalities adopt resolutions to measure energy usage annually, and provided technical assistance to get that tracking up and running. Of the 190 municipal buildings across the region that are tracked, 17 facilities made upgrades to improve efficiency and reduce wasteful energy consumption. These upgrades alone are estimated to eliminate 505.7 Metric Tons of Greenhouse Gas (GHG) emissions annually.

Outreach materials and strategies promote solarization.

Since 2017, UBRI provided hands-on technical assistance to help communities throughout Western New York develop **Solarize Campaigns**. These short-term campaigns allow communities to work with a trusted solar installer who offers discounted rates on the installation of solar arrays.

Storytelling 3.0

UBRI's Clean Energy Communities interactive Story Map chronicles the collective impact of the program in Erie and Niagara counties. Using ESRI's Story Map platform, this responsive, dynamic website maps the communities that are participating, the "High Impact Actions" being completed, and the stories of how the program helps municipalities save energy costs and become more sustainable. It's an innovative way of sharing stories to grow participation and advance sustainability in the region.



Solarize Campaign Launch event in Grand Island

Project impact

UBRI worked with over 40 municipalities and helped over a dozen Clean Energy Communities leverage more than \$800,000 in grant funding for clean energy projects since 2016. As a result of these successes, NYSDERDA committed to continuing their partnership with UBRI through 2026.

Streamlined permitting processes and community-focused Solarize Campaigns resulted in the installation of 215 residential solar arrays, eliminating 1,248 Metric Tons of CO₂ equivalent greenhouse gases (GHG) annually, and fostering over \$4 million in direct economic activity. The NYS Unified Solar permitting process was adopted in 25 municipalities, making it easier for over 400,000 residents to install renewable energy in their homes.

Over 50 municipally owned electric vehicle charging stations were added to Western New York since the start of the Clean Energy Communities program. Local municipalities are also making the move toward electric vehicles, adding (18) electric vehicles to municipal fleets which reduce transportation-related GHGs, as well as fleet-related maintenance costs.

Property Assessed Clean Energy (PACE) Financing legislation was adopted across Buffalo Niagara to help the business community make clean energy investments in their properties. This economic development tool focuses on improving local building stock, reducing overhead costs for businesses, and reducing energy consumption and associated GHGs from the region.

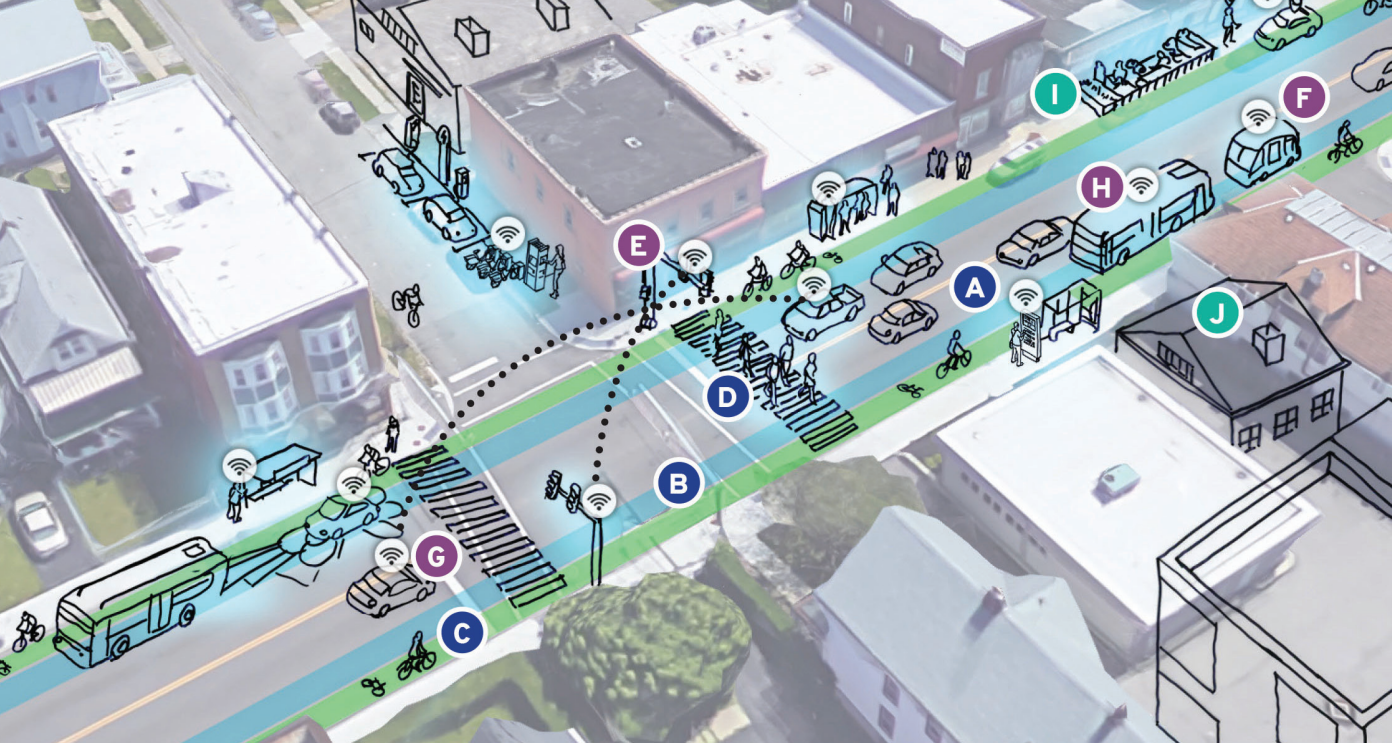


SUSTAINABILITY

Moving Forward 2050

Through the engagement of more than 700 organizations and thousands of citizens for One Region Forward, we learned what our region wants out of our transportation system in broad terms. Inspired by our findings, UBRI partnered with the Greater Buffalo Niagara Regional Transportation Council (GBNRTC), Cambridge Systematics and TY Lin International to produce an updated metropolitan transportation plan for the Buffalo Niagara region called Moving Forward 2050.

Metropolitan transportation plans are the primary tools that regions use for laying out significant, long-term improvements in their transportation systems. These plans are not simply about improving transportation—they give regions an opportunity to leverage transportation investments to realize goals for their economy, environment and quality of life.



A visual from Moving Forward 2050 showing how emerging technologies and mobility hubs could transform local streets into Smartly Enhanced Multi-modal Arterials.

Moving Forward 2050 aims to use transportation investments to strengthen communities and focus growth where we already have infrastructure, create economic development, and support workforce access. The plan also looks at ways to improve mobility using technology and aims to protect our natural environment by using sustainable materials and innovative design features.

So this is more than just a plan, and it's about more than just transportation—it is a regional vision for Buffalo Niagara, a better way for us to get Moving Forward to 2050.

Viewing the forest.

Moving Forward 2050 takes a holistic look at where we are and where we are headed to get us to a shared vision for the region's future.

This understanding gives us a framework to identify the big moves we need to meet the goals we set for our economy, communities, and environment. Big moves include new mobility options such as car and bike sharing, drone delivery and self-driving vehicles; enhanced and modernized highways and freeways; improved commuter expressways through the use of technology; harnessing technology to improve connections to other regions; and transforming key corridors into Smartly Enhanced Multi-modal Arterials (SEMAAs). As these strategies are implemented, progress will be continually reassessed, and approaches adjusted through an adaptive planning process that manages future risk.

Data meets art.

UBRI works to express data in a memorable, simple, action-inspiring way throughout all of its reports and digital communications. One of the most effective ways we used to convey our vision of future transportation systems is by overlaying infographics onto existing aerial photographs. The design technique provides a birds-eye, easy-to-understand visual that quickly and clearly conveys the ideas and strategies of the plan.

Input, feedback and idea sharing.

The plan is grounded in the community values and regional vision that grew out of One Region Forward. To be sure that this new plan resonated with the community and key stakeholders, two public meetings were held where the project team presented the plan and heard direct feedback. The draft plan was posted on the Moving Forward 2050 website for the public to review and respond. In addition, a half-day summit was held to provide transportation professionals, policy makers and business leaders the opportunity to hear from leading experts on innovative transportation solutions being used throughout the country to meet the challenges of 21st century transportation systems. As the planning and implementation process moves ahead, opportunities for community input and feedback continue through the website, email, Facebook, Instagram and Twitter.

Project impact

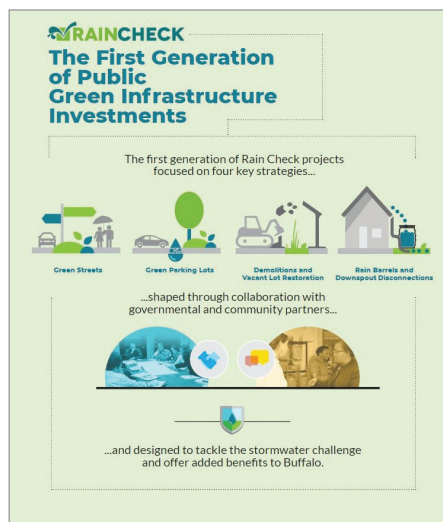
Moving Forward 2050 is Buffalo Niagara's first regional transportation plan that explicitly seeks to leverage transportation investments to grow a globally competitive economy with shared prosperity that spreads economic opportunities and benefits to all residents in the region. The plan lays out innovative strategies guiding \$3.5 billion in future investments for new transportation infrastructure—which could generate an additional \$10.5 billion of regional economic activity.

Data source: National Association of Manufacturers, "Catching Up: Greater Focus Needed to Achieve a More Competitive Infrastructure," 2014. The report found that each \$1 spent on infrastructure can spur up to \$3 in economic activity.

The first phase of the plan's Integrated Corridor Management Project would cut over half a million vehicle hours of travel over the course of a year. Collectively, the annual economic benefits related to crash prevention, reduced congestion and improved mobility after implementing this first phase equates to over \$11 million. The second phase of the project would generate another \$12.7 million per year in similar user benefits.

Data source: Cambridge Systematics, "Buffalo-Niagara Integrated Corridor Management, Final Report," 2020.

Additional UBRI projects connecting the dots in SUSTAINABILITY



A page from the Rain Check 1.0 report giving an overview of the first generation of Buffalo's green infrastructure investments.



A look at the Tonawanda Tomorrow report that provided an overview of the community engagement process.

Raincheck **Restoring the health of Buffalo's waterways.**

Partnering with Buffalo Sewer, Arcadis, EvolveEA, and PUSH Buffalo, UBRI provided planning support and tools for Rain Check—the City of Buffalo's green infrastructure program.

Rain Check aims to protect and restore the health of Buffalo's waterways by addressing today's most pressing water-related challenge—stormwater. UBRI steered the production of a benchmark report on the City's first generation of green infrastructure—Rain Check 1.0. This report describes the City's stormwater challenge, the unique role green infrastructure plays in addressing it, what has been done so far, and how the City will take green infrastructure to the next level. Building off Rain Check 1.0, UBRI supported the development of the Rain Check 2.0 Opportunity Report, a planning framework to guide the next generation of green infrastructure investments in Buffalo and recipient of the 2020 National Planning Achievement Award for Environmental Planning by the American

Planning Association. UBRI drafted an equitable development framework that outlines ways to leverage green infrastructure to close racial and socioeconomic gaps, created a GIS-based green infrastructure equity index to understand the socioeconomic and environmental factors impacting places within the city, and profiled the key equity considerations for six priority Combined Sewer Overflow basins featured in the report. UBRI developed online and print materials including a website and mobile phone based online map for communications, public outreach and stakeholder engagement to help Buffalo Sewer build more partnerships with local residents, businesses, and governments.

Tonawanda Tomorrow **A community-driven initiative for growing a sustainable 21st century economy.**

Tonawanda Tomorrow is an economic action plan that repositions the town as a regional center for sustainable job growth, offers workforce solutions that address the unique needs of Tonawanda workers and businesses, and preserves and enhances the town's existing architecture and assets to create a vibrant community for residents and businesses.

This plan was supported by the U.S. Economic Development Administration's POWER Initiative in the wake of the closure of the NRG Huntley coal-fired plant on Tonawanda's waterfront. Employing a "just transition" planning framework, UBRI worked with the Town of Tonawanda and a broad partnership on this community-driven effort that involved residents, community groups, organized labor, and local businesses. We looked at past planning efforts and current data to create a picture of Tonawanda's economic landscape. Through a comprehensive public process, the partnership developed strategies, grounded in community values, to guide

Tonawanda's economic future; followed by action plans and tools to advance a community vision for the Tonawanda economy. The plan highlights economic sectors, initiatives, programs, and projects that support that vision, and offers decision makers a clear sense of Tonawanda's strengths and challenges, and what the community wants for Tonawanda's economy. It is a public document that can be used by the Tonawanda community to advocate for decisions and projects lifted up through this process.

INNOVATION

Our region must keep planning for the future in order to thrive. If we don't innovate, we will, once again, fall behind. Innovation drives competitive advantage. It creates the jobs of the future, sparking entrepreneurship and the birth and growth of businesses. Innovation can also create synergies between the classroom and lab, research and commercialization leading to economic stability and growth. Strengthening the regional innovation landscape encourages entrepreneurs and draws investors and builds and grows small businesses, resulting in stronger economies. Innovation requires an environment that is nimble, ripe with opportunities for partnership and supportive of entrepreneurial life cycles.



Driving the region forward.

Building a solid ecosystem.

Through years of experience, UBRI built our capacity to perform insightful research, build local partnerships, and problem-solve to cultivate and grow regional entrepreneurial, small business, and innovation ecosystems.

This was true throughout UBRI's history—from our involvement with early planning and design with the development of the Comprehensive Physical Plan, "Building UB" to research on the value and economic impacts of university-industry partnerships. More recently, through our work on the Buffalo Billion and Upstate Revitalization Initiative, UBRI performed targeted research on innovation indicators to determine competitive advantages, and has taken careful consideration of stakeholder input and best practices to assist in implementing critical initiatives that fill in the gaps in our innovation ecosystem.

Cultivating vital resources.

Our region has a broad base of the human capital capacity needed for research and innovation. It makes sense to build on that capacity.

The region's high-performing colleges and universities fuel STEM-intensive industries which invest proportionally more in research & development and increase the value of the goods and services they contribute to the economy. We are working on strategies with regional leaders and partners to generate more startup enterprises by facilitating applied research & development and support systems for aspiring entrepreneurs and strengthening networks for collaboration for early-stage firm growth. These strategies are encouraging an increase in venture funding through structures and incentives that make it easier for funders to identify, assess and invest in market-viable businesses. The region is collaborating on initiatives that foster minority- and women-owned business entrepreneurship through training and tailored support to ensure opportunities extend to all communities and individuals.

Innovation will keep the region moving forward. Making the proper investments in the entrepreneurial ecosystem— startups, small businesses, nonprofits, and support networks— will attract entrepreneurs, grow STEM jobs, attract tech workers, and ensure a healthy, diverse business climate that is vital to create a resilient economy.

UBRI assisted with the early stage design and development of three Buffalo Billion projects that each play a distinctive role in a much-needed ecosystem to foster innovation in our region.

Understanding gaps in the innovation ecosystem.

Early research by UBRI, Brookings Institution and McKinsey & Company revealed our region was lagging behind in fundamental innovation indicators that were impeding economic growth. 43North, the Innovation Hub and Buffalo Manufacturing Works (BMW) were each created to address these deficiencies and accelerate the growth of Buffalo's innovation economy together.

The region was experiencing poor net small business growth with minimal venture capital activity. Its educational institutions were attracting substantial resources for research but struggled to commercialize that research. Based on best practice analyses, the idea of the world's largest business plan competition was envisioned—**43North**.



Its goal is to attract entrepreneurs from around the world to compete for prizes that turn startups with high growth potential into funded enterprises. 43North was a new way to attract startups to the region, and now we needed to foster their growth.



Successfully growing startups requires several key components including research to generate new innovations, business expertise and support, funding, access to incubators and specialized equipment, and a talented workforce. Leveraging two of the region's innovation anchors—UB and the Buffalo Niagara Medical Campus (BNMC)—like never before, **the Innovation Hub provides comprehensive, seamless support to accelerate growth of life science and technology start-ups.** It houses technology startups, provides funding to leverage successful venture capital, and delivers mentoring and expertise to guide them.

We also learned that the region's dramatic loss of high-value, tradable sector businesses that drive productivity, job growth, and income growth was also impeding innovation. We needed to build upon the region's unique specializations to enable production industries like materials processing, chemicals, and health technology and capitalize on our area's strong but underutilized materials-sciences R&D infrastructure.



Buffalo Manufacturing Works (BMW) was born from a need to breathe new ideas into existing ventures to promote competitiveness and growth.

To do this, access to applied research and scaled testing facilities for new product/process development had to increase along with adoption of more effective operational processes to drive greater resource efficiency and improve productivity. And, export assistance for small-to-medium manufacturers had to be more available to grow market expansion.

Understanding needs and tailoring solutions.

UBRI assisted 43North, the Innovation Hub and BMW with critical first steps to launch these multi-million-dollar endeavors. From the outset, it was important to find a model that worked for each project. It wasn't a one-size-fits-all approach.

There was no existing regional organization that could take on the ambitious business plan competition, so 43North needed to be built from the ground up—with a new entity, entirely new staff and board. The Innovation Hub had a different origin. Given the comprehensive network of entrepreneurial support, faculty expertise, research facilities, existing relationships with BNMC, and access to student and faculty entrepreneurs, it made sense to invest in UB as the strategic implementation partner for the Innovation Hub. For BMW, the team looked nationally for places that were leaders in manufacturing innovation.

We found a partner in Columbus, Ohio, EWI, that became the operator for BMW lending their 30 years of experience in transitioning technology innovations from proof-of-concept to production to Buffalo. While each model presented unique challenges in their nascent stages, using our proven abilities in offering strategic interventions, building organizational capacity, and monitoring and reporting progress, UBRI was instrumental in early stage project implementation from business and operations planning, to partnership building and board development, to hiring key staff members, to space planning, to outreach and communications.

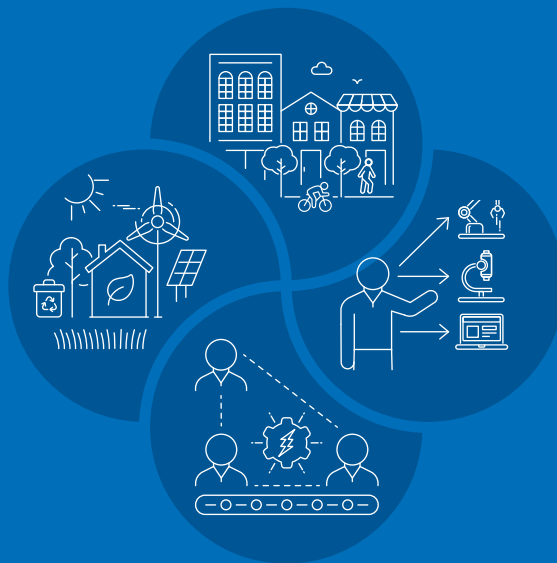
Evaluating progress and communicating success.

Given the importance and level of investment in funding, facilities and expertise that foster a stronger innovation ecosystem, UBRI developed a series of indicators to evaluate progress regionally.

We know that STEM-intensive (Science, Technology, Engineering and Math) industries drive innovation. Firms in these industries tend to employ more workers and pay higher wages. Change in STEM-intensive jobs, wages and firms is an indicator of innovation, while change in STEM-degrees granted by local colleges and universities is a measure of the talent pipeline ready to fill these jobs. We've also been looking at the jobs created at young firms as a percent of the total number of jobs created in the region. This is an indicator that the efforts the region has made to attract and grow startups is working. The level of R&D expenditures at local research universities is another important indication of innovation. An increase in funding for research together with increases in patent production in the region demonstrate that a stronger innovation ecosystem is sparking commercialization of new products and processes. 43North, the Innovation Hub and BMW are also shifting people's mindsets about Western New York and helping to build its image as a highly innovative place.



UBRI



THANK YOU TO ALL OUR PARTNERS FOR YOUR...

Bravery in leadership in moments big and small.

Commitment to raising the voices of the community.

Patience and willingness to problem-solve.

Tireless efforts to make better places for all.

Belief in the importance of making informed decisions.

Investment in the people building our communities.

Trust in partnership and process that lead to true collaboration.

THIS REPORT WAS MADE POSSIBLE WITH SUPPORT FROM
THE RALPH C. WILSON, JR. FOUNDATION, KEYBANK AND THE FIRST NIAGARA FOUNDATION.



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