



AGRIBUSINESS



STEM



TOURISM



**VIBRANT
COMMUNITIES**



**OPPORTUNITY
AGENDA**

SPARKING TRANSFORMATION

**MOHAWK VALLEY REDC
UPSTATE REVITALIZATION INVESTMENT PROSPECTUS**





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Upstate Revitalization Initiative

PLAN CONCEPTS

The MVREDC URI Plan Concepts will be threaded throughout the plan and use will be denoted with the icon set below.

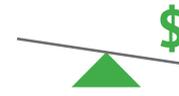
An index of the page listings where each concept can be found is located in Appendix A.



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



READINESS
READINESS TO IMPLEMENT STRATEGIES



LEVERAGING OTHER STATE INITIATIVES
USE OF NYS PROGRAMS TO ENHANCE URI FUNDS



CONNECTIVITY
SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH



COMMUNITY REINVESTMENT
HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



IMPLEMENTATION AND REPORTING
ORGANIZATIONAL STRUCTURE FOR CARRYING OUT THE PLAN



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1



SUSTAINABILITY
LONG-LASTING AND SUSTAINABLE CHANGE



WORKFORCE DEVELOPMENT
ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT



HARD-TO-PLACE WORKERS
UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH



COLLABORATION
REGIONAL CONSENSUS



GLOBAL ECONOMY
GLOBAL MARKETING & EXPORTING

MESSAGE FROM THE CO-CHAIRS

“A message to kindle anew the Mohawk fires and restore the name and fame of the valley”
Col. John W. Vrooman (1924)

Did you ever try to start a fire on your own by rubbing two sticks together? Sometimes, if you're lucky, you can start a small blaze. More often than not, you're left with nothing to show for it other than a lot of effort and sore arms. Now think how easy it is to start a fire with the addition of fuel, something other than what you have on hand. You still need to put your own work into the setting, and sustaining of the fire, but it will start easier and burn longer with an infusion of energy from the outside.

Ninety-one years ago, Vrooman's quote served as an introduction to The Old Mohawk Turnpike Book, both a history and present day survey, a road trip, really, from Schenectady to Rome through the Mohawk Valley. Ninety-one years later the Mohawk Valley is making slow but steady progress, building occasional fires. On a grand scale, we are still faced with the same challenges of 1924. But this time, things could be different.

After nearly a half-century of economic upheaval that has seen the exodus of jobs, population and wealth from the region, the Mohawk Valley is at the threshold of an economic transformation. Though many view the past fifty years as proof that the Mohawk Valley is doomed to a future of economic stagnation, rising poverty rates and the continued decay of our cities and Main Streets, we completely reject that notion. We have decided to define our future and put in motion key strategies-some of which were foundational investments from prior REDC funding rounds - that led to Governor Cuomo's August 20 game - changing announcement of a \$4 billion investment with 2,500 new jobs at SUNY Poly's Utica campus by ams and GE. We have the will and the ability to turn our decisions into reality.



MVREDC Co-Chair
Dr. Robert Geer

MVREDC Co-Chair
Larry Gilroy

MV500 Co-Chair
Alicia Dicks

MV500 Co-Chair
Nicholas Matt

Recent announcements such as the ams investment do not automatically ensure economic success. We need to and will focus on other key economic drivers and enabling investments that will ensure that our transformation is broad-based, regional, sustainable and, more important, focused on providing opportunities for segments of our community traditionally disenfranchised or trapped by barriers that preclude their ability to achieve economic success.

This region recognizes that one of its biggest challenges is the need to build the skills base to sustain the jobs that will become available as employees retire. The Regional Assessment, conducted by UBRI noted that for the remainder of this decade, over 1,800 middle-skill jobs will become vacant, nearly two-thirds of them being blue collar positions in manufacturing, construction and STEM Intensive Industries. At the same time, this region needs to build an education and workforce development pipeline to support the tremendous opportunity available with emerging nanotechnology and other advanced industry growth that is a critical cornerstone in our revival.

Funding through the Upstate Revitalization Initiative (URI) provides the opportunity to create a regional framework that will instill the type of synergy needed to realize economic results far greater than the “individual sum of the parts,” and fulfill the overarching objectives envisioned when the regional economic development councils were created.

With the advent of the URI competition, stakeholders throughout the Mohawk Valley decided to take the next bold step in building regional cooperation and important regional connections paramount for long-term, broad-based economic success. The following document is a guide to our future, created by a group from all parts of the six-county Mohawk Valley region. Collectively known as MV500, we experienced growing pains throughout the URI process; but the product of those collaborations has led to this plan: a comprehensive actionable vision for our region. We have outlined critical connections that will enable shared economic prosperity and sustainable growth in the Mohawk Valley.

Can we finally rekindle the fire Col. Vrooman claimed for 1924 and keep it lit? Our Governor thinks so; so do we. The strategy created by MV500 lives up to the Governor’s belief that we are at the beginning of an economic transformation. We are sure in our belief that our vision, combined with the addition of the URI funding, will create a prosperous Mohawk Valley in ways never before seen.

“You’ve only started; this is the first spark. Stoke those flames, we are going to have an economic fire.”

- Governor Andrew Cuomo (August 20, 2015)

Sincerely,
The MV500 Co-Chairs



**MV500 Co-Chair
Dr. Dustin Swanger**

**MV500 Co-Chair
Ray Halbritter**

**MV500 Co-Chair
Steven DiMeo**

MOHAWK VALLEY REGIONAL COUNCIL MEMBERS

Regional Council Chair

Lieutenant Governor Kathy Hochul

Mohawk Valley Regional Co-Chairs

Lawrence T. Gilroy III- President Gilroy, Kernan & Gilroy, Inc.
Dr. Robert Geer- Senior VP and COO SUNY Polytechnic Institute

Council Members

Ladan Alomar, Executive Director, Centro Civico Inc.
Juanita Bass, Owner, Juanita's Soul Classics Inc.
Steven J. DiMeo, President, Mohawk Valley EDGE*
Marianne W. Gaige, President & CEO, Cathedral Corporation
Charles Green, President & CEO, Assured Information Security*
Wally Hart, Business and Community Development, Lexington*
Dr. Todd Hutton, President, Utica College*
Mark Kilmer, President, Fulton-Montgomery Chamber of Commerce
Carolyn A. Lewis, SUNY Oneonta*
Nicholas O. Matt, Chairman & CEO, Matt Brewing Company*
Mary Morse, Owner, Kwik-Kut Mfg*
Nancy Pattarini, President & CEO, The Paige Group
Michael J. Reese, Retired
V. Daniel Robinson II, President & CEO, NYCM Insurance*
Dr. Renee Scialdo Shevat, President & Owner, Herkimer Diamond Mines
Dr. Dustin Swanger, President, Fulton-Montgomery Community College*
Scott White, President, Bank of Cooperstown*

* Denotes Executive Committee Membership

Ex-Officio

Ralph Ottuso, Chairman, Fulton County Board of Supervisors
Vincent Bono, Chairman, Herkimer County Legislature
Kathleen Clark, Chair, Otsego County Board of Representatives
Joseph Griffo, NYS Senate- District 47
Dayton King, Mayor, City of Gloversville
William Magee, NYS Assembly- District 111
Matthew Ossenfort, County Executive, Montgomery Co. Board of Supervisors
Robert Palmieri, Mayor, City of Utica
Anthony Picente, County Executive, Oneida County
Ann Thane, Mayor, City of Amsterdam*
Richard Lape, Chairman, Schoharie Co. Board of Supervisors

Executive Staff

Kenneth M. Tompkins, Executive Director
Delores Caruso, DOL Representative and Team Leader

NY State Senate Representing MV

Joseph Griffo, Senator, 47th District
Hugh Farley, Senator, 49th District
James Seward, Senator, 51st District
George Amedore, Senator, 46th District
David Valesky, Senator, 53rd District

NY State Assembly Representing MV

Ken Blankenbush, Assembly member, 117th District
Anthony Brindisi, Assembly member, 119th District
Marc Butler, Assembly member, 118th District
Peter Lopez, Assembly member, 102nd District
William Magee, Assembly member, 121st District
Angelo Santabarbara, Assembly member, 111th District
Claudia Tenney, Assembly member, 101st District

ACKNOWLEDGMENTS

STRATEGY TEAM

Anthony Picente	Oneida County
Patricia Knuth	The Arc Otsego
Jeff Katz	Village of Cooperstown
Robert Lambe	Town of Marcy
Jim Giombetti	B&B Ranch
Dan McCoy	Darman Manufacturing Co. Inc.
Carlena Fochi Ficano	Hartwick College
Ralph Ottuso	Fulton County Board of Supervisors
Jon Stead	Fulton County Board of Supervisors
Geoff Peck	Nathan Littauer Foundation
Karl Gustafson	Montgomery County
Matthew Ossenfort	Montgomery County
Kenneth Rose	Montgomery County Economic Development
Gail B. Breen	Fulton, Montgomery & Schoharie Cos. WIB
Dr. Dustin Swanger	Fulton-Montgomery Community College
Vincent Bono	Herkimer County Legislature
Stephen Smith	Herkimer County Economic Development
James Wallace	Herkimer County
William Cherry	Schoharie County
Sandy Mathes, Jr.	Otsego County Economic Development
Tim Noonan	Old Forge Properties
Andrew Santillo	Montgomery County
Peter Rayhill, Esq	Oneida County Attorney
Ryan Miller	thINCubator
James Mraz	Fulton County Planning Department

George Joseph	Oneida County Legislature, Northstar Orchards
Dr. Randy VanWagoner	Mohawk Valley Community College
Sarah Blood	Montgomery County
John Romano	The Fountainhead Group
Laura Casamento	Utica College
Jake DiBari	City of Rome
Christian Mercurio	Empire State Development
Sonny Greco	City of Utica
Kirk Hinman	Retired, Rome Strip Steel
Bob Geer	SUNY Polytechnic Institute
Alicia Dicks	The Community Foundation of Oneida & Herkimer Counties, Inc.
Nicholas Matt	Matt Brewing Company
Hans Arnold	Gerhardt Consulting, LLC
Steven DiMeo	Mohawk Valley EDGE
Kenneth Tompkins	Empire State Development
Dan Robinson	NYCM Insurance
Craig Gelbsman	Otsego County
John Swann	SUNY Polytechnic Institute
Brian Thomas	City of Utica
Christopher Guldner	Schoharie County Tourism
Christian Talgo	Nail Creek
Sean Jordan	Schoharie County
Christopher Lawrence	City of Utica

I. SPARKING TRANSFORMATION: MOHAWK VALLEY PLAN TO STIMULATE AND SUSTAIN GROWTH - EXECUTIVE SUMMARY

INTRODUCTION:

The Upstate Revitalization Initiative (URI) is a once-in-a-lifetime opportunity for eligible Regional Economic Development Councils (REDCs) to develop an Investment Prospectus for \$500 million in URI funding. These funds will help leverage public and private investment to catalyze economic growth in upstate economies that have gone through prolonged periods of economic stagnation and decline.

The Mohawk Valley shares a similar plight with other regions in Upstate New York in terms of economic need. Nearly all of the regions eligible under the URI can make the same arguments about troubled economies, prolonged periods of economic disinvestment, loss of high-paying manufacturing jobs, population decline, loss of vibrancy in cities and population centers, and changing socioeconomic trends that reveal major barriers for sizeable segments of its population who struggle to participate in a new economy that requires higher STEM-related skills.

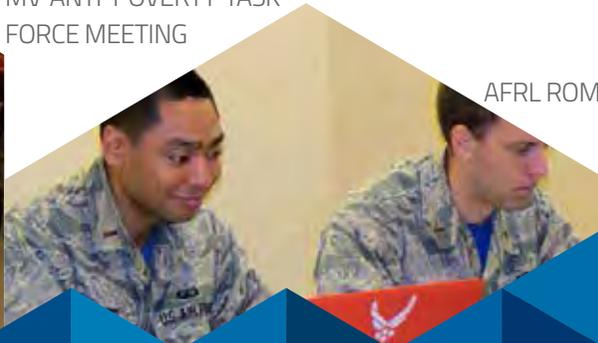
URI VALUE PROPOSITION:

This competition, however, is not just about need and who has suffered the most over the past fifty years. This process is different in that the awarding of URI funding is not solely based on need. Rather, regions are required to demonstrate project readiness and an ability to move the needle on their economy. The URI competition is not unlike the process that an investment banker or venture capitalist goes through in reviewing a number of public offerings or investment prospectuses and selecting those proposals that offer the best prospects for success.

New York State will go through a similar assessment process, selecting from among seven proposals the top three investment prospectuses that it believes offer the greatest potential for success and will dramatically alter the region's economic trajectory. We assert that the Mohawk Valley stands apart from other regions and is uniquely positioned for economic success. We have the benefit of scale: a \$500 million investment in a region of this size will produce dramatic results. The Mohawk Valley also benefits from prior foundational investments that have placed this region at the threshold of economic transformation.



MV ANTI-POVERTY TASK FORCE MEETING



AFRL ROME



SUNY POLY

RENEWED OPTIMISM AND REGIONAL OPPORTUNITY:

Nowhere is this more evident than the Governor's August 20 announcement of \$4 billion in investment from GE and ams (an Austrian-based semiconductor company) at SUNY Poly's Utica campus. The GE and ams announcement has led to other key regional employers looking at investing in their local operations versus elsewhere. Some are even considering shifting operations from off-shore locations and bringing them back to their facilities here. There is a newfound confidence that the region's best days are not in its past, but that its future promises opportunities not evident since the end of World War II.

It is clear that the region's renewed sense of optimism is resonating with individuals, organizations and businesses that now look at the Mohawk Valley as an investment opportunity. The region is attracting significant investment interest from within and outside the region.

Developers are looking to build, for example, downtown lofts and market rate rental housing to support what they see as a looming economic growth spurt sparked by the investments in nanotechnology at SUNY Poly. That level of interest has been sorely lacking for decades but developers investing across the region are starting to see opportunities in a region, poised for dynamic growth.

Potential development opportunities are being considered to build year-round tourism potential.

For example, one developer has completed a feasibility study for a major tourism initiative along the Route 28 corridor that would make Cooperstown a year-round tourism destination. This \$160 million venture would create an indoor water-park and resort area resulting in 1,200 construction jobs, 600 full-time equivalent jobs and an \$800 million economic impact over the first ten years of operation. This opportunity is possible given the energy and excitement taking place and being noticed by potential investors.

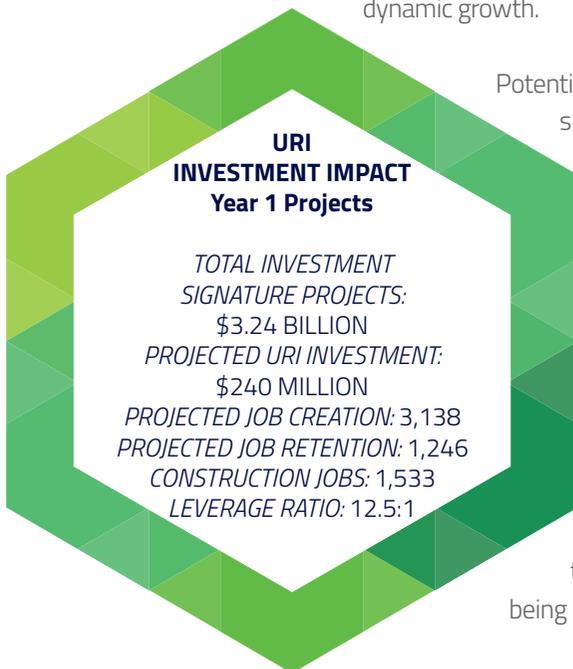
Downtown Utica is receiving major interest as buildings are being reclaimed and repurposed for mixed-use loft apartments and commercial uses. The Utica Auditorium has breathed new life into the region as a major entertainment venue with the Utica Comets and professional hockey bringing immense civic pride back to the area.

Utica is not stopping there, plans are underway to reclaim a key part of Utica's downtown to transform it as a major innovation district, given its proximity to the newly revitalized Landmarc building, Bagg's Square, the Utica Auditorium, Harbor Point, and serve as a nexus between Utica's downtown and SUNY Poly. The existing potential for nearly \$750 million in public and private investment in downtown Utica and nearby Harbor Point over the next ten years would shape Utica's downtown as a desired place to live, work, play and learn.

Success is infectious; and the region is seeing visible signs elsewhere with the granting of a medical cannabis license to Empire State Health Solutions (ESHS) for the Tryon Technology Park and Incubator Center, and planned new business investments in Amsterdam and Johnstown Industrial Park with AGT Services, Inc. and the New Age Renewables project that will find new market uses for acid whey generated from Fage and other dairy firms.

Rome is also poised for success. Griffiss continues to be a critical regional employment center and has major convergence opportunities with SUNY Poly in bringing nano-cyber and UAS together. The city has embarked on creating new housing opportunities to capture a share of the tech workforce that will emerge with Griffiss and nearby SUNY Poly. Opportunities also abound with repurposing of key buildings and sites that are seeking new economic uses as the region transitions from manufacturing to a tech economy.

Fulton and Montgomery counties are working together on a two-county regional business park that will position both counties in a competitive position to leverage supply chain growth in nanotechnology and support other regional attraction efforts given their strategic location along I-90, and proximity to major northeast population centers.



EXECUTIVE SUMMARY

The region's relatively small size and its adjacency to the Capital Region and Central New York region offers opportunities to be part of much larger cross-regional initiatives in cyber security, nanotechnology, UAS technologies and power generation. Part of our strategy is to link opportunities to train returning veterans at Fort Drum for jobs here in the Mohawk Valley, which is an opportunity to help the North Country retain population and link returning vets and North Country population with career opportunities developing across the region. A \$500 million investment in the Mohawk Valley produces dramatic results and those results will have cross-regional impacts that help revitalize other Upstate regions.

Our economic transformation is not premised on dreams or speculation. It is grounded on firm business commitments coupled with strategic investments that will help build long-term sustainability and provide the impetus for attracting additional private investment that will be the tipping point for the region's economic transformation that catapults the Mohawk Valley into a region of statewide, national and global importance.

The Mohawk Valley Regional Economic Development Council (REDC), in partnership with a singularly focused regional strategy team named MV500, has developed the enclosed Investment Prospectus. This Investment Prospectus provides a focused, meaningful and data-centric analysis of its economy, its challenges and its opportunities. It frames the region's strategies for achieving outcomes that will drive the region's economic revitalization. With the introduction of our URI strategy, the Mohawk Valley can answer that question with a forward-looking set of initiatives that put us in the vanguard of a new era of opportunity.

We fully expect that a \$500 million investment in the Mohawk Valley will leverage approximately \$4.3 billion in non-URI funding and generate outcomes with a pronounced economic impact that dramatically alters the region's economic trajectory and instead of being stuck in neutral, we have a full head of steam that is generating economic momentum.

PUBLIC SURVEY: TOP 3 OPPORTUNITIES

1. EDUCATION, WORKFORCE DEVELOPMENT, WORKFORCE PIPELINE
2. EMPLOYMENT AND ECONOMIC GROWTH IN EMERGING INDUSTRIES
3. DOWNTOWN AND MAIN ST. REINVESTMENT

FOUNDATIONS FOR SUCCESS, THE REDC PROCESS:

The Regional Economic Development Council (REDC) process inaugurated by Governor Andrew Cuomo in 2011 provided the underlying framework that has brought the Mohawk Valley together as a region and has infused critical investments that are the foundation for our pending economic transformation.

Since the introduction of its first five-year Strategic Plan, the Mohawk Valley REDC has identified and refined a set of guiding principles that serve as the parameters for its Upstate Revitalization Initiative plan:

- *Strengthening regional industry concentrations to grow more jobs*
- *Aligning educational and training programs to meet the needs of strategically vital employers, with an emphasis on hard-to-place workers*
- *Creating a regional culture of innovation and entrepreneurship*
- *Emphasizing smart growth and sustainability in all development*
- *Encouraging and, where possible, rewarding civic and governmental efficiency*
- *Growing exports and participation in the global economy*

These guiding principles have framed many of the strategic initiatives that received funding in the past REDC rounds and today are the catalysts for the region's economic resurgence. Nowhere is that more evident than the foundational investments made at SUNY Polytechnic's Utica campus with construction of the Computer Chip Commercialization Center (Quad C) and in the development of the Marcy Nanocenter site that is part of the SUNY Poly campus. These REDC investments have made it possible for the Mohawk Valley region to be at the threshold of major transformational investments with the decision by GE to locate its silicon carbide power electronics packaging center in the Quad C and ams, an Austrian based semiconductor company, choosing to expand its high performance analog semiconductor facility on a portion of the SUNY Poly Marcy site. Together this \$4 billion investment will create 2,500 direct jobs with the potential to attract substantially more in terms of investment and direct-indirect jobs as the region is poised to be a key location along New York's nano corridor.

Aside from these results, the REDC process in our six-county region has seen the creation of more than 1,400 new full-time jobs and nearly three-quarters of a billion dollars in new investment in our businesses and institutions. Now it is time to maximize these investments and do so in a way that leads to growth that will continuously build upon itself. Our investment prospectus offers the opportunity to achieve far greater economic results.

MOHAWK VALLEY URI PLAN: SYNERGY OF GROWTH AND DEVELOPMENT:

With the Governor's URI challenge announced in 2015, the Mohawk Valley region ramped up its competitive advantage by creating a dedicated, cross-sectional team of talent from each county, MV500, to complement the vast work of the MVREDC. As a result of months of focus groups, targeted engagement, expansive outreach, analysis and cultivation of concentrated strategies, the Mohawk Valley is committed to channeling future investments to three core industries—STEM Intensive Industries, Agribusiness, and Tourism—enabled by a renewed emphasis and focus on creating vibrant communities, and a commitment to expanding educational and entrepreneurial opportunities for all of our citizens. In doing so we will maximize the impact of Upstate Revitalization funds. First, by ensuring the success of initiatives made possible by New York State's Regional Economic Development process and, second, by achieving a critical mass of investment in industries that have the potential to build a new economy that will sustain the future of the Mohawk Valley region.

TARGETED INVESTMENTS - ECONOMIC DEVELOPMENT STRATEGIES:

STRATEGY 1: STEM INTENSIVE INDUSTRIES – Build new regional wealth on our technological and STEM-related industries in the areas of nanotechnology, cyber assurance and security, and unmanned aerial systems. Leverage STEM intensive industries to increase overall employment, grow population, and dramatically increase region's per capita income.

- SPECIFIC GOALS:**
- Grow an innovation network that increases the region's STEM Intensive Industries by leveraging over \$4 billion of investment over the next ten years and attract more than 3,100 new STEM Intensive Industry jobs
 - Build a 21st-century workforce and education network to develop a workforce aligned with the region's focus by doubling the number of STEM jobs by 2030
 - Create an entrepreneurial ecosystem by adding 3,000 new firms by 2030
 - Increase global exports and attract foreign direct investments by increasing global exports by 50% by 2030

STRATEGY 2: AGRIBUSINESS– The relevance of this sector to our regional economy is dramatically increasing. Our industrial base has kept pace with dairy processing expansion and innovation, churning out products for local, downstate and global markets. We are well positioned to serve a burgeoning demand for sustainably produced craft foods and beverages to domestic and international markets. Our region's proximity to major global consumer markets heralds a remarkable expansion that will grow jobs and enhance wealth in our communities.

- SPECIFIC GOALS:**
- Maximize production and increase market share by modernizing the marketing and distribution infrastructure of Mohawk Valley agricultural products by enabling 50% of farms to become profitable by 2020
 - Invest in Next-Generation farmers and close the skills gap between hard-to-place workers and agricultural, craft brewing and food processing opportunities. Achieve a 15% increase in the percentage of agribusiness workers and farm operators between the ages of 18-35 by 2020
 - Create an environment for innovation and entrepreneurship in agribusiness and agrisciences by increasing the percent of food manufacturing firms (3% in 2014) to equal the percent of total farm product sales (10% in 2014) by 2030

STRATEGY 3: TOURISM– The Mohawk Valley is one of the top three destination engines statewide. Our diverse tourism ecosystem accounts for \$1.67 billion in direct spending in the Mohawk Valley and employs more than 25,000 people. Our strategy builds on these assets, to expand external revenue and wealth transfer to our region.

- SPECIFIC GOALS:**
- Invest in craft food & beverage expansion and tourism promotion initiatives to strengthen these industry concentrations and create new job opportunities by increasing growth in visitor spending (14% in 2009-2011) to equal growth of visitor spending in NYS (18% in 2009-2011) by 2020
 - Create a path to prosperity for hard-to-place workers by increasing employment growth (6% in 09'-13') to equal growth of employment in NYS (11% in 09'-13') by 2020
 - Enable an entrepreneurial ecosystem by adding 50 new tourism firms by 2020
 - Expand year-round attractions, capture greater numbers of international visitors, and increase the Mohawk Valley's exposure to global markets by increasing tourism as a percent of global exports by 5% by 2030

EXECUTIVE SUMMARY

TARGETED INVESTMENTS - COMMUNITY DEVELOPMENT DRIVERS:

COMMUNITY DEVELOPMENT DRIVERS: SUPPORTING JOB CREATION

DRIVER 1: OPPORTUNITY AGENDA - The Mohawk Valley has adopted an opportunity agenda that focuses on securing a rewarding and affordable quality of life for all residents. This will in large part be carried out through education, job training and workforce development initiatives that support at-risk populations, as well as outcome-driven services for groups that have been challenged in participating in the region's economic revitalization. Given the diverse geography of the Mohawk Valley region, strategies must address the practical challenges of rural and urban poverty, including transportation, childcare, access to education and workforce alignment. The Mohawk Valley URI will ensure the positive social impact of target industry investments through:

- SPECIFIC GOALS:
- Social Impact Bonds: A regional financing model for strengthening civic effectiveness
 - Integrated Regional Impact Center: Catalyzing our region's human and public health sectors by providing direct access to hard-to-reach populations
 - Year-long immersive education opportunities for foreign-born residents and individuals with disabilities

DRIVER 2: VIBRANT COMMUNITIES - As our region transforms to an innovation-rich, knowledge-based economy, we need to sustain appealing communities to encourage people to settle in the Mohawk Valley. A job isn't enough; people need pedestrian-friendly downtowns, diverse amenities, resilient food systems, and neighborhood-connected waterfronts. These are the building blocks of healthy urban areas. We must revitalize our region's population centers and core neighborhoods through area-wide brownfield redevelopment, the activation of waterfronts, and the adaptive reuse of vacant, abandoned, and underutilized anchor properties. Resources will be focused on the Mohawk Valley's historic manufacturing communities, many of which lie on the banks of the Mohawk River and New York State Barge Canal. Our goal is to transform the physical landscape of the Mohawk Valley from a series of isolated, tired Rustbelt municipalities into a connected region of vibrant communities. The Mohawk Valley URI Plan will ensure the positive social impact of target industry investments through:

- SPECIFIC GOALS:
- RECLAIM MV (REcovering our Community's Legacy And Incentivizing Momentum) — A Capital Grant Program, matching up to 50% of the initial investment in the cleanup and redevelopment of our region's most blighted properties to catalyze reinvestment in population centers
 - 1% FOR US ALL— A policy requiring that one percent of the funds provided for eligible Mohawk Valley URI-funded capital projects be spent on public artwork, cultural programming, civic innovations, or connections to underserved neighborhoods
 - Mighty Waters Action Agenda — Catalytic projects that connect people to the NYS Barge Canal, Mohawk River and their tributary waterways for recreation, and, more important, inspiration

PROSPERITY FOR ALL

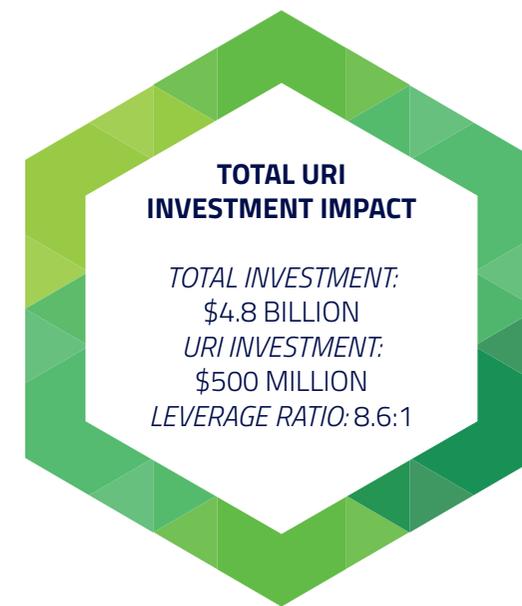
In the Mohawk Valley's URI plan there are no win-lose scenarios. The following pages are an amalgamation of creative ideas and data-driven strategies, hashed out via regional meetings where, through growing pains and a real sense of getting to know and understand each other's needs, we created a cohesive vision for the Mohawk Valley. Our agenda recognizes the importance of building critical connections that extend opportunities for shared economic prosperity throughout the region. These core connections reinforce the importance of:

- Building the Mohawk Valley's workforce development pipeline
- Enhancing the vibrancy of the region's cities and population centers to create an environment that will help attract and retain skilled workers and create new economic visions for our downtown areas
- Fostering an entrepreneurial culture that will stimulate innovation to grow ideas and businesses
- Encouraging the modernization of local government and civic institutions to align the region's governments and civic institutions within metrics for better outcomes in a 21st-century economy
- Strengthening global connections to establish stronger export markets for the region's STEM Intensive Industries and market the region's other strategic assets and competitive strengths to attract foreign direct investment

The true measure of the region's economic success is to ensure that our economic prosperity is extended throughout all six counties, and that the Mohawk Valley targets hard-to-place workers so they can meaningfully participate in the region's economic transformation.

So many people are looking for a new way to live, a lifestyle less crowded, less hectic, with more open space and greater sustainability. They want something different; to live a more relaxing, yet still vibrant, life. The Mohawk Valley, through the implementation of this ambitious but well-founded Investment Prospectus can be the place they turn to for jobs and a quality of life that will attract population and change the region's economic prospects.

The Mohawk Valley, like the other Upstate Regions, clearly has economic needs. We, however, believe that what makes us different is that we are poised for transformation and the URI is the spark that will produce catalytic economic growth. We believe the Governor's words on August 20 were prophetic when he spoke of sparks and urged us to stoke the those fires. This Investment Prospectus does just that. We believe we are at the threshold of an era of renewed economic prosperity, and the \$500 million in URI funding is the fuel that will stokes those flames.



MV500 has cultivated support from critical sectors across the region. The Strategy Team, a subset of MV500, comprises more than 50 members from public and private sectors, government, nonprofit and education. With active participation from representatives in all six counties, members of the Strategy Team came together with one purpose: to win.

The Strategy Team has evolved into an inclusive body whose members challenge and support one another. They've developed a common agenda and purpose: no easy feat for a region that has never truly seen itself as a cohesive unit, with overlapping problems, opportunities, and interests.

The Mohawk Valley has never experienced such regional unity. Public responses we've received shout for the same thing, as if in chorus: well-paying jobs; safe spaces to live, work and play; an educated workforce; prosperity. Our residents realize that prosperity does not come without hard work, and that no one gets there alone.

MV500 has taken public feedback into careful consideration when crafting strategies and choosing projects to submit. The group conducted qualitative and quantitative surveys, beginning in April 2015. Questions were compiled with input from each member of the Strategy Team, and vetted by renowned pollster John Zogby of Zogby Analytics, Inc.

In addition to its use of online survey instruments, MV500 made a concerted effort to target regional participants uncomfortable or unwilling to use technology. Paper surveys were left at community centers, health centers, refugee centers, community colleges, and other public spaces in the region.

The MVREDC accordingly directed University of Buffalo Regional Institute to conduct a more targeted analysis of STEM growth and workforce alignment. Clearly, residents of our region—old and young, rural and urban—believe

“RESIDENTS BELIEVE THE MOHAWK VALLEY'S GREATEST OPPORTUNITIES LIE IN ITS ABILITY TO FOSTER AN INNOVATION, HIGH-TECH ECONOMY WITH WORKERS ABLE TO PERFORM THE HIGHLY SKILLED TASKS REQUIRED OF SUCH INDUSTRIES.”

that job growth, and growing emergent industries, are critical pieces to regional success.

The MV500 Team wanted to know how the region saw itself, and what residents identified as strengths, weaknesses and opportunities to grow. Online surveys and social media outreach were only the first step. A series of public meetings was held in each county, as a platform for residents to propose strategies and projects. At each session, URI and the MV500 initiative were described in depth; attendees were encouraged to provide feedback in person, online and through paper surveys.

The groundwork is laid, and MV500 leaders continue to build regional unity. The URI presents an opportunity not only for \$500 million, but to open channels of communication and overcome boundaries. It's clear to everyone involved that we are not simply revitalizing the region; rather, we are creating something new.





MV500 WORKGROUPS

Agriculture & Food Systems Thinktank

Dr. Jason Evans, SUNY Cobleskill
Christopher Guldner, Schoharie County Tourism
Rebecca Morgan, Center for Agricultural Development and Entrepreneurship
James Giombetti, B&B Ranch
Jim Manning, Cornell Cooperative Extension
Vincent DeSantis, Mohawk Harvest Cooperative Market
George Joseph, North Star Orchards
Don Smyers, Cornell Cooperative Extension of Schoharie and Otsego Counties
Jim & Cindy Barber, Barber's Farm
Pete Oberacker, FormTech Solutions
Margi Neary, Village of Sharon Springs

Land Use & Livable Communities

Alicia Dicks, Community Foundation of Herkimer & Oneida Counties, Inc.
Fred Arcuri, Mohawk Valley EDGE
J. Caroline Williams, Cornell Cooperative Extension
Jake DiBari, City of Rome
Elizabeth Horvath, Otsego County IDA
Bob Lambe, Town of Marcy
Shane Nickel, Schoharie County
Laura Cohen, The Community Foundation of Oneida & Herkimer Counties, Inc.
Ryan Miller, thINCubator
Geoff Peck, Nathan Littauer Hospital & Nursing Home

Tourism Development Team

Kelly Blazosky, Oneida County Tourism
Gina DaBiere-Gibbs, Fulton Montgomery Regional Chamber of Commerce
Mayor Jeff Katz, Village of Cooperstown
Barbara Ann Heegan, Otsego County Chamber of Commerce
Ken Meifert, National Baseball Hall of Fame
Mark Kilmer, Fulton Montgomery Regional Chamber of Commerce
Geoff Peck, Nathan Littauer Hospital & Nursing Home

Mighty Waters & BOA Implementation Group

Mayor Ann Thane, City of Amsterdam
Paul Beyer, NYS Department of State
Jeff Jones, New Partners for Community Revitalization, Inc.
Karl Gustafson, Montgomery County
Christopher Lawrence, City of Utica
Matt Andrews, City of Rome
Paul Romano, O'Brien & Gere
Christian Mercurio, Empire State Development
Jake DiBari, City of Rome
Geoff Peck, Nathan Littauer Foundation

Workforce & Opportunity Agenda

Dr. Dustin Swanger, Fulton Montgomery Community College
Carolyn Lewis, SUNY Oneonta
Alice Savino, Workforce Investment Board of Herkimer, Madison, and Oneida Counties
Dr. Randall VanWagoner, Mohawk Valley Community College
Gail Breen, Fulton, Montgomery, and Schoharie Counties Workforce Investment Board
Ladan Alomar, Centro Civico of Amsterdam, Inc.
John Stemen, Office of Assemblyman Brindisi
Mark Barbano, Economic Analyst, Department of Labor
Laura Cohen, Community Foundation of Herkimer & Oneida Counties, Inc.
Christian Mercurio, Empire State Development

II. THE CHALLENGES

CURRENT REGIONAL ECONOMIC PERFORMANCE & TRENDS

POPULATION

496,971

MEDIAN AGE

41

POPULATION AGE 20-34

18%

TOTAL PRIVATE WAGES

\$4.9B

LABOR MARKET

231,800

Source: NYS DOL, US Census Bureau

How much does the region contribute to the Upstate economy?

ECONOMY & INDUSTRY BY THE NUMBERS

	MOHAWK VALLEY	% OF UPSTATE TOTAL
NUMBER OF JOBS, 2013	144,889	5%
NUMBER OF FIRMS, 2013	10,422	5%
GDP (METRO), 2013 ¹	\$7.7 B	4%
EXPORTS, 2012	\$2.8 B	5%
JOBS IN STEM-INTENSIVE INDUSTRIES, 2013	9,547	3%
AVERAGE ANNUAL WAGE, 2013	\$36,169	

¹ Includes 727 jobs (active duty and civilian) reported for fiscal year 2013 on the Air Force Research Lab (AFRL) Information Directorate in Rome, NY. A slightly higher figure of 731 jobs was reported for fiscal year 2014.

² Only includes GDP of the Utica-Rome Metro Area which comprises Herkimer and Oneida counties. This includes Schoharie county which is part of the Albany-Schenectady-Troy Metro Area. Percent of Upstate total uses GDP of Metro areas entirely within Upstate New York.

Source: NYS Department of Labor; U.S. Bureau of Economic Analysis; Bivings Institution.

UB Regional Institute

MV URI Goal: Create higher paying jobs to generate a net increase in regional wealth.

CHALLENGES

The region has 94,000 working-age individuals living in or near poverty (earning an income less than double the federal poverty line). Utica and Rome have 25% of the region's lower-income working-age residents, and in each city 40% of the working-age population consists of lower-income working-age individuals. Gloversville and Amsterdam are other regional population centers with high concentrations of working poor.

Of those aged 16 and over (408,285), the number of people in 2013 that were out of the workforce totaled 41.2% when factoring in the unemployed, the region's workforce participation rate was only 56.8%.

The Mohawk Valley region lags behind statewide rates for elementary school proficiency in math and science (4th and 8th grade test scores), with nearly two-thirds of the region's districts below the 50th percentile statewide. If the region's school districts were aggregated, the resultant single school district would rank 451st out of 714 statewide, or in the 37th percentile.

The face of the Mohawk Valley is changing. Aside from cultural, language and geographic/climatic differences, many in these population groups lack education and comparable work experiences from their former countries, and face transportation barriers that make it difficult for them to transition into available jobs within the region.

Source: NYS DOL, US Census Bureau

INDUSTRY EMPLOYMENT (2014)

% OF TOTAL EMPLOYMENT- Source: US Bureau of Labor Statistics

TOTAL ANNUAL WAGES

\$7.2B

Source: 2014 NYS DOL

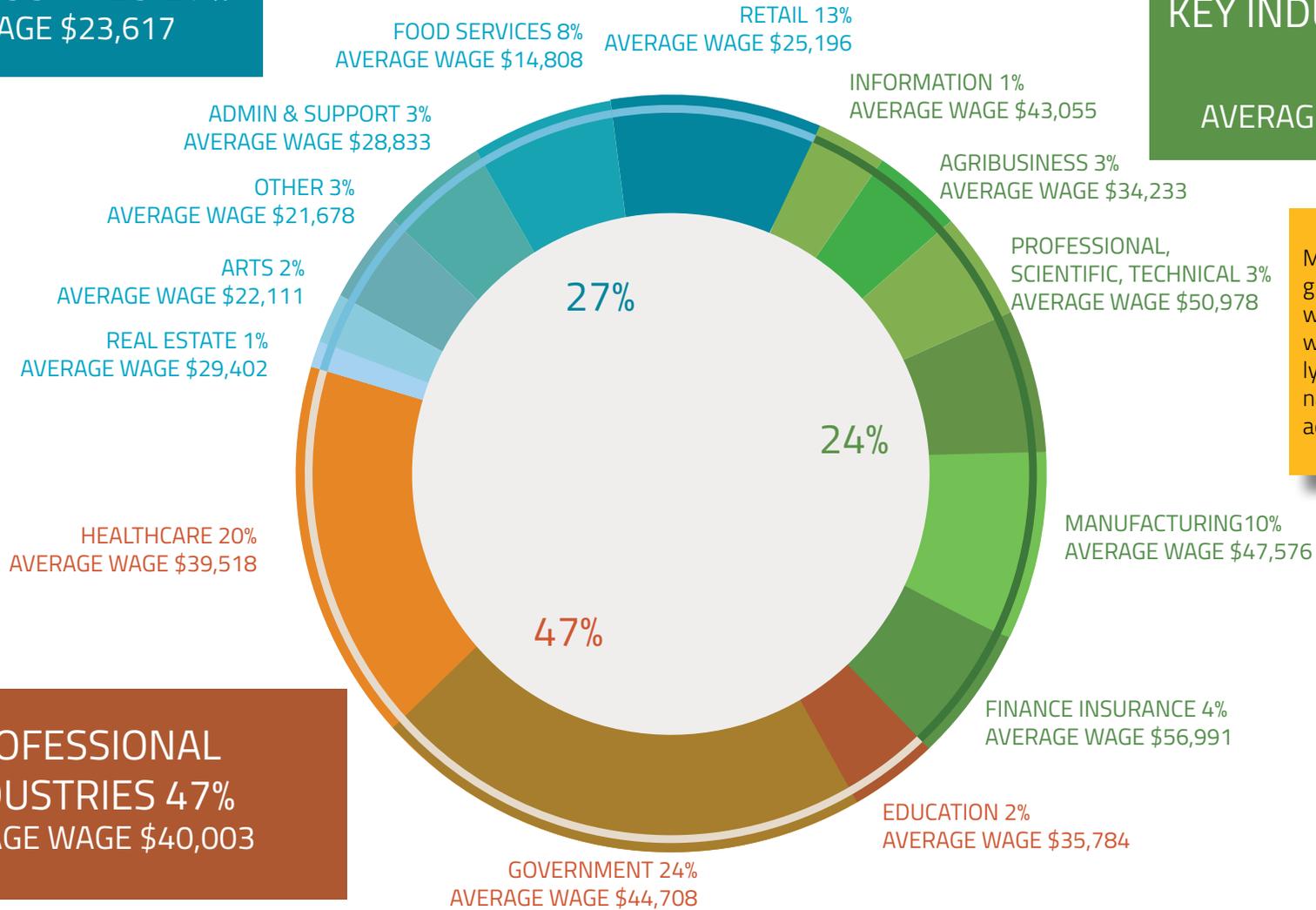
AVERAGE WAGE

\$38,386

Source: 2014 NYS DOL

SERVICE INDUSTRIES 27%
AVERAGE WAGE \$23,617

KEY INDUSTRY SECTOR 24%
AVERAGE WAGE \$43,426



MV URI Goal: Dramatic growth in these high-wage industries to spark wealth creation - especially in the rapidly growing nanotech, cyber, UAS and advanced industries.

PROFESSIONAL INDUSTRIES 47%
AVERAGE WAGE \$40,003

FOUNDATIONS FOR ECONOMIC GROWTH

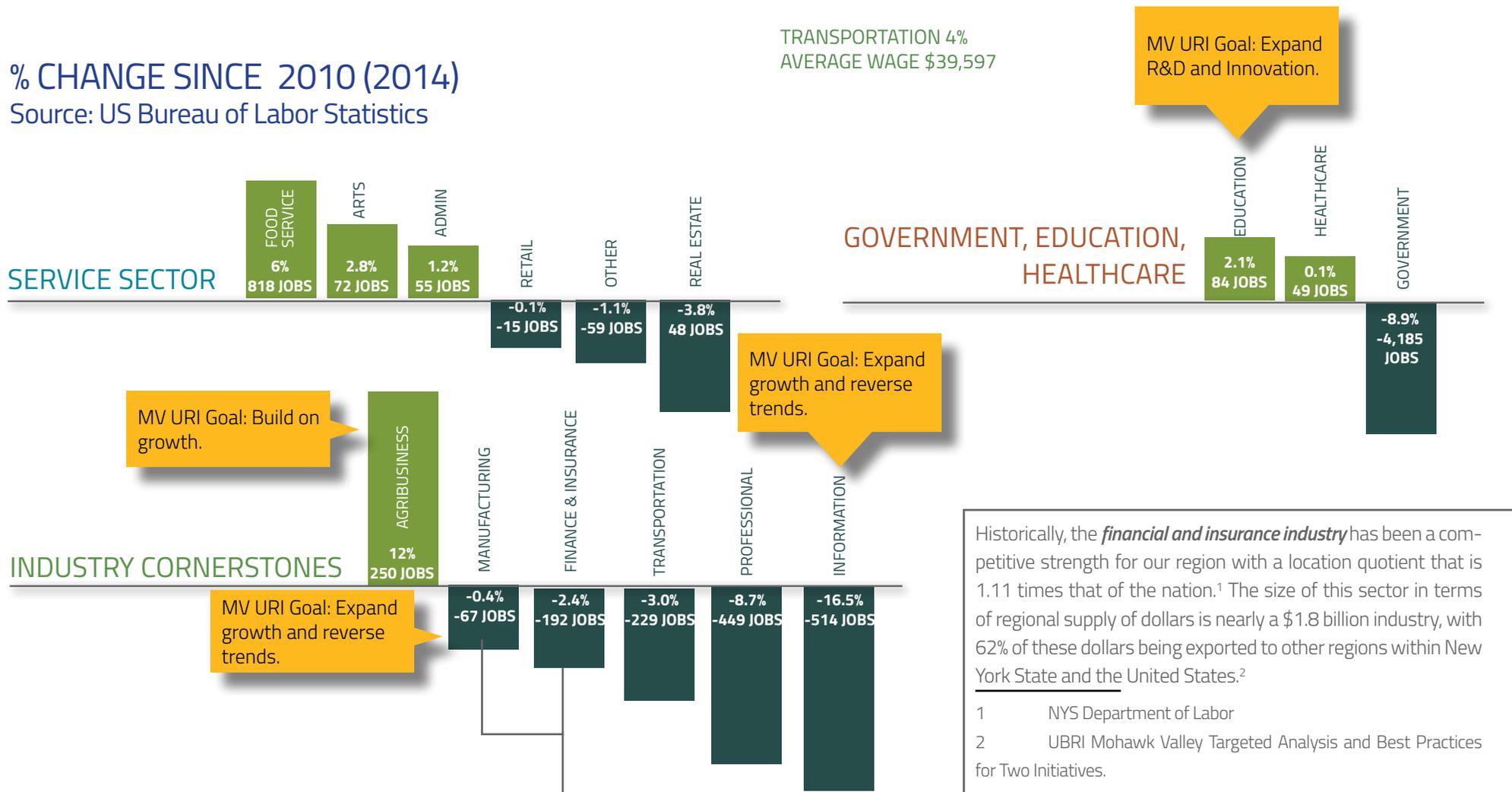
TARGETED SECTORS

The Mohawk Valley's composition of employment while diverse has traditionally lacked economic sectors that can change the region's economic trajectory. Department of Labor data shows that average employment in 2014 was 185,692, a decline of (0.5%) when compared with 2010 average employment levels. This points to a jobless economic re-

covery and reinforces the view that the current composition of the region's employment mix lacks the economic punch that can dramatically change the region's anemic economic performance.

% CHANGE SINCE 2010 (2014)

Source: US Bureau of Labor Statistics



Historically, the *financial and insurance industry* has been a competitive strength for our region with a location quotient that is 1.11 times that of the nation.¹ The size of this sector in terms of regional supply of dollars is nearly a \$1.8 billion industry, with 62% of these dollars being exported to other regions within New York State and the United States.²

1 NYS Department of Labor
2 UBRI Mohawk Valley Targeted Analysis and Best Practices for Two Initiatives.

Companies such as Hartford Insurance, Metropolitan Insurance, BNY Mellon, and Bank of America have undertaken major expansions within the region and complemented the base of well established local employers. (e.g. NYCM, Utica National, Utica First Insurance, Otsego Mutual, Excellus BlueCross BlueShield and Preferred Mutual). What has made the region an attractive location for expansion of finance and insurance functions is primarily driven by the availability of a well-trained workforce, high worker productivity, and affordable labor costs. Metlife and BNY Mellon have consistently cited the productivity of their Utica facilities as among the best. This reputation has been a selling point for other national firms that are looking at the Mohawk Valley region for expansion. In addition, the region's competitive commercial real estate market and overall lower-cost business climate have provided a compelling reason why this region has been successful in attracting growth from this sector, particularly as the industry seeks to shift functions from higher cost metropolitan markets to areas that offer competitive economic advantages.

Additional opportunities are also emerging for additional STEM Intensive Industry growth as BNY Mellon looks to expand its data analytics capability through an innovation center that would be incorporated into the bank's Mohawk Valley operations center; the bank could add new capabilities and functions that would elevate the skill content and increase STEM Intensive Industry employment.

Historically, the Industry is a robust sector of stable employment and good salary and benefits although the region did experience a decline of 2.4% in employment for the period 2010 to 2014 (8,138 jobs in 2010 and 7,946 jobs in 2014). This decline is largely attributed to the financial crisis, the national recession and the effects of regulatory changes.

This sector is an important part of the region's STEM Intensive industry base, and the region has aligned its academic curriculum to support workforce development needs for this industry sector, which is becoming critically more important as it faces a wave of retirements in an already tight labor market. This, coupled with continued technology advancements, will mean a wave of new jobs becoming available with requirements of higher worker skills, increased job responsibilities and higher compensation. This sector also complements the region's efforts to attract population as this sector offers great complementary careers for spouses of core STEM candidates to move into and remain in the area.

In addition the region has a traditional manufacturing base that is heavily specialized and concentrated in primary metals, and fabricated metal working clusters that in 2014 had 5,255 jobs, an increase of 15.5% over 2010. This sector is also a major part of the region's global export economy. Facing similar challenges as workers age out and retire these sectors are looking to invest in new equipment and technologies that will improve their global competitiveness and, in the process, require a workforce with stronger technology skills. The connectivity with the region's education and ecosystem is critical to build a sustainable workforce pipeline that will support and sustain and other manufacturing sectors.

Metals manufacturers are the heart and soul of our vibrant communities. Ilion is Remington Country. Rome is the Copper City. Keymark is Fonda's Main Street employer. They provide employment opportunities in dense, walkable neighborhoods along existing public transportation routes. They encapsulate the pride, grit and attention to detail that defines the people of the Mohawk Valley.

Special Metals and Homogenous Metals are two primary metals manufacturing companies. Both companies supply aerospace and the power generation business. Other key metals companies include Revere Copper, UTC and Worthington Industries. Revere is one of the oldest manufacturing companies in the country, competing in architectural, electrical, telecommunications, and emerging markets. Other regional metals employers include the wire and cable sector with International Wire, Owl Wire and Kris Tech as key regional employers.

SAES Getters in Oneida County works exclusively in shape memory alloys, materials that are capable of remembering a previously memorized shape and can support very high environmental variations, thanks to their super elastic properties and physical resiliency. Likewise, the resiliency and elasticity of our urban employers, particularly our metals manufacturers, will continue to adapt over time and will continue to provide valuable job opportunities in our region's vibrant communities.



"IF WE HAVE JOBS WE WILL BE BETTER POSITIONED TO SOLVE OTHER PROBLEMS - LESS POVERTY, BETTER EDUCATED PEOPLE, BETTER HOUSING, BETTER ACCESS TO HEALTHCARE. OVERALL, THERE WILL BE LESS BLIGHT AND [OUR REGION] WILL BE MORE ECONOMICALLY VIABLE."

- RON CUCCARO, ADJUSTERS INTERNATIONAL

III. THE SOLUTIONS

The Mohawk Valley has many strengths and opportunities that provide a foundation for its economic transformation. The region has also taken a hard look at significant challenges that need to be addressed to mitigate those barriers that could hinder the region's economic revival.

OPPORTUNITIES

Region has **major STEM Intensive Industry initiatives** that are anchoring the regions transformation - with SUNY Poly's investments in Utica, AFRL Rome with cyber, Griffiss as a FAA designated UAS test site and emerging opportunities at Tryon Technology and Incubator Center.

Mohawk Valley is surrounded by institutions of higher education with public and private institutions (excluding CUNY system) of 953,000 students, of which the Mohawk Valley has 3% of the total student enrollment (28,500 students at 3 community colleges, 5 public and private colleges, and 2 specialized schools). **Annually the region has approximately 7,300 college graduates.**

While the Mohawk Valley has lost population, the loss would have been even more staggering but for the region's success as one of the largest refugee resettlement communities in the US. **Utica has resettled over 15,000 refugees from 26 counties since 1981. Amsterdam has seen a 65% increase in Hispanic and Latino population since 2000.**

The region saw a **31% growth in export activity** for the period of 2009-2012. Top five export industries by real export value growth:

- Primary Metal (\$255M)
- Computers and Electronics (\$61M)
- Travel and Tourism (\$58M)
- Food Products (\$35M)

Source: NYS DOL, US Census Bureau

HOW THE REGION IS POISED FOR GROWTH

Where could we target investments?

GROWING AND COMPETITIVE INDUSTRIES

Industries with potential to expand exports to other regions or countries:

Highly Competitive	JOBS	FIRMS	Potential Alignment with REDC Priorities	COMPETITIVENESS			OTHER CONSIDERATIONS	
				Above Avg. Employment Concentration	Wage Concentration	Income Generation	STEM Employment Potential	Above-Average Wages
Hospitals	10,420	12	Healthcare & Medical Svcs	✓	✓	✓	✓	✓
Educational Svcs	4,102	85	Higher Education	✓	✓	✓	✓	✓
Food Mfg	2,282	61	Agriculture & Food Processing	✓	✓	✓	✓	✓
Primary Metal Mfg	2,224	16	Advanced Mfg.	✓	✓	✓	✓	✓
Amusements, Gambling, & Recreation	2,076	153	Tourism	✓	✓	✓	✓	✓
Transit & Ground Passenger Transportation	1,358	42	Transportation & Warehousing	✓	✓	✓	✓	✓
Wood Product Mfg	833	35	N/A	✓	✓	✓	✓	✓
Textile Mills ¹	537	17	N/A	✓	✓	✓	✓	✓
Animal Production & Aquaculture	412	56	Agriculture & Food Processing	✓	✓	✓	✓	✓
Textile Product Mills ²	395	17	N/A	✓	✓	✓	✓	✓
Beverage & Tobacco Product Mfg	289	9	Agriculture & Food Processing	✓	✓	✓	✓	✓

MV URI Goal: Expand growth.

MV URI Goal: Expand growth.

Industries with potential to increase employment and wage concentrations:

Opportunity for Specialization			Potential Alignment with REDC Priorities	COMPETITIVENESS			OTHER CONSIDERATIONS	
Admin & Support Svcs	Support Activities for Transportation	Electronic Markets & Agents & Brokers		Above Avg. Employment Concentration	Wage Concentration	Income Generation	STEM Employment Potential	Above-Average Wages
Admin & Support Svcs	3,992	389	Financial Svcs, Insurance & Real Estate	✓	✓	✓	✓	✓
Support Activities for Transportation	534	33	Transportation & Warehousing	✓	✓	✓	✓	✓
Electronic Markets & Agents & Brokers	321	62	N/A	✓	✓	✓	✓	✓
Forestry & Logging	64	25	N/A	✓	✓	✓	✓	✓
Agriculture & Forestry Support Activities	52	9	Agriculture & Food Processing	✓	✓	✓	✓	✓

MV URI Goal: Building on 'Electronics Market Opportunity' by the explosive expansion in nanotech, cyber, UAS and D2D innovation.

HOW CONNECTIVITY WILL BE INCREASED



CONNECTIVITY

SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH

The Mohawk Valley's composition of employment, while diverse, has traditionally lacked sectors with sufficient critical mass and do not have the punch that can change the region's economic trajectory. Department of Labor data shows that average employment in 2014 was 185,692, a decline of 0.5% when compared with 2010 average employment levels. This points to a jobless economic recovery and reinforces the view that the current composition of the region's employment mix lacks the economic impact that can dramatically alter what has been an economy lacking the fuel to spark growth.

The key to the Mohawk Valley's approach to economic transformation is to pursue strategic investments that will:

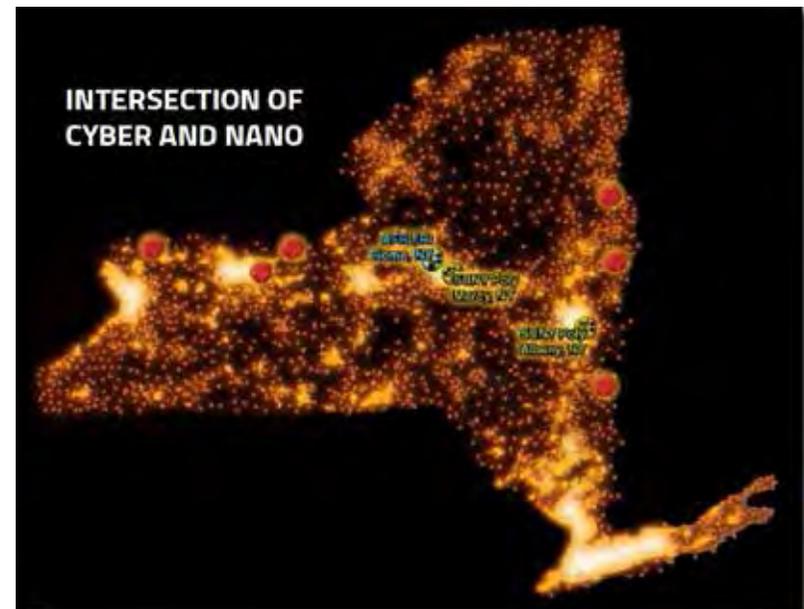
- Increase STEM Intensive Industry growth
- Generate more global exports
- Establish a comprehensive education and workforce development ecosystem that focuses on building STEM related education and training as a continuum from K-12 education to community colleges and continues into undergraduate and graduate education
- Recognizes that the region cannot afford to waste human potential and needs to invest in maximizing the potential of its entire population if it is to build a talent pipeline of blue collar, skilled workers who at least obtain two-year college degrees or successfully complete certificated education programs that will provide skills to support basic levels of STEM Intensive Industries
- Focuses on apprenticeship programs to align people with jobs
- Reclaims the region's urban centers and historic main street corridors to create vibrant communities that can attract and retain population in support of the region's STEM intensive industries
- Leverages the region's key assets and forges cross regional partnerships to exploit economic opportunities to grow and attract private investment in key strategic economic sectors.

For the Mohawk Valley, this URI Strategy focuses on how it can increase connectivity.

Examples include:

- Strengthen cross-regional connections in cyber, invest in the creation of a NYS UAS corridor, and expand and strengthen the Nano corridor linkage with SUNY Poly's CNSE campus with the significant investments in the SiC Power Electronics corridor and in diversification with ams' sensor interface and sensor solutions that serve a wide range of consumer electronic, communications, industrial, automotive, and medical markets
- Apply technology to boost the region's agricultural and tourism economies with application of UAS technologies to benefit agriculture and regional ticketing technologies to capture a larger share of visitor spending within the region
- Align education and colleges to produce the next generation workforce, which is critical as many mainstay industry clusters are facing an imminent retirement cliff and in many of these key industries technology advances require the next wave of workforce to have stronger STEM skills

This is particularly true in traditional industry clusters that have generated employment growth and have been mainstays of the region's economy.





What are the projections for the future job market of key industries in the Mohawk Valley?

PROJECTED ANNUAL JOB OPENINGS BY SKILL LEVEL FOR ALL JOBS AND KEY OCCUPATIONAL CATEGORIES, 2010 - 2020



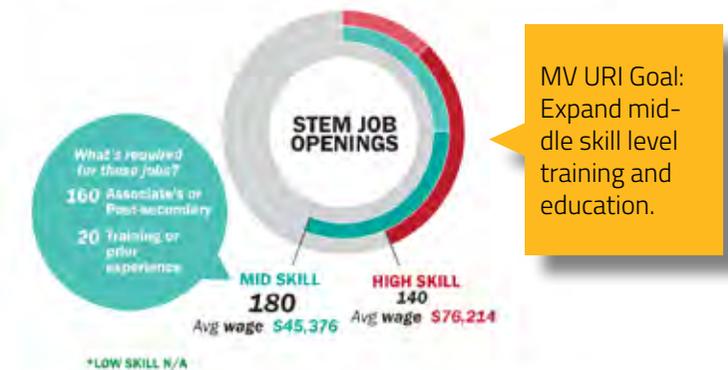
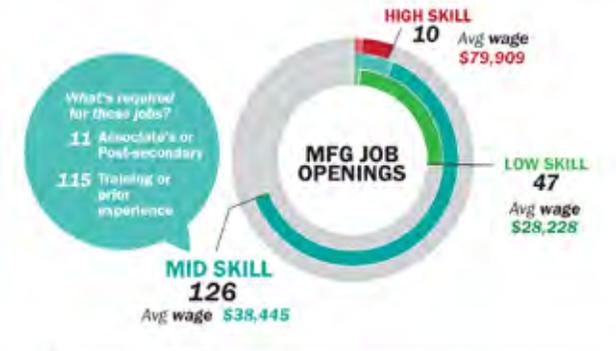
RECENT ECONOMIC TRENDS, 2009-2013

	MOHAWK VALLEY	UPSTATE	NYS	US
Private Sector Employment Growth ¹	-0.7%	2.3%	6.2%	5.6%
Private Sector Total Wage Growth (inflation-adjusted)	-1.3%	1.0%	6.3%	6.7%
Private Sector Average Annual Wage Growth (inflation-adjusted)	-0.6%	-1.2%	0.1%	1.0%
Growth in Private Sector Establishments	-0.8%	1.8%	5.7%	2.3%
Employment growth in STEM-intensive Industries ²	-15.5%	-3.7%	4.0%	6.7%
Export Growth (2009-2012)	31.0%	15.6%	14.8%	25.9%

MV URI Goal: Expand global exports and FDI.

¹Includes 727 jobs (active duty and civilian) reported for fiscal year 2013 at the Air Force Research Lab (AFRL) Information Directorate in Rome, NY. A slightly higher figure of 731 jobs was reported for fiscal year 2014.

Source: NYS Department of Labor; U.S. Bureau of Labor Statistics; Brookings Institution. All wage analysis is performed in 2013 Dollars.



MV URI Goal: Expand middle skill level training and education.

Source: UBRI analysis of data from the NYS Department of Labor and U.S. Bureau of Labor Statistics.

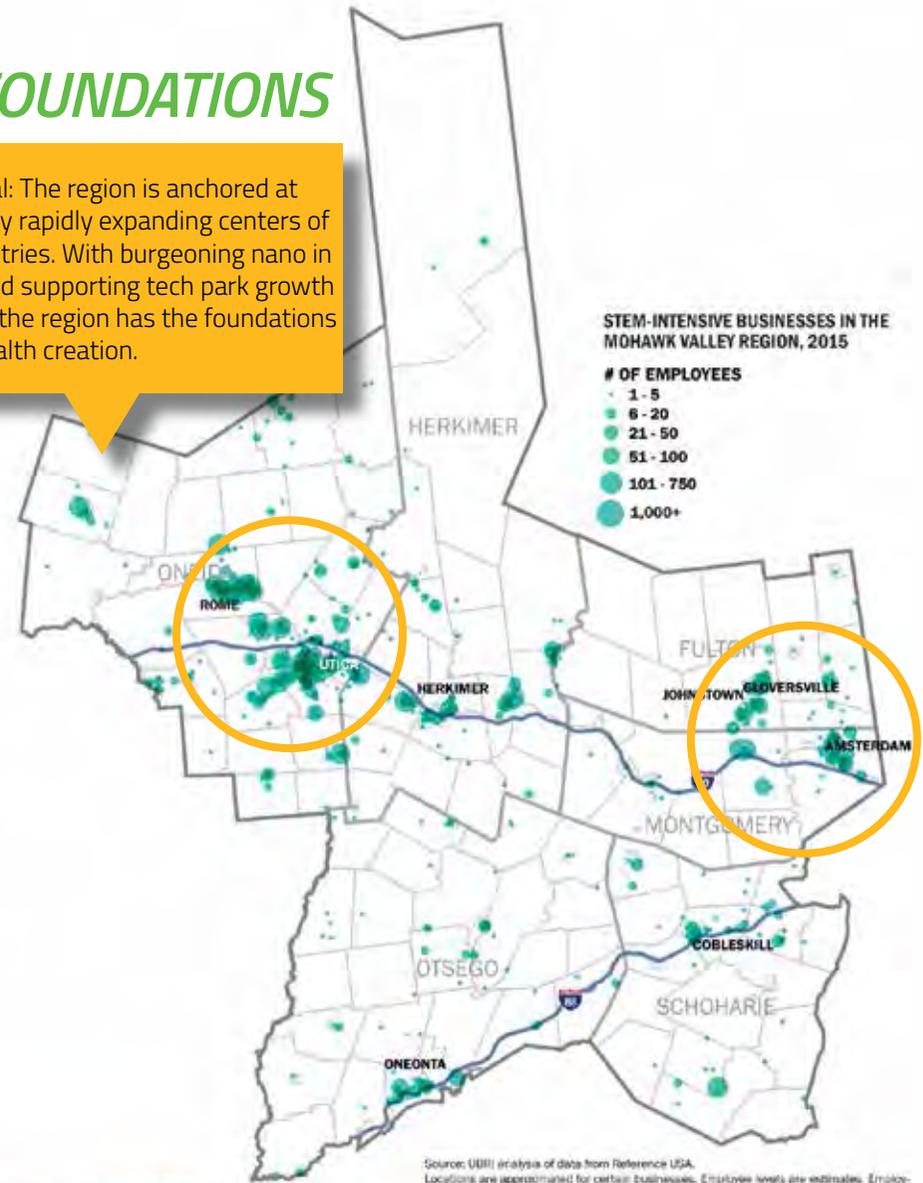


LEVERAGING KEY STEM FOUNDATIONS IN THE REGION

MV URI Goal: The region is anchored at both ends by rapidly expanding centers of STEM industries. With burgeoning nano in the west and supporting tech park growth in the east, the region has the foundations to grow wealth creation.

The center of gravity that will generate catalytic economic growth in the Mohawk Valley region targets strategic investments that will grow the region's STEM Intensive Industries, with particular focus in nanotechnology, cyber technology, unmanned aerial systems, and other advanced industries. These sectors are cornerstones of the region's economy and represent new opportunities for catalytic economic growth that will increase jobs, add net wealth to the region, and increase the region's global export economy.

Proposed signature projects contained in the Mohawk Valley's URI strategy have the potential to increase the region's STEM Intensive Industry jobs based by 25% over the next 10 years and with more than 3,100 direct jobs and "retention" of 1,000 jobs. Reversing the region's loss of STEM Intensive Industry employment with expansion of existing industries and attracting new investment from the region's emerging nanotechnology cluster and supply chain growth from other industries such as in the yogurt and dairy manufacturing.



UB Regional Institute

Source: URI analysis of data from Reference USA. Locations are approximated for certain businesses. Employee levels are estimates. Employment for the Air Force Research Lab at Griffis Business Park, one from an alternate source and may double-count employment numbers from proximate businesses included in the Reference USA database.



As part of this URI Strategy the region will seek to leverage location and proximity to major metro markets, abundant natural resources and rich farmlands, a robust agricultural production ecosystem, and niche market opportunities to generate more economic activity out of its agricultural and agribusiness sectors.

MV URI Goal: Opportunity to reach expanding NYC and global markets.

FARMLAND IN THE MOHAWK VALLEY AS A PERCENTAGE OF UPSTATE'S TOTAL ACREAGE

5%

OF ALL FARMLAND IN UPSTATE NY IS IN THE MOHAWK VALLEY REGION



Source: U.S. Department of Agriculture.



Tourism is New York's third largest industry sector and this Upstate Revitalization plan also focuses on strategies and investments that will gain more economic activity from this sector, with a particular focus on opportunities for promoting the region to international visitors and creating year-round tourist destinations.

MV URI Goal: Continue growth trend.

\$1.67B

MOHAWK VALLEY'S VISITOR SPENDING, 2009-2014

\$1.30B

\$1.40B

\$1.49B

2009

2010

2011

2014

UB Regional Institute

Source: Tourism Economics

The key to the region's success in these areas is focusing on how to build regional workforce and education pipeline that connects people with good paying jobs and, more important increases opportunities for inclusivity so that all segments of the region's population can gain meaningful participation in the next economy. Simply put, the region's economic success is contingent on increasing economic opportunities across the region to reduce poverty and promote inclusivity. Coupled with enabling a larger share of our population to participate in the region's emerging economic development opportunities is the need to build vibrant communities throughout the six-county area to create an environment that will attract investment and population.

IV. STRATEGIES



PUBLIC SURVEY RESPONSES

TOP 3 OPPORTUNITIES

1. EDUCATION, WORKFORCE DEVELOPMENT, WORKFORCE PIPELINE
2. EMPLOYMENT AND ECONOMIC GROWTH IN EMERGING INDUSTRIES
3. DOWNTOWN AND MAIN ST. REINVESTMENT

GREATEST STRENGTH

- 29% PEOPLE
- 31% ENVIRONMENTAL RESOURCES
- 33% TOURISM, ARTS & CULTURE

TOP PRIORITIES & GOALS

1. JOB GROWTH
2. DEVELOPING A SKILLED WORKFORCE
3. FOSTERING GROWTH IN EMERGING INDUSTRIES



DATA-BASED STRATEGIES FOR WEALTH CREATION AND COMPLEMENTARY, CONNECTED COMMUNITY DEVELOPMENT DRIVERS





STRATEGY 1: Grow an innovation network that increases the region’s STEM Intensive Industries by leveraging over \$4 billion of investment over the next ten years.

STRATEGY 2: Build a 21st-century workforce and education network to develop a workforce aligned with the region’s focus on STEM Intensive Industries by doubling the number of STEM jobs by 2030.

STRATEGY 3: Create an entrepreneurial ecosystem by adding 3,000 new firms by 2030.

STRATEGY 4: Increase global exports and attract foreign direct investments by increasing global exports by 50% by 2030.

STEM INTENSIVE INDUSTRIES IMPACTS AND OUTCOMES

GROSS DOMESTIC PRODUCT

40% INCREASE

2013: \$10.2 B
2030: \$14.28B

AVERAGE WAGE

60% INCREASE

2014: \$38,386
2030: \$61,598

GLOBAL EXPORTS

50% INCREASE

2012: \$2.8B
2030: \$4.2B

JOBS

12% INCREASE

2013: 149,887
2030: +17,000

STEM JOBS

50% INCREASE

2013: 9,547
2030: 19,094

PRIVATE WAGE GROWTH

60% INCREASE

2014: \$4.9B
2030: \$7.8B

POPULATION WITH 4-YEAR DEGREES OR HIGHER

31% INCREASE

2013: 21%
2030: 31%

ENROLLMENT AT MVCC & FMCC ADVANCED MANUFACTURING CENTERS

+1500 STUDENTS

UNMANNED AERIAL SYSTEMS

CAPTURE 15% OF NYS PROJECTED UAS ECONOMIC IMPACT
2030: 600 JOBS;
2030 \$60.0 MILLION IN ECONOMIC IMPACT

AMS ECONOMIC IMPACT

\$2 B- 5 YRS
\$4.1B- 10 YRS

AMS NYS ECONOMIC IMPACT- TAXES & GDP

Source: NYS DOL, US Census Bureau, Bureau of Labor Statistics

Shaping the world with sensor solutions



"We want to establish ourselves as valuable contributors in the region, and as an ambassador of the region, we want to manufacture our products right here in Utica. I feel personally that we can add an important piece to the puzzle, which makes this region the world's leading technology hub for microelectronics and nanotechnologies."

- Thomas Stockmeier, Chief Operating Officer, ams



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



WORKFORCE DEVELOPMENT
ADDRESS NEEDS OF INDUSTRY AND CULTIVATE
TALENT



COMMUNITY REINVESTMENT
HOW PHYSICAL FABRIC WILL CONTRIB-
UTE TO SUCCESS



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1



GLOBAL ECONOMY
GLOBAL MARKETING & EXPORTING

STEM INTENSIVE INDUSTRIES

SIGNATURE PROJECTS

ams Wafer Fabrication Expansion/GE Global Research SiC Power Electronics Packaging Center

AGT Services

PAR Technology

New Age Renewable

Indium

Griffiss UAS Technology Center

FSMC – SUNY Poly Innovation Acceleration Center

FSMC – SUNY Poly Workforce Development Center

MVCC Advanced Manufacturing Institute

CFA Projects:

FMCC Global Village

Robison & Smith

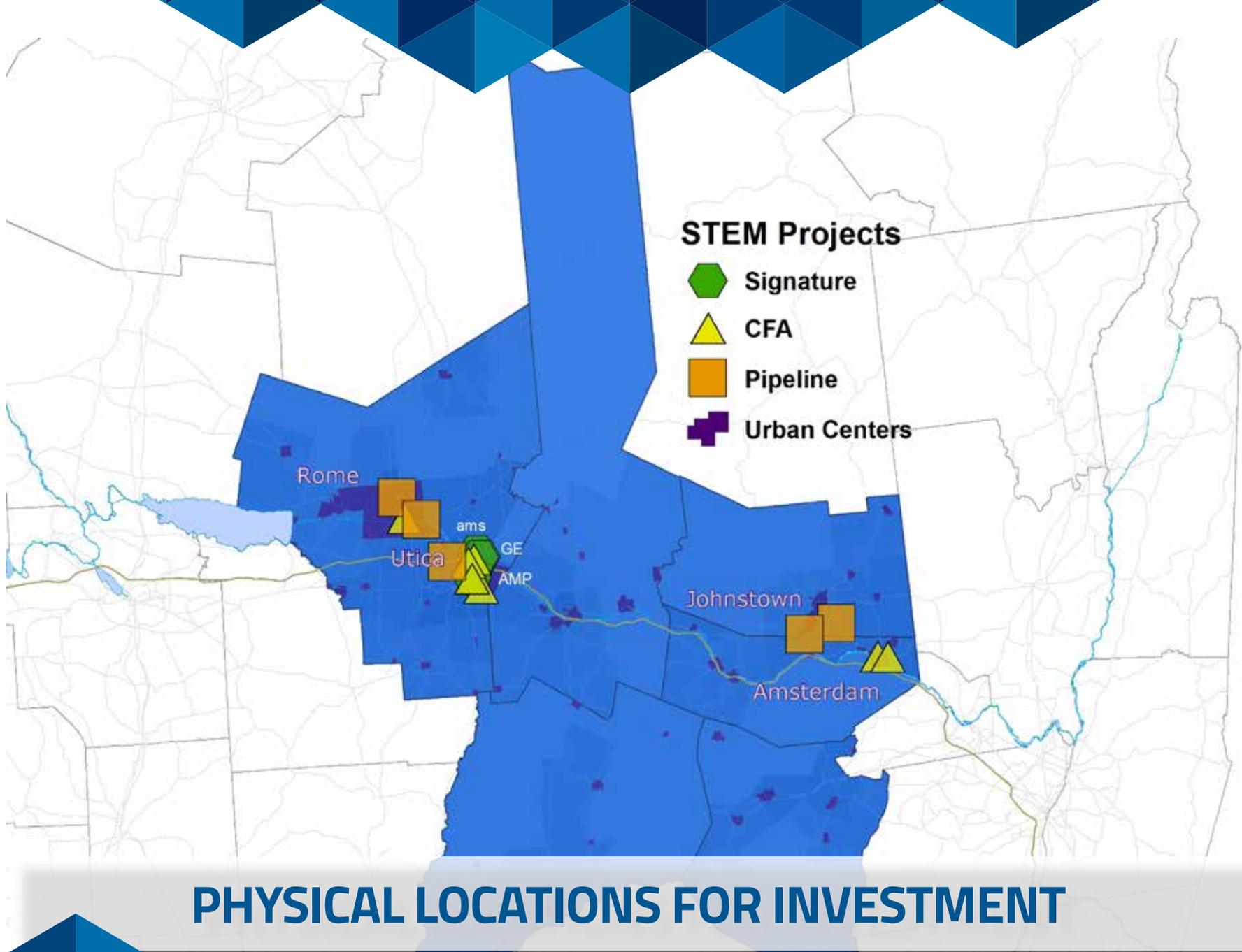
Nathan Littauer Hospital Kidney Dialysis Center - Gloversville

Nathan Littauer Hospital Primary Care - Perth

Nathan Littauer Hospital Primary Care - Fonda

Nano Utica - home to GE's SiC Power
Electronic's Packaging Center





STEM INTENSIVE INDUSTRIES

Path to Readiness



READINESS
READINESS TO IMPLEMENT STRATEGIES

The Mohawk Valley has gone through decades of economic change that shook the pillars of its economy. Despite being subjected to the economic adversity that plagued most of Upstate New York over the past half-century, this region refused to give up. Instead, it has established strategic initiatives that will help it regain its economic footing and lead it to revitalization and renewal.

Through several foundational investments - some funded in prior REDC rounds - the Mohawk Valley stands at the vanguard of a new era of economic opportunity. The cornerstone of this renewal builds on targeted investments in STEM Intensive Industries and economic clusters that offer not only the best prospects for success but are industry sectors that have the strongest direct economic impact within a regional economy. The Brookings Institution's report, "America's Advanced Industries: What They Are, Where They Are, and Why They Matter" (February 2015), noted the importance of the advanced industries sector as the highest-value part of the national economy and the best opportunity for building an innovative, inclusive and sustainable growth economy.

The Mohawk Valley's transformation is imminent; URI funding is the tipping point that will change the region's economic trajectory. What makes the Mohawk Valley's URI strategy compelling is that it is connected to a solid foundation largely fortified by recent transformational investments announced at SUNY Poly's Utica campus in semiconductor and packaging technologies; and the approval of a medical cannabis license to Empire State Health Solutions for the Tryon Technology Park and Incubator center. The region's potential is grounded on solid business commitments, coupled with strategic enabling investments, that will help build long-term sustainability and create the momentum for attracting additional private investment that will generate catalytic economic change.

TRYON TECHNOLOGY PARK



FMCC CLEAN ROOM





STEM INTENSIVE INDUSTRIES Path to Readiness

The basis for the Mohawk Valley's path to readiness is evidenced by tangible business commitments: several of these have immediate upside economic impact; others are part of an emerging ecosystem that will produce sustainable long-term positive economic gains based on the following pillars.

Expands New York's nanotechnology ecosystem with the attraction of semiconductor manufacturing at SUNY Poly's Marcy Nanocenter site.



Builds a critical hub for New York's emerging Silicon Carbide (SiC) Power Electronics Corridor.



Makes strategic investments in other key regional economic clusters such as the region's power turbine generation cluster.



Reverses the exodus of STEM Intensive Industries by encouraging key existing employers to reinvest in the Mohawk Valley.



Fosters cross regional partnerships that are building a corridor in Upstate New York.

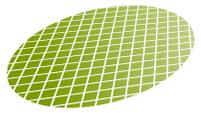


Solidifies a workforce development pipeline using the region's colleges and universities for building the region's STEM Intensive Industry workforce.



Establishes SUNY Poly's Innovation Acceleration Center - Innovation Network for Technology Convergence Facility to support the region's investment in STEM Intensive Industries and support new R&D initiatives.



MARCY 
Nanocenter at **SUNY Polytechnic Institute**

am 

*"The Mohawk Valley is beginning an economic revolution around nanotechnology, and I am excited to see the region take off and thrive, both today and in the years ahead."
- GOVERNOR ANDREW CUOMO*

SUNY POLYTECHNIC INSTITUTE



SUNY POLYTECHNIC INSTITUTE

FULTON MONTGOMERY
COMMUNITY COLLEGE

The Mohawk Valley's Upstate Revitalization Strategy builds on these and other planned investments through core connections that reinforce the critical importance of a comprehensive strategy for economic prosperity premised on:

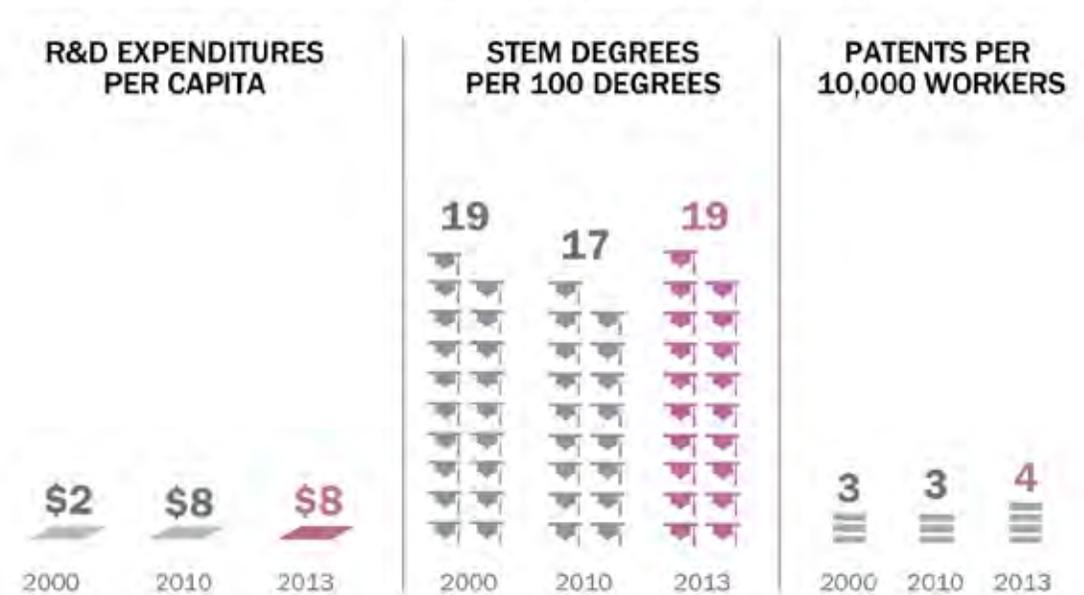
- Building the region's workforce development pipeline.
- Enhancing the vibrancy of the region's cities and population centers to create an environment that reclaims population and will help attract and retain skilled workers.
- Fostering an entrepreneurial culture that will stimulate innovation to grow ideas and businesses.
- Encouraging modernization that will align the region's local governments and civic institutions within metrics for better outcomes in a 21st-century economy.
- Establishing new and strengthening existing global connections that will expand export markets for the region's STEM Intensive Industries and market the region's strategic assets and competitive strengths for attracting foreign direct investment.

Strengthening other critical STEM Intensive Industries by:

- Leveraging AFRL Rome's C4I Directorate with plans to expand the region's cyber and C4I industry through new initiatives that extend beyond the defense industry;
- Forging a critical university partnership with Masonic Medical Research Laboratory and its potential growth with opportunities for medical innovation;
- Transforming the former Tryon Juvenile Detention Center into Tryon Technology Center with Empire State Health Solutions using a portion of the site for a pharmaceutical manufacturing project that will manufacture medical cannabis; and,
- Creating strong core connections throughout the six-county region by positioning strategic sites for development that will help foster and attract STEM Intensive Industry growth and other key industry sectors.

The true measure of the region's economic success is to ensure that the region's economic prosperity is extended throughout all six counties and that the region targets hard-to-place workers so they can achieve meaningfully participate in the region's economic transformation.

How has innovation in the region changed over time?



Source: National Center for Education Statistics; U.S. Patent Office; U.S. Census Bureau.

UB Regional Institute

STEM INTENSIVE INDUSTRIES

KEY FINDINGS



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



GLOBAL ECONOMY
GLOBAL MARKETING & EXPORTING



LEVERAGING OTHER STATE INITIATIVES
USE OF NYS PROGRAMS TO ENHANCE URI FUNDS

KEY FINDING #1: EXISTING COMPETITIVE STRENGTHS AND NEW EMERGING OPPORTUNITIES IN CYBER, NANO, UAS AND OTHER ADVANCED INDUSTRIES PROVIDE AN UNPARALLELED OPPORTUNITY TO REDEFINE THE MOHAWK VALLEY'S ECONOMY.

The Mohawk Valley region had 9,547 STEM-intensive industry jobs (2013), about 6.5 percent of the total number of jobs. Compared to the Upstate region the Mohawk Valley represents approximately 3 percent of total STEM-intensive industry jobs. The recession has seen a drop of 15.5% of employment across all STEM-intensive industries

with a loss of 1,751 jobs between 2009 and 2013. This is a larger percentage decline when compared to Upstate, which experienced a 3.7 percent drop for the same period, and is even more dramatic when compared to increases of 4.0 percent in NYS and 6.7 percent for the United States.

STEM jobs represent a key economic driver with a strong multiplier effect that contributes to economic success in other areas necessary for building a sustainable regional economy.¹ The region's prospects for economic success are based on its ability to foster the creation of higher-paying middle-skill STEM jobs.

The largest job declines within the Mohawk Valley (2009 through 2013) were in insurance, metals production, and manufacturing and precision metalworking. Additional cuts were noted in other regional employers including transportation equipment manufacturing, medical device manufacturing, and other basic industries. This may be indicative of a maturing of these industry sectors, which may translate

1 Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015

into fewer future opportunities for robust job growth, but it also offers an opportunity to connect many of the region's existing employers to our academic institutions to help them engage in process improvements that will make them more competitive, attract new market opportunities for products and services, and invest in innovation to generate new products and services that will enhance their competitiveness and position them for new market opportunities.

STEM Industry investments by existing employers (PAR Technology, Indium, Robison and Smith, and AGT Services) and new business investments (ams, GE and New Age Renewables) are opportunities to align the URI Plan to assist these sectors with innovation investments that will expand markets or create new core capabilities that do not currently exist.

Targeted investments to expand global exports, invest in plant modernization and new technological advancements, and support opportunities for innovation can help these concentrations maintain a competitive position within the Mohawk Valley region.

SEMICONDUCTORS

The US Semiconductor industry accounts for a quarter of a million direct jobs and over a million additional indirect jobs.² The global semiconductor industry is a key growth sector in the global economy. Worldwide semiconductor industry sales are forecast to reach \$347 billion in 2015, \$359 billion in 2016 and \$370 billion in 2017.³ This is a dynamic industry with potential to generate extraordinary economic results. Sensors and MEMS in particular are one of the faster growing semiconductor segments driven by the wireless, mobile and Internet of Things (IoT) markets.

The IoT market is expected to be particularly robust. SEMICO Research estimates that

2 U.S. Bureau of Labor Statistics and SIA estimates

3 World Semiconductor Trade Statistics (WSTS) and SIA Estimates

by 2020 the number of connected intelligent devices will reach an installed base of 36 billion units. Intel is even more bullish and predicts that total connected devices will approach 50 billion units, and will consume 44 zettabytes of data. **ams wants to be seen as the largest focused sensor semiconductor company, and it hopes to leverage the smartphone-based IoT sensors frenzy to grow significantly.**⁴

CYBERSECURITY AND C4I TECHNOLOGIES

Cybersecurity is a growing national defense and industry concern in terms of vulnerabilities and security threats to information systems and critical infrastructure systems. The global cybersecurity market is projected by "Markets and Markets" to grow from \$106.32 billion in 2015 to \$170.21 billion by 2020, at a Compound Annual Growth Rate (CAGR) of 9.8%. Explosive increase in cyber threats is backed by factors such as increasing mobile and web usage and social media, among others. Also, the projected growth of the Internet of Things (IoT) is another major factor that has invited cyber threats to various sensors, terminals, and end devices. The Cyber Research Institute notes that more than one million adults are becoming cybercrime victims each day and the total cost of cybercrimes is \$411 billion dollars – more than the value of global drug trafficking.

Former CIA Director Leon Panetta said that "the next Pearl Harbor could very well be a cyber-attack that cripples our government, our security, and financial systems." Governor Cuomo noted the increasing vulnerability and exposure that exists within New York State when he said: "Recent reports of cyber-attacks on governments and corporations are further evidence that our physical and virtual worlds are increasingly intertwined and the need to guard against these threats is urgent." Five of the largest data breaches in New York State occurred in the past three years.

In its 2015 REDC Progress Report, the MVREDC selected cybersecurity as its regional industry cluster. The reasons for this selection included industry forecasts of dramatic growth given the expanding intrusions and compromises that are occurring throughout our economy. In addition, the Mohawk Valley region, along with other parts of Upstate New York, has competitive strengths and capabilities that can be leveraged to produce more economic growth.

UNMANNED AERIAL SYSTEMS

The FAA designation of Griffiss International Airport as one of the six national test sites for UAS technologies for integration into the National Air Space System is an opportunity to build a new industry cluster that represents a "Kitty Hawk" moment in the growth of the aviation industry.

⁴ "Business booms under fab lite model," EETimes, September 25, 2014

While there are multiple uses for UAS in the National Air Space System, industry analysts believe that precision agriculture and public safety are the most promising commercial and civil markets. Together, these two markets are believed to comprise 90% of the known potential markets for UAS. Other markets include wildlife mapping, agricultural monitoring, disaster management, thermal infrared power line surveys, telecommunication and aerial imaging and mapping.

An Economic Impact Study by the Association of Unmanned Vehicle Systems International (AUVSI) in 2013 concluded the following:

- The economic impact of the integration of UAS into the NAS will total more than \$13.6 billion in the first three years of integration and will grow sustainably for the foreseeable future, expanding to more than \$82.1 billion between 2015 and 2025
- Integration into the NAS will create more than 34,000 manufacturing jobs and more than 70,000 other new jobs in the first three years
- By 2025, total job creation nationally is estimated at 103,776

The manufacturing jobs created will be high-paying middle-wage jobs and require technical baccalaureate degrees. Tax revenue to the states will total more than \$482 million in the first 11 years following integration (2015-2025).

Within New York State, AUVSI's Economic Impact Report projects that for the period between 2015 and 2025, the UAS industry will generate 3,363 direct jobs with a total economic impact of \$2.66 billion, and the industry will generate \$28.05 million in annual taxes.



"TOGETHER WITH NEW YORK STATE AND SUNY POLYTECHNIC INSTITUTE IN ALBANY, AND NOW UTICA, WE ARE CREATING A SILICON CARBIDE CORRIDOR THAT WILL BE THE EPICENTER OF THE NEXT REVOLUTION IN POWER. IN UTICA, IT WILL EXPAND THE FOCUS FROM COMPUTER CHIP COMMERCIALIZATION TO CREATING THE FIRST U.S. BASED POWER ELECTRONICS MANUFACTURING CENTER WITH GE'S SILICON CARBIDE TECHNOLOGY!"

- MARK LITTLE, SENIOR VICE PRESIDENT AND CTO, GE



KEY FINDING #2: THE UTICA ROME MSA IS ACHIEVING MAJOR TRACTION IN THE DATA TO DECISIONS (D2D) INITIATIVE THAT WAS INCLUDED IN THE BROOKINGS METROPOLITAN BUSINESS PLAN (MBP) FOR THE CENTERSTATE NEW YORK AGENDA FOR ECONOMIC OPPORTUNITY.

The Utica-Rome MSA was one of the three key metropolitan areas identified in the CenterState New York Metropolitan Business Plan Agenda (November 2013)¹. The MBP identified one of the top technology opportunities as a focus on a segment of STEM Intensive Industry jobs in technologies that create and build systems or components for the emerging Data to Decisions or D2D sectors². The D2D targeted sectors include digital electronics, primarily in defense and aerospace applications; equipment to monitor and control energy use and environmental quality in buildings; diagnostics and remote monitoring technology for healthcare; and information technology for data management, analysis, transmission, and security.

¹ Brookings MBP for the CenterState New York Agenda for Economic Opportunity includes 12 counties in Upstate New York, including the Syracuse MSA, Ithaca MSA and Utica-Rome MSA.

² Brookings Metropolitan Business Plan, CenterState New York Agenda for Economic Opportunity – Executive Summary (November 2013).

Since the issuance of the Centerstate MBP and the D2D recommendations in 2013, the Mohawk Valley and the Utica-Rome MSA in particular achieved major successes with:

Creation of SUNY Polytechnic Institute that gives the Mohawk Valley connection to the world-class and cutting-edge research capabilities at SUNY Poly’s CNSE campus.

Governor Andrew Cuomo’s game changing economic development announcement that GE’s Global Research Center, ams and SUNY Poly will invest \$4 billion and create more than 4,000 new direct and indirect jobs over the next ten years at SUNY Poly’s Utica campus.

MVCC proposal to establish the Mohawk Valley Advanced Manufacturing Institute to double down on its commitment to build the region’s Cyber-Nano-UAS workforce with expanded training and academic programs in UAS, the colleges Mechatronics 12-month Certificate Program, and other STEM-related training programs.

Griffiss UAS Technology Center as one of the six FAA-designated national test sites for commercialization of UAS systems into US commercial airspace.

Announcement by SUNY Poly of its plans to build the Innovation Acceleration Center to extend an advanced manufacturing ecosystem through creation of an integrated research, development, prototyping, and educational training center, with major commitments to target hard-to-place workers, with particular emphasis on refugee populations and telepresence training with Fort Drum veterans.

New business opportunities to leverage the region’s Cyber and C4I capabilities to address the growing threat of cyber threats to critical information and infrastructure systems of government, not for profit institutions and businesses.



BROOKINGS

KEY FINDING #3: THE MOHAWK VALLEY NEEDS TO CHANNEL MORE OF ITS POPULATION INTO AN EDUCATION AND WORKFORCE DEVELOPMENT ECOSYSTEM THAT EXPANDS THE REGION'S WORKFORCE PIPELINE TO SUPPORT STEM INTENSIVE INDUSTRY JOB OPPORTUNITIES.

STEM jobs for workers without 4-year college degrees pay 10% higher than jobs with similar educational requirements

Approximately 30% of all STEM jobs are blue-collar jobs

STEM career occupations comprise a large share of middle skill jobs that do not require four-year or advanced degrees

STEM jobs are a strong indicator of economic performance ranging from innovation to employment

The Hidden STEM Economy: Metropolitan Policy Program at Brookings²

While the Mohawk Valley is looking to increase the percentage of its population with four-year and advanced college degrees, a critical part of its strategy should be to also create middle-skill jobs for blue-collar workers, jobs that do not require a four-year or advanced college degree and opportunities for the region's 94,000 working individuals whose incomes are less than 200% of the federal poverty limit. UBRI projects that for the balance of the decade (not including the exciting new STEM Intensive opportunities that have been announced), the region will need to fill 1,810 new jobs that fall within middle-skill occupations (do not require four-year college degree or higher). More than two-thirds of these jobs are in manufacturing and STEM Intensive Industries.

Fewer Mohawk Valley residents age 25 and older have attended at least some college, when compared to their peers in the rest of Upstate, New York taken as a whole, and the United States¹. Lower rates of college educational attainment tell just part of the story. A more disturbing trend adding to the region's economic challenges are high rates of poverty and the large number of hard-to-place workers, lower 4th and 8th grade math and science proficiency, and lower rates for high school students that receive Regents diplomas with advanced designations.

These indicators are in addition to demographic trends that show that the size of the region's workforce is the second smallest in Upstate New York³. Even with an improving national economy, the Mohawk Valley has experienced a jobless recovery

with a net loss of jobs from its pre-recession period.

These indicators suggest that the region will have a more difficult time sustaining a workforce development pipeline that can meet future employment demands, particularly with looming "retirement cliffs" that will adversely impact many major employers. This also reflects potential challenges that the region will face meeting emerging economic opportunities in a knowledge-based economy. The UBRI Regional Assessment notes the need for the region to fill on average 1,810 middle-skill jobs expected to be created over the balance of this decade, with more than two-thirds of these jobs in manufacturing and STEM-related fields.

The Mohawk Valley will need to attract workforce from adjoining regions to meet likely demands for STEM Intensive workers. This is possible given the wage salaries for many of the STEM Intensive Industries that are being sought. A Regional Workforce Analysis completed by the Site Selection Group (November 2013) found that the effective labor shed for the Marcy Nanocenter site is a 90-mile radius with a total population of 2.9 million, and a nearly 1.5 million person labor force. However, the region will need to invest resources and intensify efforts in boosting the skill sets of its existing population base to demonstrate that it can develop most of its STEM Intensive workforce from within. This is essential to produce a sustainable economic development strategy that will add net regional wealth and support other essential redevelopment needs and reap the full benefits within the region from these transformational opportunities.

- Oneida-Herkimer-Madison BOCES hosts OHM P-TECH, and partners with Mohawk Valley
- 3 Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015

1 Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015

2 the Hidden Stem Economy The Hidden STEM Economy, Jonathan Rothwell, Metropolitan Policy Program at Brookings (June 2013)

STEM INTENSIVE INDUSTRIES KEY FINDINGS

To build a sustainable education and workforce development ecosystem the Mohawk Valley is targeting key strategic investments in K-12 STEM Education/P-Tech Programs, Community Colleges with Associates and Certificated programs and at its four year academic institutions in programs and degree offerings that are aligned with STEM Intensive Industries:

K-12 EDUCATION



Community College. This program is focused on career opportunities in semiconductor manufacturing and advanced manufacturing

- Hamilton-Fulton-Montgomery BOCES hosts HFM P-TECH, and partners with Fulton Montgomery Community College. This P-TECH is aligned in three areas, which include advanced manufacturing, business and healthcare.
- Herkimer BOCES hosts VP-TECH and partners with Herkimer County Community College. VP-TECH focuses on quality assurance manufacturing.

Each of these P-TECH programs receive \$2.4 million in funding to launch this innovative education program. The Mohawk Valley Region believes that additional P-TECH designations should be sought in other BOCES districts to expand the region's coverage with approved P-TECH programs and looks to explore opportunities to connect students into internships and apprenticeship programs to better connect our students with local employers.

COMMUNITY COLLEGE



- Fulton Montgomery Community College's (FMCC) Electrical Technology Programs include a teaching cleanroom that prepares students for opportunities to work in a cleanroom environment at CNSE, Global Foundries and emerging opportunities in Utica.
- Mohawk Valley Community College (MVCC) has established several STEM education curricula and also has an approved semiconductor training program and advanced industries with its FAB Lab programs, which also includes a 12-month certificate in Mechatronics to meet the employment needs for New York's growing cluster of semiconductor and nano-electronics companies this is in addition to programs for the FAA recognized Airframe and Power Plant Program and the college's pending UAS programs.
- Herkimer County Community College (HCCC) and the New York Power Authority (NYPA) recently formed a partnership to establish a training program for NYPA employees, and HCCC has programs that are supporting information technology needs for area employers. HCCC is also exploring opportunities on how it can meet requirements for a growing nanotechnology industry cluster in the region.

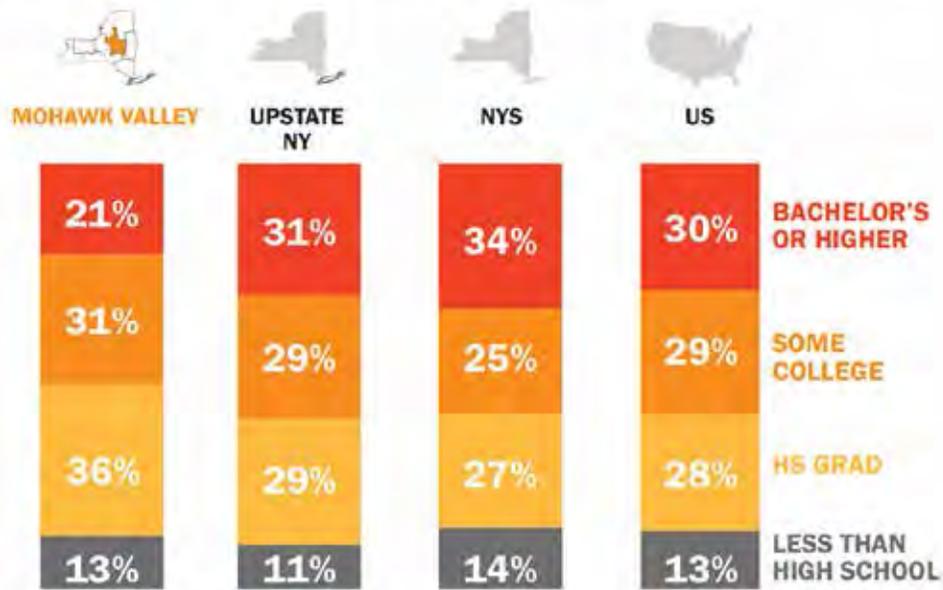
FOUR-YEAR COLLEGE



- SUNY Poly's proposal for establishing a Workforce Innovation Center includes full telepresence capabilities and will be designed and constructed in cooperation with the National Science Foundation's Northeast Advanced Technological Training Center (NEATEC), Bridge360, a Texas-based education and training firm, and SUNY Poly faculty working directly with the Mohawk Valley's refugee community, veteran populations from the 10th Mountain Division at Fort Drum, and other hard-to-place workers. SUNY Poly has expanded its engineering degree offerings to meet growing demands for nanotechnology, cyber and advanced manufacturing disciplines.
- Utica College has earned a place among nationally recognized undergraduate and graduate programs in both cybersecurity and financial crime. Utica College was the first institution in the nation to earn two elite cybersecurity designations: the National Security Agency/Department of Homeland Security, Center of Academic Excellence in Cyber Defense Education and the Defense Cyber Crime Center, Center of Digital Forensics Academic Excellence and the college has upgraded its labs to support STEM Related education.

How educated is our population?

EDUCATIONAL ATTAINMENT, POPULATION AGE 25+, 2013



Source: U.S. Census Bureau.

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FMCC CLEAN ROOM



HFM BOCES



UTICA COLLEGE





STEM INTENSIVE INDUSTRIES KEY FINDINGS

KEY FINDING #4: THE REGION MUST BUILD A CULTURE OF INNOVATION AND ENTREPRENEURSHIP THAT WILL STIMULATE ENTREPRENEURSHIP AND GROWTH FROM WITHIN THE REGION.

The region's rate of innovation is less than it should and can be. While the Mohawk Valley possesses many innovation-based assets, the region lags behind other Upstate regions and the nation in many innovation benchmarks. Despite the Mohawk Valley having 6% of Upstate's population and 4.7% of Upstate's economy, the region produced 4% of Upstate

NY's new firms, 3.9% of its total R&D expenditures, and less than 1% of its total patents from 2009–2013.

Additionally, according to *Innovation in American Regions*, the Mohawk Valley has an innovation index of 87.2, compared to Upstate's index of 102.6. According to U.S. Cluster Mapping, the Mohawk Valley experiences only \$11 per \$10,000 GDP in Venture Capital.

The region's lagging innovation index was caused in part by the loss of STEM jobs, a lower rate of patent activity due to the region's lack of a university center, and limited access to seed financing and venture capital funding. There are however, emerging opportunities: the creation of incubators at the Griffiss Institute and the designation of the thINCUBATOR in Utica, development of the SUNY Cobleskill Ag Regional Dairy Processing Center and Hartwick's Craft Food and Brewing Center, and AFRL's investment in the Commercialization Academy to exploit the lab's patent portfolio—all are opportunities to boost the region's culture of innovation and entrepreneurship.

The MVREDC's 2015 Progress Report also recommends funding to designate an incubator at SUNY Cobleskill as part of its Ag Regional Dairy and Processing Center to support more agricultural business development initiatives. The URI offers an opportunity to connect these incubators and support systems to entrepreneurs across the region.

The region's colleges have less than one (1) percent of the annual R&D spending across Upstate. This is likely to change with the merger of SUNY CNSE and SUNYIT that created SUNY Polytechnic Institute. SUNY Polytechnic's CNSE campus is a major center of R&D and is ranked as one of the top universities in the nation for corporate funded R&D in nanotechnology. SUNY Poly's Utica campus is expected to establish graduate degree engineering programs and build R&D capacity to support academic and corporate partnerships with semiconductor and Nano electronics companies that are locating at the Utica campus. This includes a planned Simulation Lab with Indium and the Advanced Manufacturing Performance Center that will involve SEMATECH, Edwards Vacuum, Inficon and other industry partners. SUNY Poly is also looking at convergence opportunities between Nano-Cyber and UAS Systems which will also help boost the region's rate of innovation and R&D capabilities.

The region has taken significant steps to focus on its need to build a stronger culture of innovation and entrepreneurship. Examples of where the region is building institutional capacity to drive more innovation and new business-start up opportunities include:

- MVCC's creation of the thINCUBATOR and its hot spot designation by New York State in the 2013 REDC round. The thINCUBATOR is working to support small business start-ups and boost the region's rate of innovation. As the region's hot spot, the thINCUBATOR can partner with other academic institutions to support innovation and entrepreneurship opportunities.

- START UP NY locations at MVCC, FMCC, HCCC, SUNY Poly, SUNY Cobleskill and SUNY Oneonta. In addition, pending applications through MVCC are under review for portions of Griffiss International Airport to support the airport’s technology focus in aviation, UAS systems and supply chain nano growth.

- The NUAIR Alliance, based out of Griffiss International Airport in Rome and comprising 70 member private businesses, public entities, and academic institutions, was named in 2013 as the managing partner of one of the nation’s six UAS research and test sites. This partnership creates a strong network that enables innovation and research in the UAS field, which will be essential in the growth of the industry in both the Mohawk Valley and across the state. The Griffiss Test site has been tasked to focus on “sense and avoid” technologies and NUAIR, New York State along with Oneida County have made strategic investments to support development of a ground-based test instrumentation range and other airport infrastructure required by national and international UAS companies.

- A Project Intermediary Agreement between the Griffiss Institute and AFRL’s C4I Directorate to support tech transfer, operation of the Commercialization Academy to identify commercialization opportunities from patents in AFRL’s patent portfolio, and facilitate the lab’s educational partnerships that have faculty from more than 150 universities and 50 companies assign faculty and staff to conduct research at AFRL’s Rome site. The Griffiss Institute is also a NYS-funded business incubator and is working to support cyber, C4I and other technology companies and with prior REDC funding developed a high-performance computing center to link Griffiss with super computers at partner research universities.

- Creation of the Cyber Research Institute (CRI) to focus on R&D partnerships with universities and colleges on cybersecurity problems and identifying opportunities to align the region’s cyber assets to support business investment and business expansion opportunities, particularly in transitioning the region’s strong C4I and cyber capability from defense to non-defense realms. The CRI is working with Utica College and SUNY Poly on potential cyber partnerships that will boost the region’s cyber capabilities and further leverage the expertise of AFRL Rome.

How much does the region contribute to innovation in Upstate?

BY THE NUMBERS	MOHAWK VALLEY	AS % OF UPSTATE TOTAL
PATENTS 2009-2013	228	0.9%
NUMBER OF NEW FIRMS, 2014	770	4%
EMPLOYMENT AT YOUNG FIRMS (0-5 YEARS), 2013	9,670	4%
DOCTORATES, 2013	241	5%
STEM DEGREES, 2013	848	4%
R&D EXPENDITURES, 2013	\$3.8M	0.2%

Source: U.S. Patent and Trademark Office; U.S. Census Bureau; National Center for Education Statistics; Reference USA.

UB Regional Institute



**STEM INTENSIVE INDUSTRIES
KEY FINDINGS**

KEY FINDING #5: TO BUILD CORE-CONNECTIONS WITH THE BALANCE OF THE SIX-COUNTY REGION, INVESTMENTS SHOULD BE AVAILABLE FOR REGIONAL STRATEGIC SITES AND CRITICAL INFRASTRUCTURE TO SUPPORT REGION'S STEM INTENSIVE INDUSTRY JOB GROWTH WITHIN OTHER PARTS OF THE REGION AND LEVERAGE SUCCESSES UNDERWAY IN ONEIDA COUNTY IN NANOTECHNOLOGY FOR SUPPLY CHAIN INDUSTRY GROWTH.

Oneida County contains more than half of the region's population and has the largest share of the region's economy. The county is fortunate to have critical investments in several strategic sites, with the two largest transformational economic development anchors being Griffiss Business & Technology Park and the Marcy Nanocenter site at SUNY Polytechnic Institute's Utica campus. Oneida County also has opportunities to market key vacant and underutilized buildings and sites that are ripe to support STEM Intensive Industries and Supply Chain growth within existing industrial parks, key industrial buildings that are vacant and or facilities and sites that can be re-purposed.

A "catch-22" situation exists on several of these sites: they cannot achieve shovel-ready status since the project sponsor cannot secure a 5:1 match as required under the REDC competition. URI funding is seeking 5:1 leverage ratios in the aggregate. Some of the proposed transformational investments have leverage ratios that far exceed 5:1 and therefore the MVREDC can consider a lower leverage ratio to support targeted phased investments to help jump start strategic site development opportunities that position the Mohawk Valley for economic development opportunities at sites that appear to be the most competitively viable and likely to secure end user activity aligned with the MVREDC's URI Strategy.

To foster a broad based regional prosperity, the Mohawk Valley region should target investments that develop key sites in other parts of the region for STEM industry-related

growth. This would support expansion and attraction efforts for other targeted advanced industries (e.g., power turbine generating industry and food production manufacturing), supply chain growth opportunities with the establishment of two nanotechnology anchors in the Utica-Rome MSA and Capital Region, and opportunities available with the Tryon Business Center because of the medical marijuana cannabis license granted to Empire State Health Solutions (ESHS). Other potential opportunities include additional growth in logistics given the fact that several of the prospective strategic sites have close proximity to major highways and I-90/I-88 and are proximal to major northeast population centers.

To address the prohibition against speculative real estate development, the MVREDC can consider an advanced funding commitment - with an expiration date if not implemented - that can only be deemed executable once an end user is secured for the site (exceptions would be for limited purposes such as property acquisition, planning, engineering and permitting approvals). As a result, the end user would know that there are dollars attached to the project that would be released concurrent with the end user making a commitment to the site.



Potential strategic site opportunities that can be positioned for development include:

Creation of the 240-acre **Tryon Technology Park and Incubator Center in Fulton County** as a strategic site focused on building STEM Related Industry Jobs.

Fulton and Montgomery Counties are jointly preparing a 265+ acre **Regional Business Park** tract of land into a large shovel ready site.

Montgomery County has expanded the 844+ acre **Florida Business Park**, two miles from exit 27 on State Highway 55. Its tenants include Target, BeechNut, and Hill and Markes.

Herkimer County is looking to improve infrastructure capacity for its **5S North Business Park in Frankfort and the Schuyler Business Park in Schuyler**.

Otsego County has commenced work the **Commerce Business Park in Richfield Springs**. May be expanded to include Herkimer County to create a two-county strategic site.

Johnstown Industrial Park





STRATEGY 1: Grow an innovation network that increases the region's STEM Intensive Industries by leveraging over \$4 billion of investment over the next ten years.

SUB-STRATEGY #1: ADVANCE THE MV REGION AS A CRITICAL NANO CORRIDOR HUB WITH THE BUILD-OUT OF THE MARCY NANO CENTER, QUAD-C AND THE ATTRACTION OF SUPPLY CHAIN ECOSYSTEM JOBS.

of cleanroom space (with approximately 600,000 square feet of ancillary support structures, the wafer fab facility and administrative offices) on a 50-acre site within the Marcy Nanocenter site. The new wafer fabrication facility will enable the company to transition to 300 mm wafer technology and make advances in manufacturing nodes.

This \$3 billion investment is expected to create 1,000 direct jobs and help attract 500 indirect jobs. The construction of the ams facility will complete major site development, infrastructure and utility upgrades on the 428-acre site and support two additional state-of-the-art wafer fabrication facilities and a standalone packaging center, capable of attracting another 3,000 to 4,000 direct jobs. The Marcy site is uniquely positioned to attract similar mid-tier semiconductor firms that will need to add capacity with projected growth in memory, flash, and sensors. The IoT market is expected to exhibit explosive growth with 50 billion devices being connected to the Internet by 2020.

- ams executed an Alliance Agreement with FSMC and EDGE that will result in a new semiconductor wafer fabrication facility on the Marcy Nanocenter site by FSMC and leased back to ams. The project will more than double ams's existing manufacturing capacity, and thus enable the company to support growing markets in several important technology markets. The proposed project will build approximately 100,000 square feet

- GE Global Research and SUNY Polytechnic Institute, SiC Power Electronics Packaging Center will develop a power electronics facility to package silicon carbide (SiC) chips in the Quad-C on SUNY Poly's Utica campus. SiC technology would be an alternative to silicon chips and is expected to produce lighter, more durable and more efficient chips that could be used in everything from airplanes to dishwashers to hybrid vehicles to solar panels. GE is looking to create nearly 500 direct jobs with room to double job growth as the market for SiC power electronic packaging devices grows. Over ten years, GE and SUNY Poly expect to have nearly 1,000 jobs associated with Power Electronics.

- Indium Corporation is looking to invest \$50 million over the next five years and create 105 jobs as a key part of the nanotechnology ecosystem. Indium is targeting key investments on expansion of local operational capacity at the company's Clinton, Utica and Rome facilities; in sourcing of operations from vendors outside New York State, part of the company's strategy for vertical integration to improve agility, reduce costs and manage quality; and, develop in partnership with SUNY Poly a simulation lab for semiconductor packaging research to explore new technologies and allow application engineers to evaluate specific production issues. The SIMLAB could provide services that are currently provided by vendors in Taiwan.

- SUNY Poly Innovation Acceleration Center and Advanced Manufacturing Performance (AMP) Center is part of the supply chain growth ecosystem that is developing. AMP establishes a testbed site for studying the causes of defects and contamination in manufacturing systems and components, and develops methods to improve quality. AMP will initially focus on the semiconductor industry and will expand into nanotechnology, photovoltaic, power electronics, LED lighting, MEMS, bio/medical, IT, and big data. Industry partners will include SEMATECH, Edwards Vacuum, Inficon, and others. Initial employment will include 45 full-time jobs within the next three years, with the potential to expand to 150 jobs if the AMP is expanded into a major manufacturing center that is positioned for federal funding under the National Network for Manufacturing Innovation (NNMI), which helps accelerate manufacturing innovation in technologies with commercial applications.

**SEMICO RESEARCH
ECONOMIC IMPACT ANALYSIS
AMS PROJECT¹:
\$200 million URI investment**

NYS taxes and GDP:
5 Yrs: \$2.0 billion
10 Yrs: \$4.1 billion

Local impact (taxes and GDP):
5 Yrs: \$289 million
10 Yrs: \$532 million

Indirect multiplier jobs:
5th year: 1,478
10th year: 4,025

¹ SEMICO Research Corp, Upstate NY- ams Project (August 2015)



CONNECTIVITY

SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH



INNOVATION

CORNERSTONE OF THE ADVANCED ECONOMY

SUB-STRATEGY #2: LEVERAGE THE PRESENCE OF THE AIR FORCE RESEARCH LABORATORY'S ROME C4I INFORMATION DIRECTORATE, UNIVERSITY AND DEFENSE INDUSTRY CONCENTRATIONS TO SUPPORT COMMERCIALIZATION OPPORTUNITIES IN C4I AND CYBERSECURITY.

The Cyber Research Institute-sponsored symposium of 90+ industry, government and university interests met at the Griffiss Institute in July. The breadth of the cybersecurity threat to our society was well represented by the wide spectrum of participants, which represented the power industry, banking and finance, automotive, healthcare, SCADA, aviation product security, biometrics, computer forensics and others. This symposium focused on a proposal to create dataRAMPART, a unique approach to achieve objectives contained in the President's Executive Order on Information Sharing and Analysis Organizations and link this initiative with existing capabilities at AFRL, Utica College, the Griffiss Institute and SUNY Poly.

dataRAMPART is a discovery research, analysis, and response Cybersecurity Center founded on the alliance of an open innovation ecosystem through academic, industry and government collaboration for the cyber threat protection of public and private organizations of all sizes across industry sectors. The range of potential targets in industry sectors such as finance, manufacturing, healthcare, agriculture, nanotechnology, government agencies, not-for-profits, retail, pharmaceutical, critical infrastructure, and others represents the diversification needed to complete a comprehensive assessment of the threat landscape.

The dataRAMPART value proposition is that more advanced services such as malware analysis, research, policy generation, and incident response are better provided on an as-needed basis. By pooling the data, tools and skilled human resources necessary to provide these services, dataRAMPART staff can serve a large number of member organizations with these functions, which require dedicated attention to each member's unique needs, but which are only occasionally deployed and therefore are not efficient as in-house capabilities.

CRI in conjunction with Griffiss Institute has proposed creation of dataRAMPART with a malware analysis center that could be linked with Utica College's Cybersecurity curriculum. The proposed initiative would require a five-year investment of \$65 million and will create 42 full-time jobs within five years and is positioned as a pipeline project.





STEM INTENSIVE INDUSTRIES STRATEGY 1



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



CONNECTIVITY
SYNERGY AMONG INDIVIDUALS, INDUSTRIES,
ACADEMIA, NON-PROFIT & GOVERNMENT
CREATE IDEAL CONDITIONS FOR ECONOMIC
GROWTH

SUB-STRATEGY #3: EXPAND THE CAPABILITY OF GRIFFISS AS ONE OF SIX FAA DESIGNATED TEST SITES TO ATTRACT UAS TESTING, R&D, DATA ANALYSIS AND EXPLOITATION TECHNOLOGIES AS PART OF A CROSS-REGIONAL PARTNERSHIP BETWEEN THE MOHAWK VALLEY AND CENTRAL NEW YORK REGIONS.

NUAIR was created to help spearhead creation of a UAS corridor in Upstate New York given the designation of Griffiss International Airport as one of six FAA test sites. NUAIR has more than 40 public and private partners and is attracting major national and international interest from UAS companies to deploy UAS systems that can be tested at Griffiss and related test ranges for future integration into commercial

airspace. NUAIR, which was given a mandate by FAA to focus on sense and avoid technologies, is also looking to collaborate with AFRL to address cyber issues to protect UAS and autonomous systems from being hacked.

The last REDC competition provided \$4 million in funding for CNY and Mohawk Valley REDC's for the Phase I the ground-based instrumentation range. The MVREDC included as a 2015 CFA priority project recommendation \$2.68 million to Griffiss International Airport on behalf of NUAIR to expand the test range's capability with installation of a Saab Sensis Corporation Wide Area Multilateration (WAM) Surveillance & SR-3 Airport Surface Radar and SRC, Inc. LSTAR (V3) Air Surveillance Radar and installation of surface movement X-band radar to provide surface radar coverage to UAS pilots. The Phase II deliverable is to allow for high-accuracy data collection and advance testing capability. The project will supply aircraft tracking data for safety and awareness for UAS operations with a future opportunity to support capabilities of the MQ-9 Reaper mission of the 174th NYANG Wing, 10th Mountain Division MQ-1C Gray Eagle operations, AFRL activity and Governor's Civil Support. These installations have several thousand military and non-military civilian jobs that are critical employers in the Central NY, Mohawk Valley and North Country economies.

Continued investment in the ground-based instrumentation range is critical to several confidential private companies that are looking to locate operations at Griffiss International Airport. Projected employment is estimated at 69 direct jobs and 306 indirect jobs.

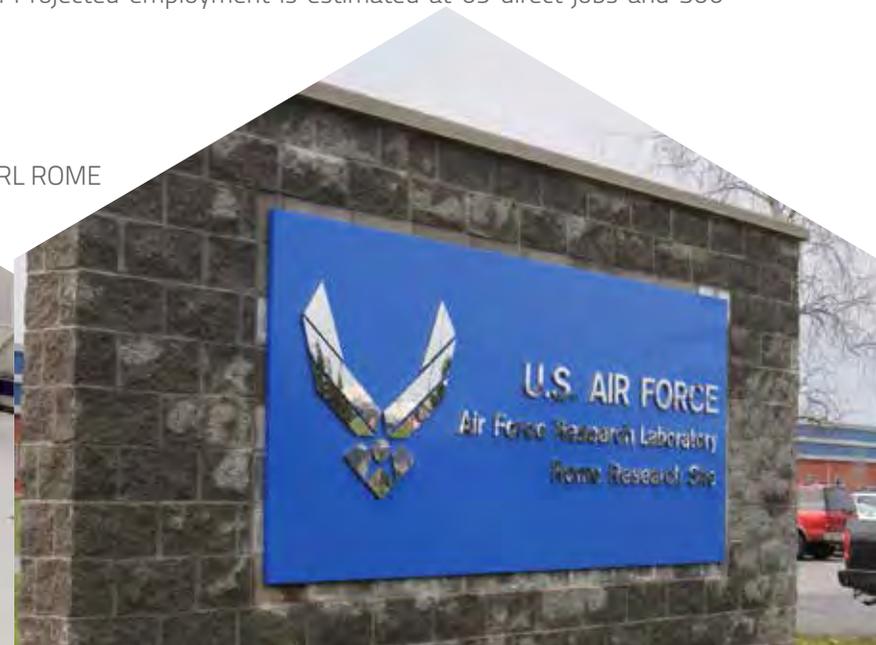
LOCKHEED MARTIN
UAS TESTING
AT GRIFFISS

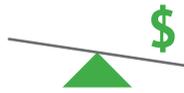


GRIFFISS
INTERNATIONAL
AIRPORT



AFRL ROME





LEVERAGING OTHER STATE INITIATIVES
 USE OF NYS PROGRAMS TO ENHANCE URI
 FUNDS



GLOBAL ECONOMY
 GLOBAL MARKETING & EXPORTING

SUB-STRATEGY #4: STRENGTHEN AND ENHANCE CROSS REGIONAL PARTNERSHIPS THAT LEVERAGE THE INVESTMENTS IN POWER ELECTRONICS, POWER GENERATION AND ENERGY, AND OTHER ADVANCED INDUSTRIES.

The region is realizing opportunities for additional STEM Intensive Industry growth with planned projects exemplified by:

- **PAR Technology**, which is looking to reinvest in their New Hartford site by bringing jobs back from Colorado and Asia and proposing critical investments that will make

its corporate headquarters a center of growth. For more than 30 years, PAR has developed hospitality solutions: restaurant point of sale, hotel management software, spa, retail point of sale and cruise ship point of sale equipment. The company has 391 employees in New Hartford and the planned reinvestment in its New Hartford site will create 73 full time jobs with total investment to support the relocation of jobs from its Boulder, Colorado, and Asian centers with total investment of nearly \$6 million. PAR is an example of a company that emerged from AFRL Rome with one of its subsidiaries, PAR Government and Rome Research still working with the Department of Defense and military services on leading C4I technology initiatives. PAR is part of the ecosystem of digital and electronic industries located in the Upstate corridor.

- **AGT Services** provides repair and rebuild services for power generators manufactured by any and all Original Equipment Manufacturers (OEMs) from around the world. The public utilities, municipalities, industries, independent power producers and municipalities that comprise AGT Services' customer base are located everywhere from South America, Mexico, Canada, Korea, Europe, the Caribbean islands, the Philippines and the US. AGT is looking to purchase and install a new high-speed balance machine, which will allow the company to remain competitive and enhance its marketability worldwide. The company has 70 employees and will create another 25 jobs as part of this \$15 million investment. The power turbine generating industry supports approximately 300 jobs in Montgomery County and builds on GE's Power Turbine Center in nearby Schenectady.

- **New Age Renewables** is proposing an innovative technology for an acid whey treatment facility in Fulton County. This technology converts nearby FAGE's yogurt acid whey into ethyl alcohol for industrial uses as well as livestock feed (dry yeast). The project will invest \$12.43 million and create 27 full-time jobs that support a growing yogurt and cheese manufacturing cluster for the region and is a critical part of the region's focus on building a more robust dairy production economy.

- **Robison and Smith (R&S)** is a 100 year old company with two antiquated, and undersized industrial laundries in Gloversville and Johnstown. The company is looking to consolidate both plants and invest in an existing facility located in the Johnstown Industrial Park that it would renovate, furnish and equip for its production needs. The company's primary customers include dry cleaning, healthcare linen and laundry services, linen rental for hospitality industry, and industrial uniform rental services. The company could position itself to be part of the supply chain for CNSE and Global Foundries in the Capital Region and potentially serve the nanotechnology market and cleanroom garment needs in Utica and other points along the Nano corridor. The investment in a upgrade of plant and equipment will boost the company's competitiveness, support growth and support retention of 240 existing jobs and create 7 new jobs. R&S is one of the larger employer in the Gloversville-Johnstown area and provides employment opportunities to harder to place workers.

These investments are 2015 CFA Priority Project recommendations.



**STEM INTENSIVE INDUSTRIES
CORE CONNECTIONS**



HARD-TO-PLACE WORKERS
UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH



WORKFORCE DEVELOPMENT
ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT

STRATEGY 2: Build a 21st-century workforce and education network to develop a workforce aligned with the region’s focus on STEM Intensive Industries by doubling the number of STEM jobs by 2030.

SUB-STRATEGY #1: STRENGTHEN COLLABORATIVE PARTNERSHIPS WITH THE REGION’S COLLEGES AND COMMUNITY COLLEGE NETWORK TO SUPPORT CRITICAL INDUSTRY NEEDS BY CREATING DESIGNATED INNOVATION HUBS AND CENTERS FOR MANUFACTURING EXCELLENCE.

The Mohawk Valley’s URI strategy establishes connections between colleges and employers to tailor workforce training to their current and future needs, aligning degree and certificate programs with private-sector businesses in a flexible and responsive partnership that creates a reliable workforce pipeline. In close collaboration with employers, the Mohawk Valley will develop a workforce prepared to participate and succeed in a new knowledge-based, innovation-driven

economy, particularly in flourishing advanced industries that will create well-paying jobs – STEM-related industries such as nanotechnology, unmanned aerial systems, cybersecurity and other advanced industries.

Signature projects that will be pursued include:

Address workforce development gaps and address barriers for Hard to Place workers:

The region’s most pressing challenge is to create opportunities for its hard-to-place workers to gain entry into the workforce and take advantage of increased opportunities in STEM Industry jobs. The biggest dilemma facing the Mohawk Valley is to bridge the divide between employers who claim they have jobs but cannot find qualified people and residents who claim they cannot find jobs. Coupled with the region’s high hard to place worker population is the number of individuals (94,000) who are employed in jobs that pay less than 200%

of the federal poverty limit. Many of these individuals lack skills that will allow them to transition into better paying jobs that require some level of STEM skills.

Achieving stronger success in reducing the number of individuals who fall within these categories is the true measure of the region’s success that will contribute greatly to its economic transformation.

By rethinking traditional approaches to engaging these groups both in the classroom and in the workforce, the Mohawk Valley will put many of these workers in industries that need dedicated and capable employees.

Barriers that inhibit entry and advancement in securing higher paying STEM Intensive Industry jobs for the region’s hard to place workers category and excessively larger lower income worker population include:

- Lack of education and need for upskilling the region’s workforce to achieve better access to jobs and increase the rate of worker participation in the job market.
- Language barriers, particularly for the region’s large refugee populations and other population groups where English is a second language.
- Breaking the cycle of poverty by moving more of the region’s population from poverty to economic self-sufficiency.
- Connecting veterans to job opportunities and creating linkages with Fort Drum to encourage returning veterans to focus on career opportunities in the Mohawk Valley.
- Addressing other barriers such as need for day care centers, after school programs, access to transportation to bring people to jobs that make it difficult for workers to connect to the economy and training programs to reach the region’s rural hard-to-place workers and population.
- Need to create apprenticeship and paid internship programs.



“OUR GREATEST WEALTH IS OUR PEOPLE... WE NEED TO KEEP THE TOP STUDENTS COMING OUT OF OUR LOCAL UNIVERSITIES TO CONTINUE TO ADD INTELLECTUALLY TO THE LOCAL POPULATION.”

- ALAN FINK, CONMED

Prospective signature projects that will be pursued to increase the rate of workforce participation by hard-to-place workers, provide more upward economic mobility for workers who currently are employed in lower wage jobs, and improve career advancement opportunities for veterans and refugee populations include:

Strategically locate/expand regional Manufacturing Training Centers.

These centers will train and assist in placing hard-to-place workers; they will focus on training technical skills and upskilling workers, particularly for middle-skill jobs in high-tech industries. Similarly, the creation of Multi-Institutional Education Centers will bring together public service providers with business leaders in a “one-stop” environment to prepare people to work. These centers address the needs of hard-to-place workers through education and support programs that help remove barriers to learning and working, and will help to upskill a broad workforce in our expanding industries, including trades and advanced industries.

Address Training Needs in Rural Communities:

Expand “Estella’s Brilliant Bus” to hard-to-place workers in more rural parts of the region. This will provide customized mobile learning centers, designed to travel directly to rural communities to deliver services where they are most

needed. Providing this service for underserved communities will provide education, training, and access to technology while addressing deficiencies in public transportation and broadband connectivity.

“Road to #YesWeCode” merges computer programming with on-the-go entrepreneurship training offering three exciting programs: Basic Coding Workshops, Mobile App Build, and Basics of Tech-Entrepreneurship.

Create Multi-Institutional Education-Community Impact Centers:

Modeled after successful education centers like WIRED in Northwest Florida (Workforce Innovation in Regional Economic Development) and San Antonio Works, these Centers bring together not-for-profit service providers, business leaders, and elected officials in a collaborative “one-stop” model to prepare people to work. These centers address the needs of hard-to-place workers through education and support programs that help remove barriers to learning and working, and will help to upskill a broad workforce in the region’s expanding industries.

As a partner to the school systems and workforce training centers, EBB will bring technology and STEM programming to our rural communities on a regular basis. Cyber security has been identified by the MVREDC as a high growth industry sector. Currently, EBB signature event is the annual Road to #YesWeCode. This roadtrip brings together 100 students on buses to meet with hundreds of other local students at each stop on a historic multi-city tour of local cultural heritage landmarks and includes hands-on technology learning activities. Estella’s Brilliant Bus’s

Are there K-12 educational barriers?

GRADUATION RATES BY COUNTY, 2014

COUNTY	ALL STUDENTS		ECONOMICALLY DISADVANTAGED	
	GRADUATION RATE	% GRADUATING WITH REGENTS WITH ADVANCED DESIGNATION	GRADUATION RATE	% GRADUATING WITH REGENTS WITH ADVANCED DESIGNATION
HERKIMER	78%	29%	71%	15%
FULTON	72%	21%	63%	11%
MONTGOMERY	74%	26%	64%	12%
ONEIDA	79%	32%	70%	15%
OTSEGO	83%	30%	75%	14%
SCHOHARIE	81%	24%	75%	10%
MOHAWK VALLEY	78%	29%	69%	14%
NEW YORK STATE	76%	31%	67%	17%

Source: UBRI analysis of data from the New York State Education Department.
NOTE: Data represents the 4-year graduation rate of the cohort entering high school in Sept, 2010.



STEM INTENSIVE INDUSTRIES

STRATEGY 2: Build a 21st-century workforce and education network to develop a workforce aligned with the region's focus on STEM Intensive Industries.

These downtown education centers should be located in strategic areas, such as Utica, Rome, Amsterdam, and Oneonta, where the impact will be most profound¹. The centers will target individuals who are currently low-income and in search of employment, as well as those who have educational and literacy limitations that create barriers to finding good jobs. Many individuals who live in poverty (17% of the Mohawk Valley) must address their most immediate needs before they can focus on building a stable economic future. Working closely with existing community agencies to provide basic necessities to those in need, and to help clients avoid or recover from crisis situations that inhibit educational and workforce progress, these centers will:

- Address language issues for non-English speakers through both ESL classes, and instruction in key native languages (including industry-specific language skills)
- Aid low-skill and hard-to-place workers by modifying curricula to upskill individuals in employer-desired areas
- Provide access to not-for-profit agencies to offer needed services in a non-institutional environment
- Be situated in neighborhoods closest to the majority of the targeted populations and along public transportation routes to allow ease of access
- Offer opportunities for small group study and one-on-one instruction in an open and casual environment
- Layer education and work readiness services in a logical progression to help individuals work towards economic stability and self-reliance.

¹ Utica and Rome have been identified as priority areas for such centers because they house 40% of the region's working age individuals who live in or near poverty, according to UBRI. Oneonta would serve as the focal point for many of the rural communities in the southernmost part of the region; the city itself has a poverty rate of 25% and a low/mod rate exceeding 53%, and Otsego and Schoharie counties have poverty rates exceeding 16%.

The following programs that would be incorporated into the Impact Center:

- Mohawk Valley Educational Opportunity Center (EOC): The EOC serves approximately 1,000 individuals per year. Services include extensive tutoring to prepare people for post-secondary level academics and entrance exams, as well as meeting individuals' specific needs such as difficulties in speaking English or need to obtain a high school equivalency. The Center's emphasis on academic advisement, mentoring, and personal counseling guides students in navigating the higher education system and making informed decisions. Assistance through the college application process is provided as well as in applying for financial aid.
- Mohawk Valley Resource Center for Refugees (MVRRC): MVRRC will transfer multiple programs to the Impact Center, enabling limited-English individuals and newcomers to the area to access needed services in close proximity to the education and job training programs through project partners. This close connection will ensure that no individuals fall through the cracks due to miscommunication between partners or inability to navigate to various service centers in the community.
- One World Utica Market: The One World Utica Market provides entrepreneurial start-up services and retail space for microenterprise ventures owned by refugees, immigrants, veterans, minority citizens and other low-income groups, with the goal of building a thriving downtown business community to attack poverty and revitalize the city of Utica.
- Community Agencies: The project expects to include office and program space with the Mohawk Valley Latino Association and other community agencies.

Centro Civico has proposed an initiative to help hard to place workers gain entry into the economy. Through an Intent to Propose, Centro Civico has identified the need for a comprehensive model that will provide wrap around services to remove barriers and create pathways for education to employment. Centro Civico has developed a Memorandum of Understanding with Fulton, Montgomery, Schoharie County Workforce Development Boards to establish this initiative.

SUB-STRATEGY #2: SUPPORT IMPLEMENTATION AND EXPAND REGIONAL ENACTMENT AMONG BOCES AND REGIONAL SCHOOL DISTRICTS OF THE ALIGNMENT OHM INITIATIVE (STEM HUBS) AND LEVERAGE P-TECH PROGRAMS TO STRENGTHEN PARTICIPATION IN STEM FIELDS.

The Mohawk Valley region will align K-12 curricula with projected job-skill needs, to elevate graduation rates and increase the employability of graduates (“cradle to career”). Most important, this approach will be designed in close collaboration with employers in the region to assure that the skills taught meet the needs of local industries. Two examples of this alignment are through STEM Hub curriculum development and P-TECH

programs throughout the region. While STEM Hubs will align curricula with industry cluster needs, P-TECH modeled experiential learning programs will offer targeted training for specific careers, such as advanced manufacturing, providing hands-on learning for high school students to explore careers in advanced industries.

The STEM Hubs will, in close collaboration with business and industry:

- Develop and implement several comprehensive community plans throughout the region, targeted to business and parents, articulating the urgency of delivering STEM instruction and skills needed to meet both local and global workforce needs;
- Extend trans-disciplinary inquiry and project-based STEM instruction to elementary and middle school grade levels;
- Develop credit-bearing high school course sequences in STEM, blending virtual and project-based learning to achieve mastery and lead toward articulated and/or dual credit attainment;
- Implement a menu of professional learning opportunities under the BOCES umbrella that provide opportunity for educators to extend their STEM knowledge and experience;
- Promote and coordinate the region’s school and business alliance assets, offering students the opportunity to explore 21st-century careers and education paths;
- Develop an economic development advisory council of key stakeholders to inform the work of the STEM Hubs

SUB-STRATEGY #3: STRENGTHEN PUBLIC-PRIVATE PARTNERSHIPS IN JOB TRAINING, APPRENTICESHIP AND EDUCATION OPTIONS OR EARN AND LEARN PROGRAMS AND DEVELOP A RANGE OF CUSTOMIZED TOOLS TO ATTRACT AND TRAIN NEXT GENERATION OF WORKERS.

Data shows that the greatest opportunity for job growth in the Mohawk Valley is in middle-skill jobs. These jobs do not require a bachelor’s degree, but most often require an associate’s degree or some sort of apprenticeship or specialized certification in a STEM field to be competitive. It is estimated that by the end of the decade, the region will produce 1,810 new middle-skill jobs each year, especially in the targeted

areas of manufacturing (more than two-thirds of job openings are middle-skill) and in STEM-intensive industries. Yet our workforce is by and large either unprepared for or aging out of these jobs. Through programs that help upskill existing or dislocated workers, or that award AAS degrees or specialized certifications to young workers who have been trained in STEM fields, our region will more than meet the increasing demand for these jobs.

The Mohawk Valley region needs to seek opportunities to enhance apprenticeship and intern programs to help match students with existing employers with prospects that there is a match that leads to a future job. The Workforce Investment Board of Herkimer, Madison & Oneida Counties was just recently awarded \$2.9 million in federal USDOL funds to lead the Central NY Regional Apprenticeship Program. The grant will be used to create the first regional pre-apprenticeship program. Pre-apprenticeship will transition to new apprenticeship programs and increased participation in existing union-run apprenticeship programs. The program will serve 600 traditionally underserved populations in the State of NY. The Apprenticeship program will focus on Nano-Cyber-UAS , aircraft maintenance and repair, construction trades, and other STEM Intensive Industry employers.

A possible signature project that can be tied to the region’s Social Impact Bonds (SIC) would be to establish a funding stream that is leveraged with industry, other public funding and foundation support to build internships and apprenticeship programs that are incorporated in the academic curriculum with the community colleges, P-Tech and area colleges. The goal would be to have more students exposed to a co-op type of structure where they gain real work experience that is linked to their academic curricula.



SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT
CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH



CORNERSTONE OF THE ADVANCED ECONOMY

STRATEGY 3: Create an entrepreneurial ecosystem by adding 3,000 new firms by 2030.

SUB-STRATEGY #1: STRENGTHEN R&D CAPACITY THROUGH EDUCATION, AND DEVELOPMENT OF INNOVATION TECHNOLOGY CENTERS.

The Mohawk Valley Region is looking at building more R&D capacity with SUNY Poly and Utica College and the Cyber Research Institute. Two key initiatives that offer the opportunity to support R&D and innovation include:

SUNY Poly proposes to develop a nano-cyber innovation

acceleration center (The IAC is a 2015 CFA Priority Project recommendation) to extend its advanced manufacturing ecosystem by creating an integrated research, development, prototyping and educational training center that provides:

- Strategic support to the region’s advanced nano-manufacturing initiative through cutting-edge process and tool development including support of the Quad-C and ams wafer fabrication facilities on the nearby Marcy Nanocenter site.
- Advanced computational infrastructure for nano-analytics, and system integration and testing;
- Leading-edge nano-manufacturing training infrastructure for the Mohawk Valley.

Potential creation of dataRAMPART by CRI with a Malware Analysis and Training Center incorporated as part of Utica College’s Cyber Security Program offers the opportunity to provide operational support to diagnose, detect and develop security procedures to protect critical information and infrastructure systems and support additional business development opportunities for the cybersecurity sector.

SUB-STRATEGY #2: EXPAND THE NUMBER OF INCUBATOR AND COMMERCIALIZATION CENTERS TO DRIVE BUSINESS CREATION AND START-UP OPPORTUNITIES.

The Mohawk Valley region has designated incubators with the Griffiss Institute, and thINCUBATOR. The thINCUBATOR is also a NYS Hot Spot designee and has the

authority to work with other approved incubators to support innovation and entrepreneurship. The thINCubator has outgrown its current facility and is in the process of expanding its incubator in a leased facility in historic Baggs Square as part of a much larger mixed-use development that will include commercial development space, MVCC’s construction trade programs and loft style apartments. The 2015 Progress Report includes a recommendation by the MVREDC for designation of an incubator slot at SUNY Cobleskill, which will complement funding received that would create an Ag Dairy Processing Center for the college.

The MVREDC will encourage New York State to allow additional incubator designations so that other parts of the region can benefit.

SUB-STRATEGY #3: BUILD ON AFRL’S INVESTMENT IN THE COMMERCIALIZATION ACADEMY TO IDENTIFY COMMERCIALIZATION AND BUSINESS START-UP OPPORTUNITIES EVOLVING FROM AFRL’S PATENT PORTFOLIO.

The Griffiss Institute also has a contract with AFRL for a Commercialization Academy that is looking to commercialize the lab’s patent portfolio. The Commercialization Academy’s first year of operation resulted in nine business plans approved for participation in the

Commercialization Academy and seed funding that was earmarked for the selected business plans. Six of these proposals will go through demo day in the fall for possible next-stage financing.

Venture Capital firm Wasabi Ventures, (headquartered in San Mateo, CA), was chosen to manage the Commercialization Academy due to its unique, multi-faceted approach to bring businesses from concept to fruition. Wasabi operates under the philosophy that attracting entrepreneurs is not solely about making money available to prospective businesses; it’s about producing the right ecosystem of people, technologies, and education/R&D.

**SUB-STRATEGY #4:
IMPROVE ACCESS TO
CAPITAL FOR SMALL
BUSINESS LENDING,
MICRO-ENTERPRISE,
AND ESTABLISH THE
MOHAWK VALLEY
FUTURES FUND.**

The MVREDC has advocated for micro-enterprise grants to support various small business start-ups efforts throughout the Mohawk Valley region. The MVREDC should continue to take advantage of opportunities to capitalize microenterprise grant programs to support eligible startups and small business needs.

The Mohawk Valley region has the foundations of an up-and-coming innovative economy. Using these assets, and identifying additional assets, the Mohawk

Valley will “scale-up,” and use the Commercialization Academy model to promote commercialization and entrepreneurship across the region through the Mohawk Valley Futures Fund. Such a scaled-up version will supply more than just professional assistance. A “scaled-up” thINCubator, with satellite locations across the Mohawk Valley, will provide physical work space to participants. This work space will be proximal to educational institutions and downtown communities, and will tap into other professional resources such as lawyers, accountants and marketing firms.

The Commercialization Academy program is unique to the Mohawk Valley as it provides seed funding to program participants. Seed funding is an important first step of venture funding, and having a larger reserve for this purpose may attract more entrepreneurs.

Funding for early-stage companies has also historically been limited. A program akin to New Hampshire’s Granite Fund will help change that. In a partnership between a venture capital firm and the state’s Business Finance Authority, a blend of state and private money goes to early-stage companies located within the state. Uniquely, the state participates as an equal partner in any deal, but also insures private investors against loss. If the startups thrive, the state reaps the returns; if they do not, the state absorbs the first 15 percent of losses. This makes the state a “subordinate partner.”

Inspired by this model, the MVREDC proposes to set up the *Mohawk Valley Futures Fund* in which the region’s incubators, colleges, and research institutions network with the Commercialization Academy to create commercialization and entrepreneurial opportunities for business start-ups or small businesses with growth potential that are focused in one of the region’s strategic industry clusters. Each year the program would take a cohort of 10 teams and provide up to \$25,000 in seed funding to each team for incubation and acceleration purposes. Teams will earn money upon reaching pre-determined milestones. At the end of each cohort, teams will have the opportunity to participate in a Demo Day, and win a share of \$750,000 in forgivable loans, as well as funding from private investors. Loans would be forgivable based on certain criteria met by the business.



STRATEGY 4: Increase global exports and attract foreign direct investments by increasing global exports by 50% by 2030.

**SUB-STRATEGY
#1: CONTINUE
IMPLEMENTATION OF
MV'S METROPOLITAN
EXPORT INITIATIVE,
DOUBLE GLOBAL
EXPORTS BY 2020.**

The Mohawk Valley has seen a 31% increase in global exports for the period of 2009-2012, surpassing the rate of growth for Upstate, New York and the United States¹. Primary metal industry exports grew more than any other category of global exports by \$255 million. The balance of the region's export growth was distributed among leather and allied products (\$67 million), computer and electronics (\$61 million), travel and tourism (\$58 million) and food products (\$35 million).

Export figures for 2014 show that the region's exports totaled nearly \$2 billion. Companies in Oneida County generated 56 percent of the region's exports. Ful-

ton-Montgomery Counties together generated 24% of the region's exports, with the balance (19%) coming from Herkimer, Otsego and Schoharie counties.

Overall exports represent just 5% of the Mohawk Valley's overall economy. Achieving more global exports and attracting foreign direct investments are paramount to achieving transformative economic success and realizing a stronger rate of growth in STEM Intensive Industry jobs. The Central New York International Business Alliance (CNYIBA) has expanded its presence in and beyond the Utica-Rome MSA by incorporating the balance of the Mohawk Valley and implementing the recommendations that were identified in the Metropolitan Export Initiative and further reinforced in the Global Export strategy contained in MVREDC's 2014 Progress Report.

The region seeks to maintain the increase in its global exports and also benefit from the potential global export opportunities that will emerge with GE SiC Power Electronics Packaging Facility and AMS's high performance analog semiconductor plant. Both GE and AMS are global industries that sell into global markets. 94% of AMS's market share is to global customers located outside the US. GE's SiC Power Electronic Packaging Facility will develop packaging devices for use in wind turbines, utility-scale solar inverters, data centers and hybrid cars that will be part of a global market opportunity for GE to expand.

Similar opportunities exist with the potential growth of UAS technologies as there are many global UAS firms that are looking to deploy UAS systems in the US, and that provides opportunities for attracting more foreign direct investments.

**SUB-STRATEGY
#2: SECURE MORE
FOREIGN DIRECT
INVESTMENTS IN
KEY GLOBAL
INDUSTRIES.**

Several companies in the region are successful examples of foreign direct investment. FAGE, Sovena USA, Saes Getters, and Premier Aviation are some of the foreign direct investments that have taken place in the Mohawk Valley within the past ten years.

This list is about to be increased with the decision by ams to expand its semiconductor operations at SUNY Poly's Utica campus. ams is an Austrian-based firm that achieves a major strategy objective of attracting foreign direct investment in the Mohawk Valley.

The region's investments in nanotechnology and UAS Technologies include a focus on attracting foreign direct investments as both industry sectors are global industries. For UAS companies, including companies from outside the US, securing validation that their respective UAS platforms are certified for operation in commercial airspace is essential; and NUAIR in conjunction with the Griffiss International Airport as part of its marketing strategy is also targeting off-shore companies who are looking at potential growth in the US.



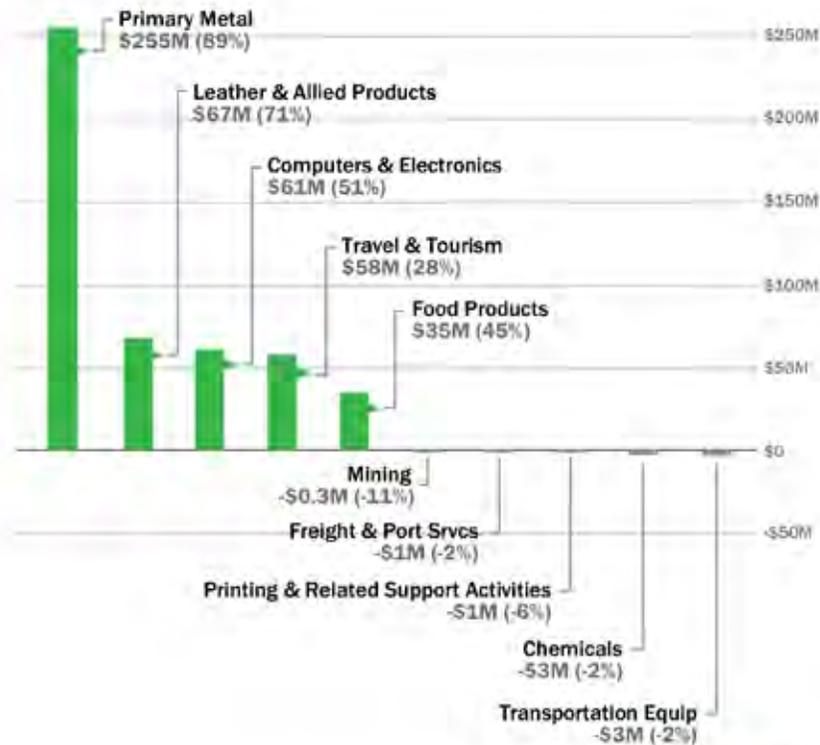
In which industries are exports growing?



GLOBAL ECONOMY
GLOBAL MARKETING & EXPORTING



TOP 5 AND BOTTOM 5 EXPORT INDUSTRIES BY REAL EXPORT VALUE GROWTH, 2009-2012



Source: Brookings Institution

UB Regional Institute



Sovena USA



Indium Corporation

STEM INTENSIVE INDUSTRIES

SUB-STRATEGY #3: BUILD COMMUNITY INFRASTRUCTURE TO SUPPORT GROWTH IN GLOBAL/TECH INDUSTRIES.

The Mohawk Valley is part of the Central New York International Business Alliance (CNYIBA) and is working with this organization to provide assistance to area employers on expanding opportunities to seek global markets for their products and services.

Through the work of the Central New York International Business Alliance, the region is partnered with the Mohawk Valley region to bring one-on-one export counseling, training, and export plan development to an expanded geographic footprint of businesses. Over the past 12 months, the CNYIBA conducted 10 new export events focused on topics around export readiness, country specific export assistance, and export compliance.

Through its engagement with more than 200 firms over the past two years, the CNYIBA proactively identified companies that could benefit from the development of strategic export plans. Mohawk Valley REDC companies that CNYIBA has been involved with on exporting include: ConMed, Indium, Bartell Machinery, CTM Controls, Burrows Paper, Electro Metrics, Fountainhead Group, HUD-SON, Mercer's Dairy, Metal Solutions, Nova Health Products, Power and Composites Technologies, RedCo Foods, Riverhawk and Utica Cutlery (Kutmaster).

Many companies in the Mohawk Valley are very proficient in global exports. As an example, Indium Corporation generates 73% of its sales outside the US, with Asia the fastest growing market for its products. ConMed is another company that has enjoyed strong export markets with nearly 56% of its revenues coming from exports.

The ExportNY program provides intensive export training, market analysis, and strategic plan development. Many of the firms that have created plans through this process are either expanding export sales or are exporting for the first time. Based on the success of this and other programs, the CNYIBA partnered with JPMorgan Chase in 2015 to launch the Export Catalyst Program. This pilot initiative will test the concept of offering in-house export consulting to build new-to-market or new-to-export plans and develop company competence in export compliance.

In 2014-2015 the CNYIBA also expanded in-country assistance through a targeted trade mission. In November 2014, the organization accompanied representatives of seven upstate companies from CNY and the Mohawk Valley to Singapore and other ASEAN (Association of Southeast Asian Nations) countries. From the Mohawk Valley, ConMed participated in this trade mission. Each of the companies that participated has benefitted from new or expanded business in these Southeast Asian countries. In 2015, the CNYIBA assisted with trade missions to Montreal and is planning follow-up visits to Singapore.

Feldmeier Equipment



Northern Safety



Worthington Corporation

Burrows Paper
AGT Services
ConMed

Bartell Machinery

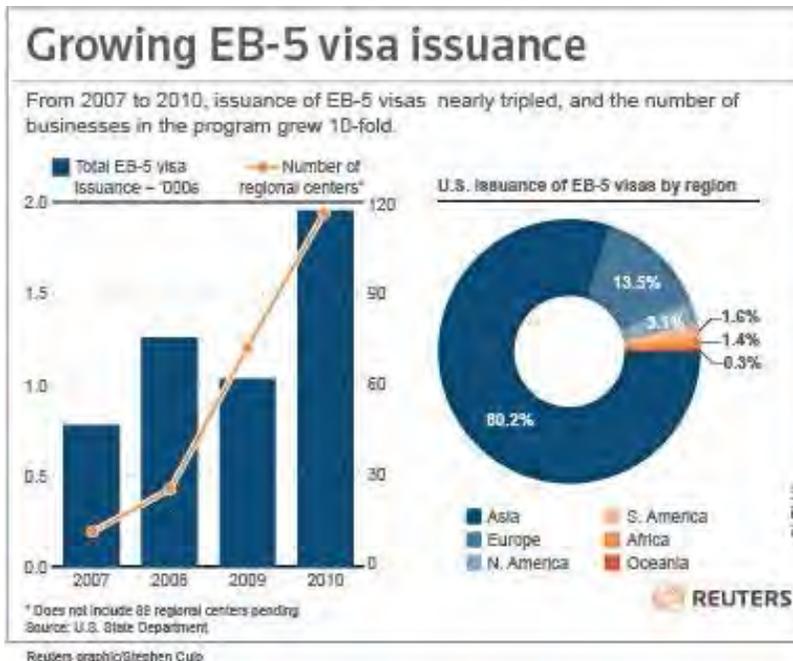
***SUB-STRATEGY #4:
EXPLORE USE OF EB-5
INVESTMENTS FOR KEY
REGIONAL ECONOMIC
DEVELOPMENT
OPPORTUNITIES***

The EB-5 visa provides a method of obtaining a green card for foreign nationals who invest money into an EB-5 United States Citizenship and Immigration Services (USCIS) designated Regional Center that would support a critical economic development project(s) in the Mohawk Valley. This is an opportunity to attract foreign direct investment that is aligned with regional economic development priorities that will create direct and indirect jobs and fulfill other regional strategies. The EB-5 Visa can also assist in providing work visas for employees who are hired to work in STEM Intensive Industries that are locating or expanding within the region.

A unique development initiative is the proposed creation of FMCC's Global Village (2015 CFA Priority Project), which is a planned community directly adjacent to the community college in Montgomery County. The proposal would create a planned mixed use community that would be intergenerational but would include additional student housing and young professional housing to support the college's interest in attracting out of town students and boosting its international student recruitment. The college is located in a rural area with the nearest population center about 7 miles from campus. This makes it difficult for students without cars to move back and forth from one of the cities to the campus.

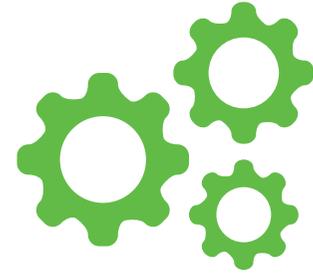
The project will create a new planned community that will give the college more opportunities for out of town student recruitment.

The college currently has 300 units of housing for a campus with approximately 2,800 students, of which approximately 120 international students. The college plans to recruit more international students, which would help create opportunities to align some of the student population into technical programs and employment opportunities that are aligned with STEM Intensive Industries.



CONNECTIVITY PROFILE

The Mohawk Valley - Leading the Way in the Next Generation of Precision Agriculture



UAVs, and the use and analysis of data retrieved through those hi-tech devices, will set the Mohawk Valley (as a key member of the NUAIR team) apart as a national leader in the advancement of modern agricultural practices, including, but not limited to:

- Variable planting data analysis;
- Nutrient and moisture mapping;
- Field profitability mapping;
- Thermal and multi-spectral data collection; and
- Insect, disease and infestation prevention.

Problems that go unnoticed or uncared for during the growing season can reduce livestock feed yields and revenue from the sale of cash crops. The traditional approach to avoiding such losses has been to gather crop growth and health information through field scouting; periodically walking through a field to observe and assess crop performance, pest and beneficial insect populations, weed and disease pressure, and environmental conditions; information that can provide direction for appropriate selection and application of crop nutrient and protection products. Under the traditional model, a decision to take action was based on the percentage of the field that is infested, pest or weed populations and distribution, and/or the stage of crop growth.

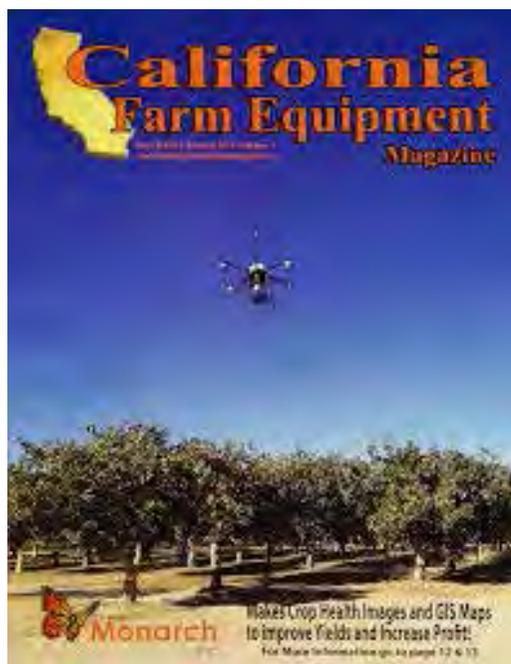
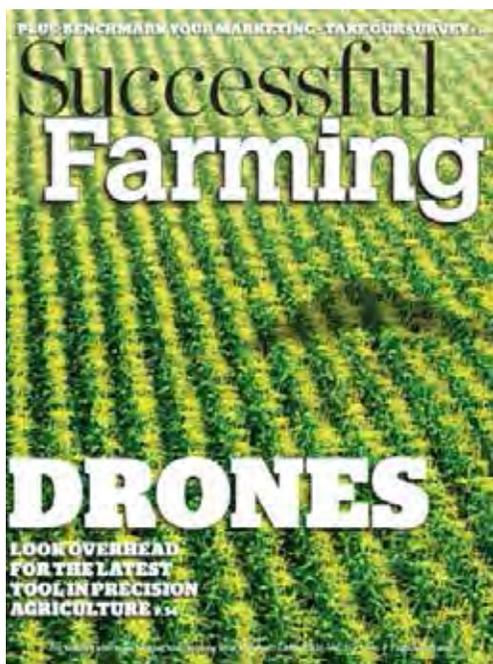


Yet it certainly appears as though, in the near future, field scouts will be using UAVs to analyze planting areas, identify and quantify specific issues, and provide recommendations, when financially appropriate, for measured actions and highly localized treatments. Other possible UAV applications include precision-spray treatments of pesticides and fertilizers, water supply forecasting, irrigation monitoring, and crop and tree pollination.

By combining what is gathered on multiple flyovers of the same area, visual data can be used to create three dimensional images. These provide a measurement of the height and size of the plants in a given field. A series of measurements over time can yield a record of plant growth, which varies spatially in a single field and over a wider area. The visual data can also be analyzed simply to count the number of plants per given area. Current

experimental approaches involve gathering this electronic data with the UAV and then collecting the same information in the conventional manner on the ground, in order to evaluate the accuracy and precision of the UAV gathered data. Similar data sets have been gathered by piloted aircraft and even by satellites, but the UAVs are capable of obtaining much higher resolution images.

It's not yet clear just how many jobs might be created in the Mohawk Valley as a result of agricultural drone testing, but the region is optimistic that research, development, and implementation of new UAV technologies leave the Mohawk Valley positioned "to become the Silicon Valley of unmanned systems advancements.



**ECONOMIC
STRATEGY:
AGRIBUSINESS**

STRATEGY 1: Maximize production and increase market share by modernizing the marketing and distribution infrastructure of Mohawk Valley agricultural products by enabling 50% of farms to become profitable. by 2020.

STRATEGY 2: Invest in Next-Generation farmers and close the skills gap between hard-to-place workers and agricultural, craft brewing, and food processing opportunities. Achieve a 15% increase in the percentage of agribusiness workers and farm operators between the ages of 18-35 by 2020.

STRATEGY 3: Create an environment for innovation and entrepreneurship in agribusiness and agri-sciences by increasing the percent of food manufacturing firms (3% in 2014) to equal the percent of total farm product sales (10% in 2014) by 2030.

AGRIBUSINESS IMPACTS AND OUTCOMES

FARM PROFITABILITY

**4%
INCREASE**

2014: 46% PROFITABLE
2030: 50% PROFITABLE

AGE OF FARM OPERATORS
BETWEEN 18-35

**15%
INCREASE**

2013: 231
2030: 265

FOOD MANUFACTURING
FIRMS

**7%
INCREASE**

2012: \$2.8B
2030: \$4.2B

CRAFT BREWERIES

**10%
INCREASE**

GLOBAL EXPORTS

**+12
STRATEGIC EXPORT
PLANS**

CONNECTIVITY

**+140
CONNECTIONS FROM
FARMS TO NEW
BUYERS**

PRODUCT INVENTORY

**+3500
PRODUCTS INCLUDED
TO INTERACTIVE
DATABASE**

ENTREPRENEURS

**+10
NEW AG OR AGTECH
BUSINESSES**

Source: NYS DOL, US Census Bureau, Bureau of Labor Statistics



BEEKMAN 1802

Cultivate a better life.

"There's a certain level of grit and sturdiness to the people of a rural community. Those who live in our region of New York State have always made the best of the situation and have created opportunities for themselves using the resources they had available. It is an admiration of hard work and authenticity that people from around the world are now flocking to our little corner of the world to witness."

- Josh Kilmer-Purcell and Brent Ridge, Founders, Beekman 1802

"One of the fastest growing lifestyle brands in America."—NASDAQ

AGRIBUSINESS

SIGNATURE PROJECTS

Malt & Barley Manufacturing B&B Ranch

CFA Projects:

TJ Allen Bulk Services LLC

Hartwick College Center for Craft Food and Beverage

Erie Pellet



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



GLOBAL ECONOMY

GLOBAL MARKETING & EXPORTING



CONNECTIVITY

SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH



PRIVATE SECTOR INVESTMENT

MINIMUM LEVERAGE OF 5:1



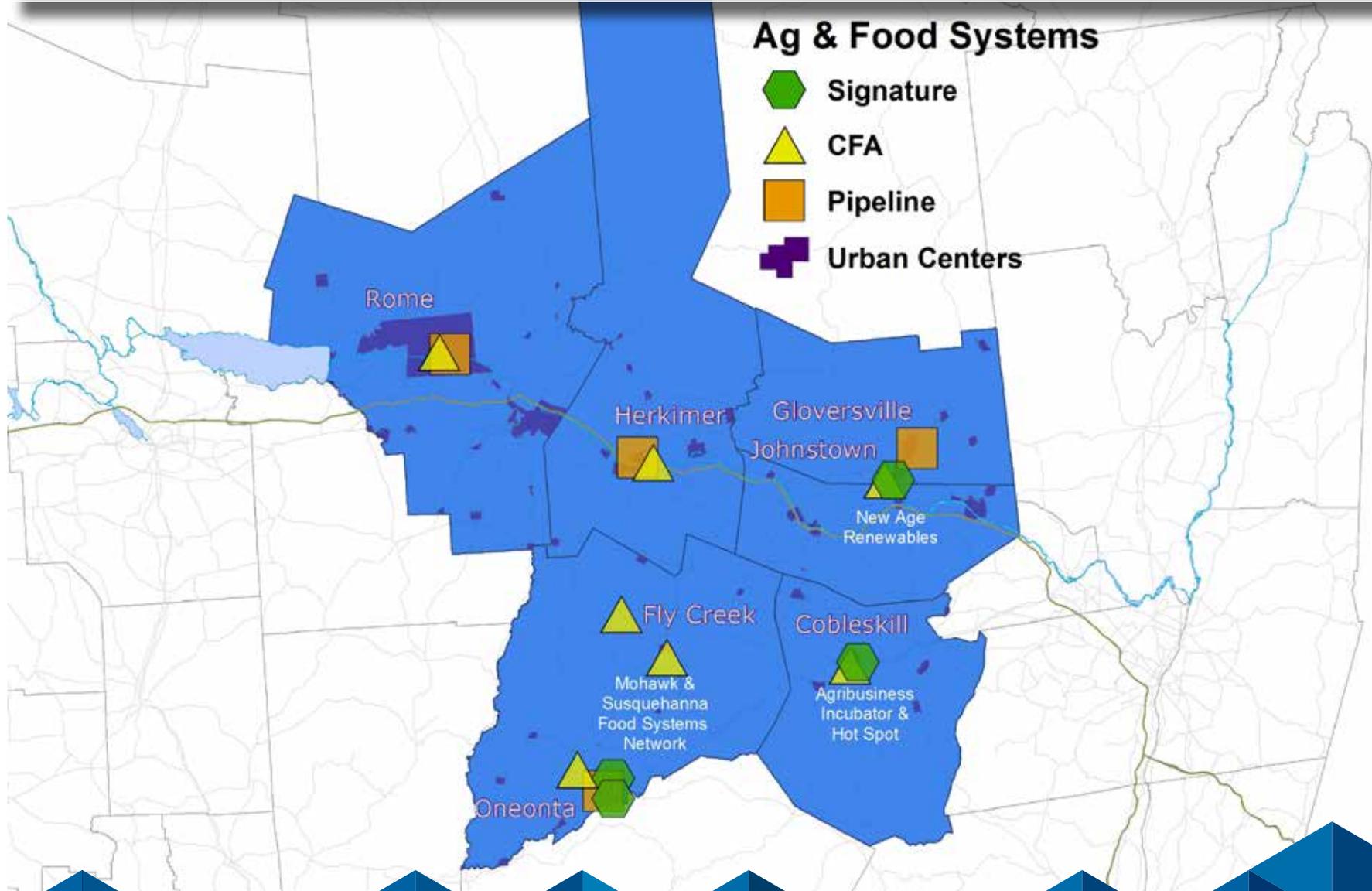
"HAVING AN ABUNDANCE OF SMALL FARMING IN THE REGION IS AN ADVANTAGE THAT SHOULD BE CAPITALIZED ON."

- ERIN HAMLIN, OLYMPIC ATHLETE



Schoharie County

PHYSICAL LOCATIONS FOR INVESTMENT



AGRIBUSINESS

Path to Readiness



READINESS

READINESS TO IMPLEMENT STRATEGIES

The Mohawk Valley has been known for its authentic food for generations. Recipes and treats found only in the region include turkey joints, half-moon cookies, greens, home-brewed beer, riggies, tomato pie—the list goes on. The Mohawk Valley has also been known for its quality food products including dairy, varieties of produce, hops, and much more. Food and farm have been a cornerstone of the regional culture and economy for generations; and, with current national trends such as the sustainable “farm-to-fork ” movement and initiatives advocating for fresh products for healthy living and wellness, the relevance of this diverse sector to the regional economy is increasing dramatically.

The diversity of businesses that comprise the food and farm ecosystem in the Mohawk Valley is immense, representing all facets of the agricultural value chain: specialty crop producers, livestock and dairy producers, food processors both small and large, wholesalers, shippers, farm insurance and real-estate entities, and a robust inventory of farmers markets, restaurants and food retailers. Vast acres of fertile soil, ample quality water resources and proximity to untapped major global consumer markets, combined with the creativity of ag-entrepreneurs and rapidly growing non-traditional markets, position the region to attract new farmers and agricultural investments that will sustain and grow the sector.

The region is poised for success; however, to strengthen food and farm systems for future competitiveness, the Mohawk Valley has to collectively commit to deep transformations in a comprehensive regional strategy. Ensuring the profitability and viability of farm and food businesses, fully utilizing significant farmland resources, engaging with colleges and universities innovative research and creating jobs throughout the food and farm ecosystem are already evident in myriad ways:

- Craft food and beverage science at **Hartwick**
- Job-shadowing through Career Opportunities in Rural Education (CORE) program at **Milford Central School**
- World class ag-tech at **SUNY Cobleskill**
 - **SUNY Cobleskill's** baccalaureate program in Food Systems & Technology designed with support from USDA's National Institute for Food and Agriculture
 - A web-based Industry-Specific Spanish Language Training at **SUNY Cobleskill**
 - Three-year grant from **USDA** to fund projects through which students work with regional food producers to develop, market and pilot novel value-added food products.



Schoharie County

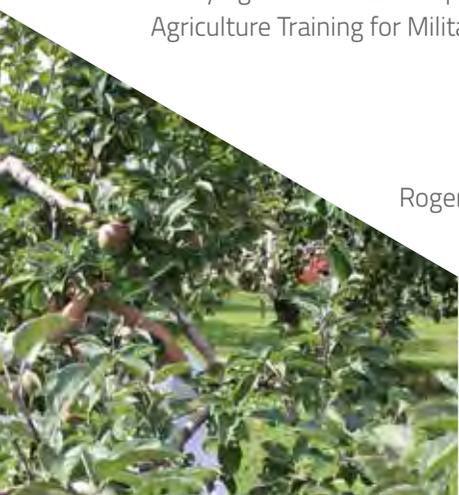
Momentum has started with investments that pave the way to a prosperous future:

- Regional consortia of SUNY educators and researchers is working to train entrepreneurs and technicians critical to the agribusiness industry value chain.
- Dairy Processing Center at SUNY Cobleskill will lead a public-private partnership with NYS, the US Economic Development Administration and corporate sponsors to construct and equip a 3,000-square-foot training and demonstration facility containing milk processing and bottling equipment, and equipment to make ice cream, yogurt and cheese.
- Hartwick College has established the State's first Center for Craft Food and Beverage, a resource for testing, business development, and education that supports small and mid-sized breweries, wineries, distilleries, farms, and other craft food and beverage producers.
- Center for Agricultural Development & Entrepreneurship has initiated an Agriventure and New Farmer Education programs, assisting more than 125 new and existing farms to date.
- Cornell Cooperative and New Venture Advisors are gathering regional data to assess food systems, producers and buyers and are exploring, via data to decision, the need for and location of a food and ag center and the creation of a web based logistics program to make connections between producers, suppliers and markets.

MV500's Agribusiness Strategy Team focused on creating opportunities to bring economic prosperity to small and middle-size farms and well as address the needs of larger agribusinesses. The team identified the need for an asset map of agribusiness and agritourism resources. In addition, successful models are being analyzed and considered in part or in whole for implementation including Vermont Farm to Table (F2P) Network, The Hudson Valley Agribusiness Development Corporation (HVADC) and NCAT Armed to Farm Sustainable Agriculture Training for Military Veterans.



SUNY Cobleskill



Rogers Orchard- Fulton County

AGRIBUSINESS KEY FINDINGS



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



CONNECTIVITY
SYNERGY AMONG INDIVIDUALS, INDUSTRIES,
ACADEMIA, NON-PROFIT & GOVERNMENT
CREATE IDEAL CONDITIONS FOR ECONOMIC
GROWTH

KEY FINDING #1: THE REGION'S CLIMATE AND NATURAL RESOURCES ARE CONDUCTIVE TO EXPANSION OF THE AGRICULTURE INDUSTRY, PARTICULARLY DAIRY PRODUCTION.

In an era in which enormous stretches of the country's topography are either overbuilt, suffering from drought, or both, the Mohawk Valley possesses ample land and water resources that have attracted new investors in recent years and will serve as the foundation for a resurgence in agricultural production and innovation. The US Geological Survey reports that, on average, the Mohawk Valley region has 20 to 25 net inches of precipitation available each year, the second highest designation in the survey, and typically experiences "little or no water deficiency in any season." The region is not unduly stressed by commercial/industrial/residential development pressure in rural areas, which has permitted appropriate property to be farmed. In 2012, 788,000 acres were farmed in the Mohawk Valley with twenty-two percent of our region's land base working for the region's agribusiness sector.

The Mohawk Valley's most recent burgeoning agribusiness industry, dairy, owes its success to the region's natural resources as well. The exceedingly reliable snowpack and favorable climate result in abundant clear-running streams and lush pastures well-suited to sustain growth in dairy farming. Today, New York finds itself on the cusp of becoming the leading dairy state in North America. More than 500 new jobs were added in food manufacturing in 2010 alone, largely

a result of the fast and significant growth in Greek yogurt production.

The region's rich industrial base has kept pace with substantial demands in dairy processing expansion and innovation, churning out milk, Greek yogurt, cheese, ice cream, and a host of artisanal and value-added dairy products to local, national and global markets. Dairies and food processors—stalwarts of the Mohawk Valley's ag economy—are generating a much-needed boost to the region. Regional agricultural cooperatives and co-packing partnerships are opening new market opportunities for Mohawk Valley farms as well as food and beverage manufacturers.

In 2014, New York ranked fourth in milk and cheese production, behind California, Wisconsin, and Idaho. According to the USDA Economic Research Service, prolonged drought conditions in California pose a clear and present threat to agricultural production.¹ This positions New York, and particularly Western NY, the Finger Lakes, Central New York, and the Mohawk Valley, to increase market share in milk, cheese, and yogurt production. As part of the supply chain, these regions are also considered, nationally, as major crop areas for moisture-intensive winter wheat, hay, and alfalfa production.²

Our industrial base has kept pace with dairy processing expansion and innovation, churning out milk, Greek yogurt, cheese, ice cream, and a host of artisanal and value-added dairy products to local, downstate, and global markets. Dairies and food processors – stalwarts of the Mohawk Valley's economy – are generating a much-needed boost to the region. Regional agricultural cooperatives and co-packing partnerships are opening new market opportunities for Mohawk Valley farms and food & beverage manufacturers.

1 USDA Economic Research Service, 2015. <http://www.ers.usda.gov>

2 USDA Office of the Chief Economist, 2015. <http://www.usda.gov/oce/weather/pubs/Other/MWCACP/namerica.htm>

Mohawk Valley producers are within striking distance of 40 Million consumers in six major US-Canada metropolitan markets.



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community. Content may not reflect National Geographic's current map policy. Source: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

KEY FINDING #2: DEMAND FOR MOHAWK VALLEY AGRICULTURAL PRODUCTS IS UNMET IN MAJOR METROPOLITAN AREAS OF THE NORTHEAST; PROXIMITY DOES NOT GUARANTEE ACCESS TO MARKETS.

Surprisingly, the region's proximity to major urban areas such as New York City, Boston and Montreal, is an unexploited opportunity. The region is competitively challenged due largely to issues surrounding small producers' access to aggregation and distribution. The unmet demand for New York State-produced food products in New York City alone is estimated at over \$4 billion a year, yet structural issues prevent many small-scale producers from reaching that particular

market. Large producers are able to compete at relatively low average cost for a number of reasons pertaining to economies of scale. Large producers' dominance makes it increasingly difficult for small and midsized operators to compete for buyers and increase their capacity for growth. Nationally, small farms grossing less than \$75,000 annually are 85% of the agribusiness sector. The Mohawk Valley has great capacity to grow this sector.

Thus small-scale producers, including many in the Mohawk Valley, have capitalized on consumer interest in food provenance and sell through direct-to-consumer food markets

(farmers markets, community supported agriculture (CSA) and farm stands), which tend to attract buyers who value provenance and sustainability over low prices.

Unfortunately, in the Mohawk Valley and beyond, direct marketing channels simply don't work for the bulk of medium-scale agricultural producers (referred to as the "Ag of the Middle"). Those selling between \$50,000 and \$250,000 worth of product annually represent approximately 18% of all Mohawk Valley farm businesses according to USDA Agricultural Census and are too big to rely primarily on direct-to-consumer marketing channels for selling their output. They are also usually located too far away from population centers to make direct marketing practical. Compounding the issue, these producers are often too small to compete on price with large-scale commodity producers, while only 69% of Mohawk Valley farms had access to the Internet in 2012.

Any strategy aimed at enhancing profitability and viability of the region's farm and food businesses will have to directly address this problem: simultaneously shepherding development of marketing opportunities for small-scale producers and facilitating continued success and lessened market risk for large-scale commodity operations. In short, physical, virtual and intellectual resources from both the public and private spheres must be marshalled to efficiently link buyers with sellers and to capitalize on the rapid and favorable changes occurring in the global food system.

KEY FINDING #3: ADDRESSING THE GAP BETWEEN WORKFORCE ABILITIES AND AGRICULTURE & FOOD PROCESSING INDUSTRY NEEDS IS ESSENTIAL TO MAINTAINING AND GROWING THE INDUSTRY.

Agriculture and agri-business in the Mohawk Valley are no longer low-tech businesses. Many careers in this industry require some sort of specialized and/or technical training. However, many obstacles in the talent pipeline currently prevent the industry from becoming more innovative, efficient, and robust. The Mohawk Valley's K-12 students are underperforming compared to their Upstate counterparts, while a youthful brain drain draws well-educated young workers

away from the Mohawk Valley economy. Additionally, those that come from economically disadvantaged households perform more poorly than their counterparts in terms of high school graduation and Advanced Regents Designation.

The high percentage of hard-to-place workers in the Mohawk Valley, who traditionally have lower levels of educational attainment, create an additional challenge in finding employment opportunities and pathways to prosperity for all residents. The silver lining in this data cloud is the fact that our regional workforce is well-suited to food system employment, particularly the immigrant, undereducated and at-risk labor pools, all of whom represent a "trainable workforce."

To enable agribusiness to thrive in our region, the Mohawk Valley will have to cultivate a robust workforce pipeline that has the flexibility to adapt to the needs of agricultural employers. Increasing STEM education and graduation rates in K-12, through models like Governor Cuomo's P-TECH program (with targeted training in ag-tech, for example) will be key, particularly with their emphasis on experiential learning.



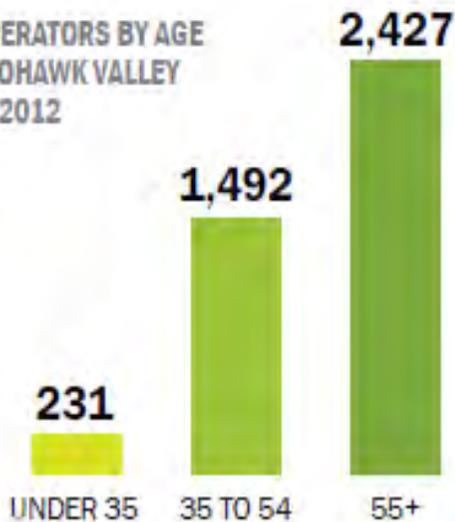
WORKFORCE DEVELOPMENT
ADDRESS NEEDS OF INDUSTRY AND CULTIVATE
TALENT



HARD-TO-PLACE WORKERS
UNTAPPED RESOURCE TO SUPPORT & EN-
HANCE GROWTH

Is there an age cliff facing the agricultural industry?

FARM OPERATORS BY AGE
IN THE MOHAWK VALLEY
REGION, 2012



57 
AVERAGE AGE OF
FARM OPERATORS
IN THE MOHAWK VALLEY
REGION

Source: U.S. Department of Agriculture, 2012.

Ommegang Brewery



**KEY FINDING #4:
ENTREPRENEURSHIP
AND THE FARM-TO-TABLE
MOVEMENT WILL CONTINUE
TO DEFINE AND EXPAND
GROWTH IN VALUE-ADDED
AGRICULTURE.**

Predictions abound that entrepreneurial opportunities in Northeast agriculture will grow in the foreseeable future because of climatic changes in major western U.S. food-producing regions, and because of consumers' growing appreciation of and demand for local, source-identified food products. The last ten years have seen increased local food procurement from major food retailers, significantly increased direct-to-consumer food sales, more than double-digit growth in farmers' markets throughout the U.S., and the emergence of urban food systems in and near metropolitan areas¹.

The market is placing increased value on "credence" attributes associated with food including origin, traceability, eco-friendliness and nutrition. Further, technological advances – including those that enable "precision agriculture" and e-commerce in food markets – will increasingly reduce operating and marketing costs for the region's food producers.

The Mohawk Valley, with its longstanding history of agricultural production and accrued farming-related intellectual capital, is well poised to take advantage of these opportunities, owing to strong corporate-sponsored research partnerships and respected agriscience programs. Six SUNY institutions and six private colleges/universities are located within the region, all offering diverse degree and certificate programs relevant to the farm and food ecosystem, including programs in agricultural sciences, food science, culinary arts, agricultural business management, finance, and STEM-intensive manufacturing.

1 Martinez, http://www.ers.usda.gov/media/122868/err97_1_.pdf



Royal Meadery



Fage



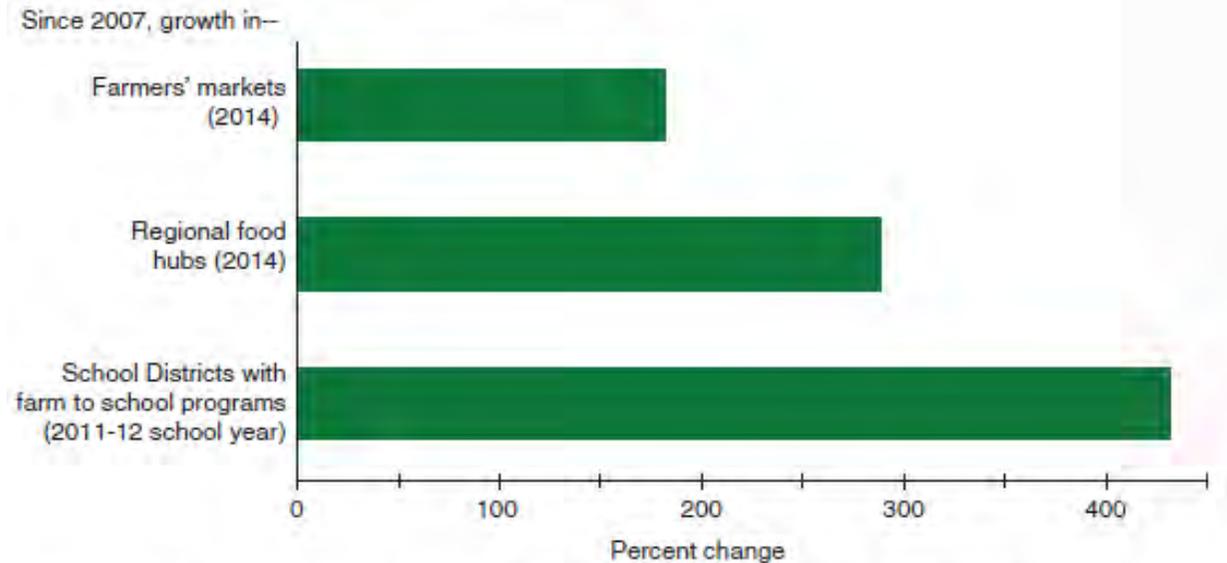
Adirondack Barrel
Cooperage

KEY FINDING #5: PART-TIME FARMING, MARKET FRAGMENTATION AND MARGINAL PROFITABILITY LIMITS GROWTH OPPORTUNITIES FOR SMALL FARMERS AND NEW AGRIBUSINESS VENTURES.

Average net cash farm income in the region was \$22,437 (compared to \$34,240 statewide) in 2012. In that same year, 54% of Mohawk Valley farms incurred net losses, while 40% of principal operators on Mohawk Valley farms cite their “primary occupation” as something other than farming; this is especially true for non-dairy operators.

In the specialty crop and value-added food markets, our region sees extensive fragmentation: many small-scale producers and little virtual or physical infrastructure for facilitating transactions. Though the Mohawk Valley accounts for nearly 10% of New York State’s total farm product sales, the region contains less than 3% of the state’s food manufacturing firms.

Increase in local & regional marketing channels



Sources: USDA, Agricultural Marketing Service, Food Nutrition Service; National Food to School Network.

MV500 Agriculture Thinktank Mind Map





STRATEGY 1: Maximize production and increase market share by modernizing the marketing and distribution infrastructure of Mohawk Valley agricultural products by enabling 50% of farms to become profitable by 2020.

**SUB-STRATEGY #1:
CREATION OF THE
MOHAWK VALLEY
FOOD SYSTEMS
NETWORK (MVFSN)**

Based on the success of agricentric development organizations within and outside of New York State, a Food Systems Network focused on the goal of enhanced profitability in the Mohawk Valley's farm and food ecosystem will be created. Initial project steps include benchmarking analysis of similar organizations across the country, development of a charter for the organization and identification of optimal private-public funding alignment and

accountability structures.

MVFSN will facilitate implementation of the strategies enumerated here by adapting the often cited "collective impact" model built on the following conditions: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication and backbone support organizations. With a mission to create growth and development opportunities within the agribusiness complex, the network will be buttressed by clearly delineated milestones and methods for measuring success and manifested through the work of a diverse group of stakeholders, each bringing unique strengths to bear in collaborative work. The "backbone support organization" references the need for a dedicated staff to support and coordinate the organization's stakeholders and initiatives.

The network will develop strategic export plans for 12 existing farm-based businesses in 2016-17.

Successful models are being analyzed and considered in part or in whole for implementation including: Vermont's Food System.



SUB-STRATEGY #2: CONSTRUCT AN AGRICULTURAL ASSET MAP & INVENTORY MANAGEMENT SYSTEM TO LEVERAGE FOOD RESOURCES AND SITE CAPACITY.

Construct an agricultural asset map & inventory management system to leverage food and fiber resources and site capacity. The asset map will enable the facilitation of real estate transactions and an increase in commercial transactions among ag product buyers and sellers.

The asset map will identify existing farm, processing, distribution, shipping and retail businesses and for-sale real property suitable for farming or food-related commercial spaces. The virtual tool will create capability for new or leverage existing online brokerage, information dissemination and producer support services that:

- Facilitate online direct sales of regional food and fiber products and information exchange between buyer and seller
- Facilitate user scheduling of Farm & Food Business Incubator shared kitchen/processing spaces
- Provide logistical support for upstate-downstate shipment and backhaul
- Serve as a matchmaker between entrepreneurs and investors to facilitate farm expansion, diversification or start-up projects
- Serve as the centralized information and application site for a regional micro-loan/micro-grant initiative
- Serve as an information hub for market intelligence
- Serve as a conduit to online and in-house educational programming opportunities sponsored by regional colleges
- Support teams of students and faculty from regional colleges will help facilitate adoption of this tool and with ongoing necessary information collection, farmer assistance and site development
- Enhance opportunities for workforce and job access for hard-to-place workers through identification and coordination workforce training options and agricultural industry partnerships.

Outcomes will include the development of an interactive database and perform inventory of 3500 producers in 2016-17, connect 140 existing farms to new buyers and institution of a market outlet in NYC for Mohawk Valley products, implementing a bi-monthly shipment of MV farm products to NYS Metro market.



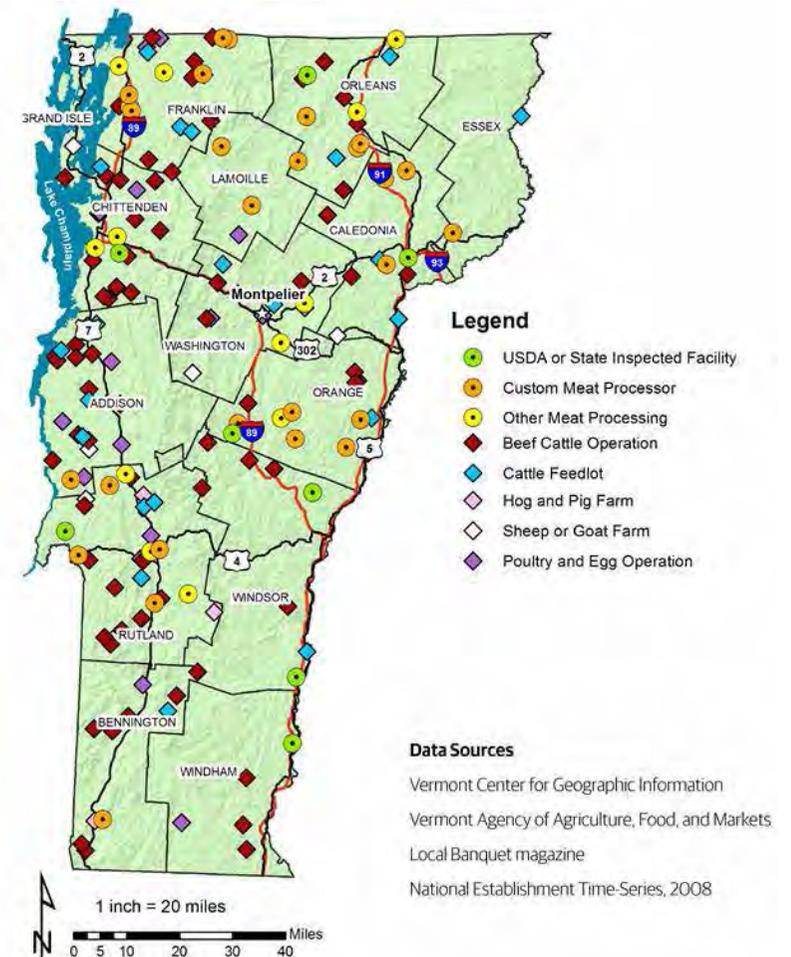
3: Food Production



4: Crosscutting Issues



BEST PRACTICES MODEL: VERMONT ASSET MAP





HARD-TO-PLACE WORKERS
 UNTAPPED RESOURCE TO SUPPORT & ENHANCE
 GROWTH



WORKFORCE DEVELOPMENT
 ADDRESS NEEDS OF INDUSTRY AND CULTIVATE
 TALENT

STRATEGY 2: Invest in Next-Generation farmers and close the skills gap between hard-to-place workers and agricultural, craft brewing, and food processing opportunities. Achieve a 15% increase in the percentage of agribusiness workers and farm operators between the ages of 18-35 by 2020.

**SUB-STRATEGY
 #1: CREATION OF
 A NEW INCLUSIVE
 EDUCATION
 ECOSYSTEM TO TRAIN
 HARD-TO-PLACE
 WORKERS IN NEEDED
 SKILLS.**

Agriculture and agri-business in the Mohawk Valley are no longer low-tech businesses. Many careers in this industry require some sort of special training. However, many challenges exist in the talent pipeline that currently prevents the industry from becoming more innovative, efficient, and robust. The Mohawk Valley’s K-12 students are underperforming compared to their Upstate counterparts, while a youthful brain drain draws well-educated young workers away from the Mohawk Valley economy. Additionally, those that come from economically disadvantaged households perform more poorly than their counterparts in terms of high school graduation and

MV500 will align K-12 curricula with projected job-skill needs, in order to elevate graduation rates and increase the employability of graduates. One example of this is through P-TECH modeled programs throughout the region. P-TECH modeled experiential learning programs will offer targeted training for specific careers, such as agriculture and ag-tech, providing hands-on learning for high school students to explore careers in this advancing industry.

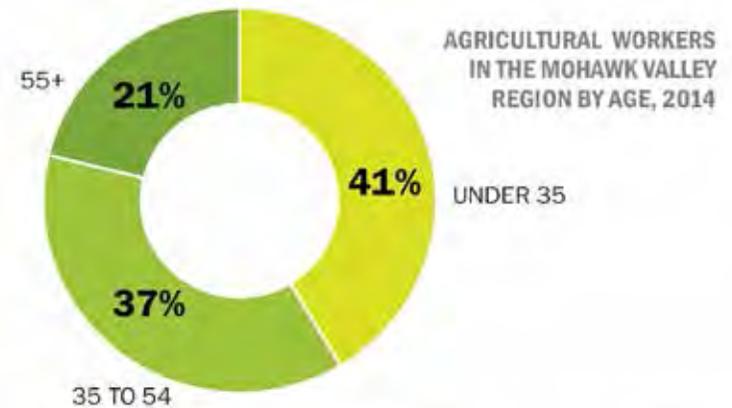
Advanced Regents Designation. Elevated levels of hard-to-place workers in the Mohawk Valley, whom traditionally have lower levels of educational attainment – create an additional challenge in finding employment opportunities and pathways to prosperity for all residents.

Pull hard-to-place individuals into the workforce through a series of interventions tailored to specific needs: By rethinking traditional approaches to engaging disadvantaged segments of the workforce, MV500 will establish mechanisms to put many of these workers in targeted industries. Removing barriers through non-traditional workforce development opportunities will serve the dual purpose of lifting these individuals out of poverty and increasing the labor pool.

Tailor workforce training to current/upcoming employer needs:

MV500 will enhance direct interfacing between colleges and employers to tailor workforce training to their current and future needs, aligning degree and certificate curriculum with agriculture-sector businesses in a flexible and responsive partnership that creates a reliable workforce pipeline. In collaboration with employers, the Mohawk Valley will develop a workforce that is prepared to participate and succeed in an innovation-driven economy, particularly in industries such as agribusiness and ag-tech.

Increase STEM education and graduation rates in K-12:



Source: NYS Dept. of Labor, 2013 and U.S. Census, Quarterly Workforce Indicators, 2014, Quarter 1.



*SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA,
NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR
ECONOMIC GROWTH*



*USE OF NYS PROGRAMS TO ENHANCE URI
FUNDS*

STRATEGY 3: Create an environment for innovation and entrepreneurship in agribusiness and agrisciences by increasing the percent of food manufacturing firms (3% in 2014) to equal the percent of total farm product sales (10% in 2014) by 2030.

**SUB-STRATEGY
#2: LEVERAGE
EXISTING FARM AND
FOOD BUSINESS
INCUBATORS.**

SUNY Cobleskill has been endorsed by the MVREDC as the region's second designation for New York State Business Incubator and Hot Spot status, to capitalize on the agricultural and ag-tech innovation ecosystem emerging in the southern part of the Mohawk Valley. A partnership between CADE and SUNY Cobleskill, with support from Cornell Cooperative Extension, SUNY Oneonta and Hartwick College, the Ag Hot Spot will provide an annual intensive workshop series, tailored consultation, business plan

development support, matchmaking for farmland purchase and access to capital/investors and product development assistance, including recipe development, facilitated scheduled process authorization, small batch production, consumer panel assessment, sensory analysis, retail piloting, marketing strategy development and use of shared commercial kitchen and dairy processing spaces.

The Dairy Processing Center at SUNY Cobleskill in Schoharie County will form a public-private partnership of New York State, the U.S. Economic Development Administration and corporate sponsors to construct and equip a 3,000-square-foot training and demonstration facility that will contain milk processing and bottling equipment, as well as equipment to make ice cream, yogurt and cheese.

The Mohawk Valley region has the foundations of an up-and-coming innovative economy within agriculture, agri-business, and ag-tech. Assets that provide this foundation include the thINCubator, which offers physical space for entrepreneurs to develop their business ideas, research and development and educational institutions such as SUNY Cobleskill and Hartwick College, and educational and commercialization programs such as the Commercialization Academy.

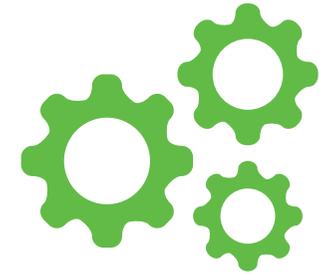
Building a strong presence of innovative assets is essential to growing any cluster, even traditionally low-tech clusters like agriculture. This cluster, especially in the Mohawk Valley, is no longer low-tech, and is grown through innovative minds as in any other industry.

The program will utilize the academic strengths of local colleges/universities – institutions such as SUNY Cobleskill or Hartwick College's Center for Craft Food and Beverage – which create an ecosystem that enables agri-business and ag-tech entrepreneurship.



CONNECTIVITY PROFILE

Beyond the Table: Where Agriculture Meets Tourism



Agritourism is a set of activities that occur when people connect travel with the products and experiences of agriculture. In agritourism, farmers become entrepreneurs rather than just producers. Diversifying into value-added agriculture or agritourism provides several market opportunities, including collective branding, heritage and cultural events, and agritainment (concerts, harvest festivals, etc.). Rather than waiting for food manufacturers and distributors to establish a marketplace, farmers as entrepreneurs can establish their own prices and market.

A recent resurgence of agricultural entrepreneurship is increasingly contributing to New York State's already booming craft beer scene. Many of the new class of cultivators and artisans are handling every aspect of the process, from crop to shelf, making the

Mohawk Valley a destination where you can touch the ingredients, taste the finished product, and even talk to the people who make it happen.

Brew Central, a marketing collective that brings together the stories, traditions and tastes behind craft beer, hard cider, spirits and wine in the Mohawk Valley, is providing a regional brand that is being broadcast both nationally, and around the globe. The goal behind that initiative is to capture as much of the rural travel market share as possible, and dramatically increase outsider spending and multi-day/overnight trips.

By providing opportunities beyond the production and sale of commodities, the Mohawk Valley hopes to leverage its history and density of agriculture into a burgeoning entrepreneurial environment in value added agriculture and agritourism.

What do rural travelers like to do?

Source: Travel Industry Association of America – Rural Tourism Travel Poll

Activity	Percent
Dining/Drinking	70
Shopping	58
Visit Historic Sites	41
Fishing/Hunting	32
Attend Festival	29
Bike Riding/Hiking	24
Visit Working Farm	15



BREWERY OMMEGANG



MATT BREWING COMPANY

CENTRAL NEW YORK

AMERICA'S CRAFT BREW

DESTINATION

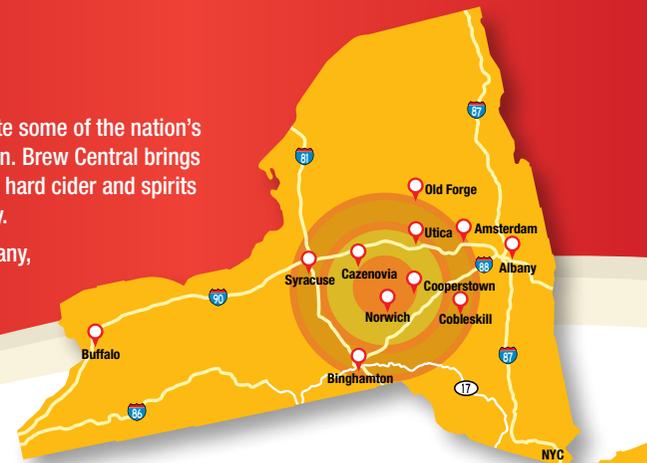
3 TO 4 DAY ITINERARY



BREWCENTRALNY.COM

Explore New York's incredible beverage legacy and celebrate some of the nation's greatest beer and spirits in America's Craft Brew Destination. Brew Central brings together the stories, traditions and tastes behind craft beer, hard cider and spirits in Central New York, the one-time hop capital of the country.

Just take the three-hour train ride from Penn Station to Albany, where an Enterprise rental car will be waiting for you to start your brew odyssey ...



START HERE!

Utica and Verona, N.Y.

Start things off with the popular tour of the F.X. Matt Brewery, home to Saranac beers, and then take a walk to Nail Creek Pub & Brewery next door, where tons of craft brews and a European pub style make it a local favorite. A little further up the street, you can sample Central New York's first-ever legal bourbon alongside award-winning gin and vodka at Adirondack Distilling Co. Jump on the Thruway and enjoy a few sips at the new Villa Verona Vineyards, conveniently located near the Turning Stone Resort & Casino and its New York beer-focused Upstate Tavern.

- www.saranac.com
- www.nailcreekpub.com
- www.adirondackdistilling.com
- www.villaveronavineyard.com
- www.turningstone.com



Cazenovia and Hamilton, N.Y.

Head down to Good Nature Farm Brewery & Tap Room for its farm-to-table beer by the glass, growler fill, bottle, keg or flights in their Hamilton tap room, which features live entertainment frequently year round. Unwind with some wine in a picturesque, rural setting of grapevines, gardens, ponds and orchard at Cazenovia's Oweravineyards.

- www.goodnaturebrewing.com
- www.oweravineyards.com

Greater Binghamton | Chenango | Herkimer | Madison
Montgomery | Oneida | Onondaga | Cooperstown/Otsego | Schoharie



STRATEGY 1: Invest in craft food & beverage expansion and tourism promotion initiatives to strengthen these industry concentrations and create new job opportunities by increasing growth in visitor spending (14% in 2009-2011) to equal growth of visitor spending in NYS (18% in 2009-2013) by 2020.

STRATEGY 2: Create a path to prosperity for hard-to-place workers by increasing employment growth (6% in 2009-2013) to equal growth of employment in NYS (11% in 2009-2013) by 2020.

STRATEGY 3: Enable an entrepreneurial ecosystem by adding 50 new tourism firms by 2020.

STRATEGY 4: Expand year-round attractions, capture greater numbers of international visitors, and increase the Mohawk Valley's exposure to global markets by increasing tourism as a percent of global exports by 5% by 2030.

TOURISM IMPACTS AND OUTCOMES

VISITOR SPENDING GROWTH

14% -> 18%
BY 2025

EMPLOYMENT GROWTH

6% -> 11%
BY 2025

FIRMS

+50
BY 2025

GLOBAL MARKETS

5%
INCREASE
BY 2030

ERIE CANAL TRAIL

100%
COMPLETION
BY 2025

Source: NYS DOL, US Census Bureau, Bureau of Labor Statistics



"I've always been a guy that likes to search and learn and see history and I got glued to everything I saw in Cooperstown that first trip. I went looking for (fellow Dominican Republic native) Juan Marichal's plaque but I found a lot more. I'm extremely honored to now become part of it"

– Hall of Famer Pedro Martinez

TOURISM



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1



GLOBAL ECONOMY
GLOBAL MARKETING & EXPORTING



INNOVATION
CORNERSTONE OF THE ADVANCED ECONOMY



COMMUNITY REINVESTMENT
HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



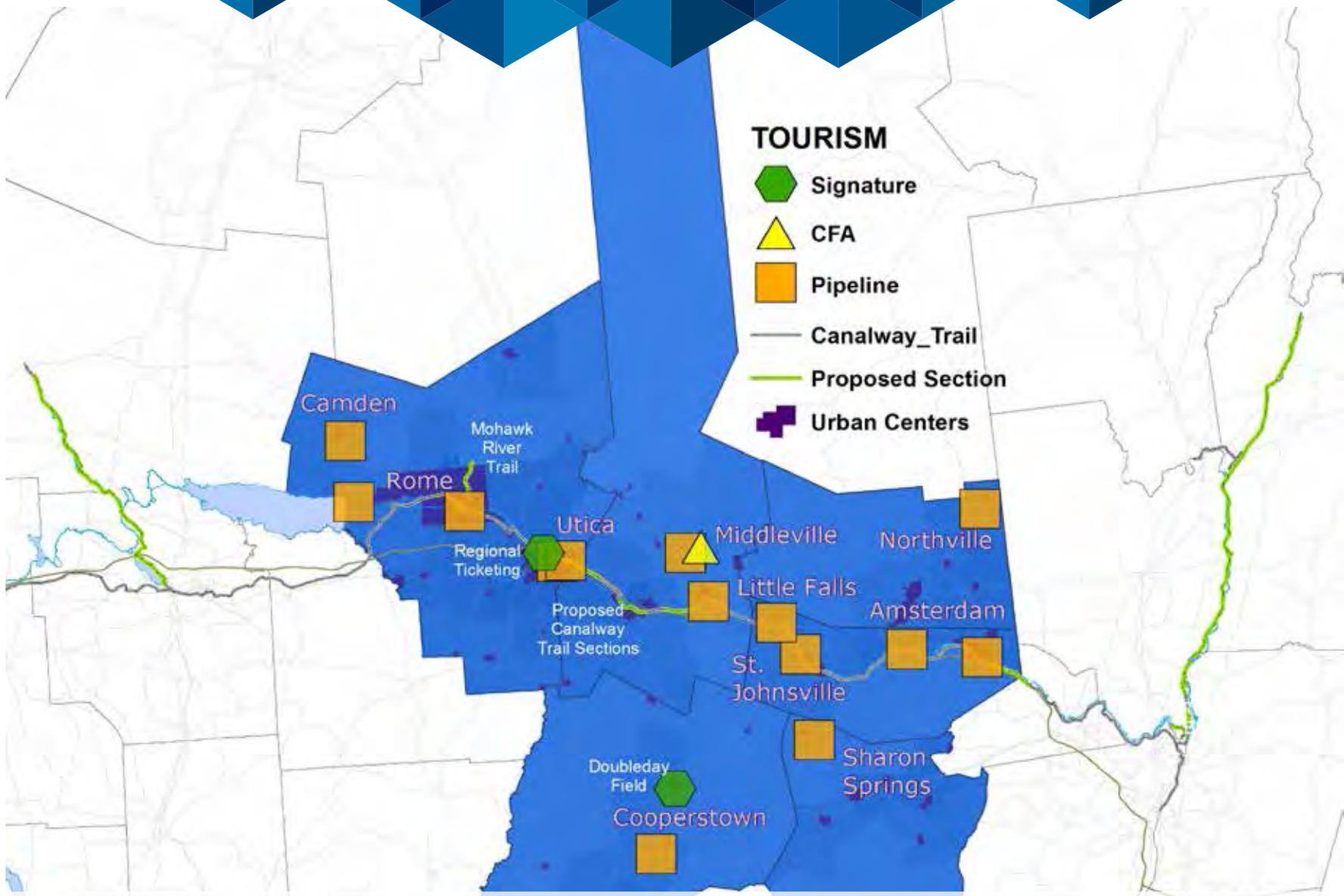
SUSTAINABILITY
LONG-LASTING AND SUSTAINABLE CHANGE

CFA Projects:

Ace of Diamonds -2016 Tourism Enhancement Project



MATT BREWING COMPANY



PHYSICAL LOCATIONS FOR INVESTMENT

TOURISM

Path to Readiness



READINESS

READINESS TO IMPLEMENT STRATEGIES

In 1939, staggered by the Nation's worst depression, Cooperstown's Stephen Clark turned to tourism to bolster a village in need of an economic jolt. There's an old saying that if opportunity doesn't knock, one must build a door. The Mohawk Valley has built that door and crashed through it.

Clark's inspiration, the Baseball Hall of Fame and Museum, succeeded instantly. Cooperstown and the Hall of Fame became synonymous, a brand representing excellence and, in the ensuing eight decades, an international bucket-list destination. (President Obama visited the Hall in May 2014 and spoke about the importance of Cooperstown and international tourism). Young people (young and old) across America dream of becoming the next Babe Ruth or Mickey Mantle. A pilgrimage to Cooperstown has become a must for baseball fans everywhere, and more than 300,000 people -- nearly all from beyond the Mohawk Valley region -- visit annually. More importantly, the Hall's impact on the region exceeds \$150 million each year.

Some cities, states and countries have turned themselves around by enticing people to come see what they have to offer. Cooperstown is a prime example with not just the Hall of Fame, but also The Farmers' Museum, Fenimore Art Museum and Glimmerglass Festival (Opera). The recipe for healthy economies is relatively simple as well, and aligns directly with tourism's core initiative: bring outside money in and keep inside money in. Tourism has been, and always will be, a critical component of sustainable economies, a robust engine that drives our growth and enhances our quality of life.



ARKELL MUSEUM



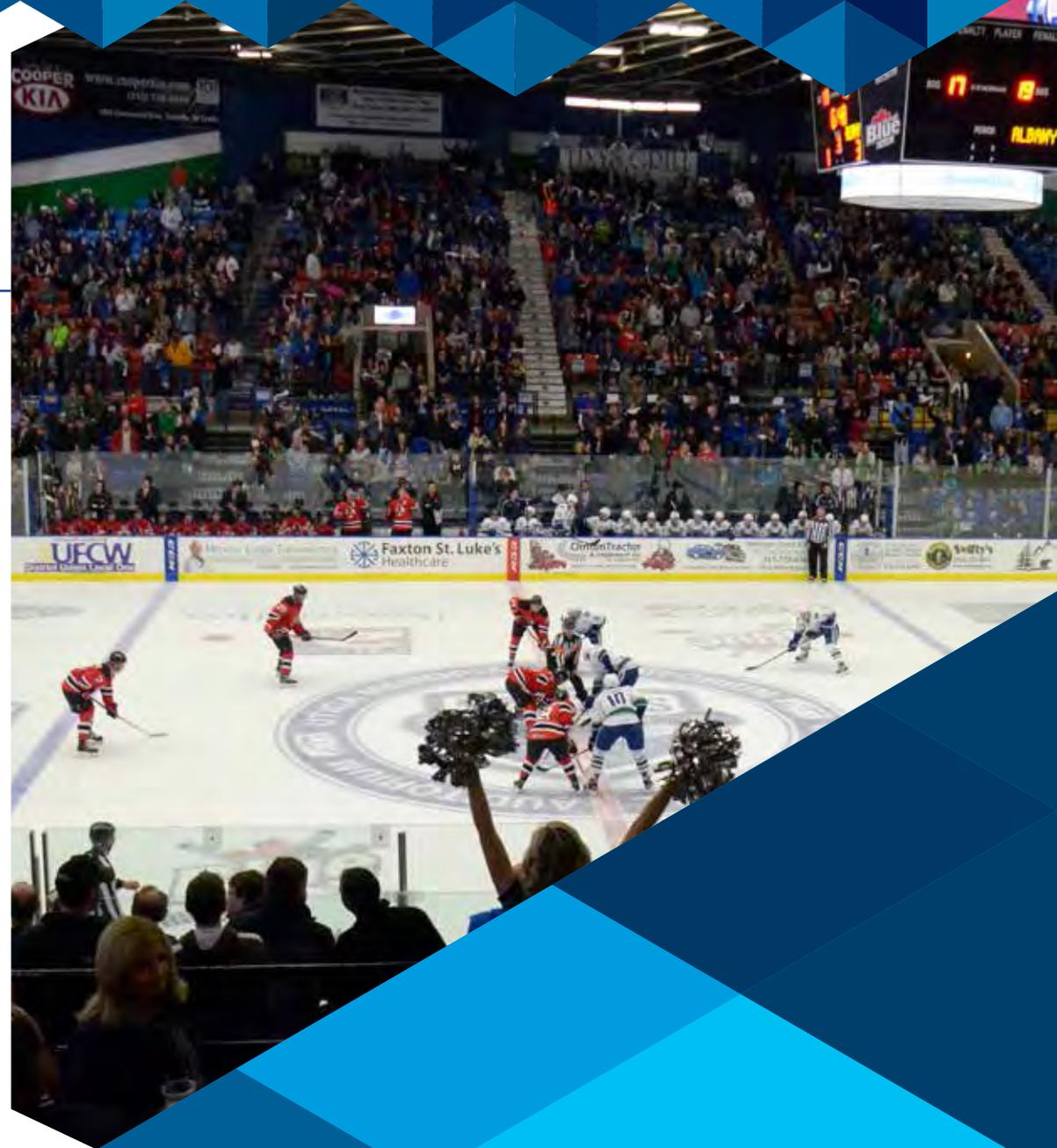
PUBLIC SURVEY: WHAT DRIVES OUR COMMON IDENTITY

1. MAJOR HISTORICAL AND CULTURAL ASSETS
2. WATERWAYS THAT SUPPORT ENVIRONMENT AND QUALITY OF LIFE
3. STRONG AGRICULTURAL BONDS

MV500 TOURISM FOCUS:
SPORTS DESTINATIONS,
ADVENTURE TOURISM, AND
AGRITOURISM.



BALD MOUNTAIN



TOURISM

KEY FINDINGS

KEY FINDING #1: THE REGION IS RICH IN TOURISM ASSETS – NATURAL AND MAN-MADE – WITH AN ABUNDANCE OF VARIETY

In the Mohawk Valley, passionate, innovative people make things happen. One result is that our region's long list of tourist draws. The strength of these attractions and their diversity – college and professional sports, athletic events, outdoor adventure, hiking, skiing, culture, shows and more – generates \$1.6 billion in direct spending in the Mohawk Valley each year and employs more than 25,000 people. Buffalo Billion researchers learned that every \$1 million dollars spent by visitors creates up to 15 jobs.¹ Overall visitor spending in the Mohawk Valley continues to grow, consistently outpacing Upstate spending growth, topping \$1.49 Billion in 2011, and surpassing the \$1.67 Billion mark in 2014. Between 2010 and 2014, visitor spending in the Mohawk Valley increased by 19.7 percent.² These riches are shared among regions. As natural partners with Central New York, Southern Tier, and the North Country, the Mohawk Valley captures the essence of what it means to live in Upstate New York, and embodies the unique character treasured by natives and visitors alike.

¹ Buffalo Billion, 2013

² CNY Tourism Impact Analysis, Tourism Economics, 2014



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS

Consider the breadth and depth of the most prominent offerings:

- Majestic mountains (the Adirondacks and Catskills); pristine lakes, rivers and streams; the Fulton Chain Lakes; Otsego Lake; West Canada Creek; Moose River Plains -- everywhere jaw-dropping natural beauty, spine-tingling adventure, deep and restorative relaxation.
- The Erie Canal -- and its successor, the New York State Barge Canal -- enjoys iconic status in American history and has served as the backbone of the region's economy and culture. Increasingly, communities across the Mohawk Valley are reconnecting with their waterfronts and with each other through recreational trails and activities.
- Cooperstown's National Baseball Hall of Fame and Museum began as an idea to bring more visitors to Cooperstown and has transformed the region.
- Howe Caverns began as a simple business idea to capitalize on a natural underground phenomenon and has grown into the second-most visited natural attraction in New York State behind Niagara Falls (Tourism Economics), drawing more than 200,000 visitors annually.
- Turning Stone Resort and Casino began as a bingo hall with a small hotel and now employs more than 4,500 people. Visitor spending exceeds \$400 million a year. The TSR&C boasts two Golf Digest U.S. Top 100 public golf courses (there is only one other in the state).

- Herkimer Diamond Mines Resort, a family entrepreneurial endeavor, has built an international destination that showcases the region's unique geology and natural resources to attract more than 100,000 adventure visitors a year.
- The Utica Comets, American Hockey League farm club to the NHL's Vancouver Canucks, named the Memorial Auditorium its new home in 2014. The Comets join an already successful Utica College Pioneers program in the recently renovated Aud, a prototype of Madison Square Garden and, now, a magnet drawing thousands to downtown on game nights.
- Breweries: The region boasts several award-winning craft beer makers. Utica-based Matt Brewing is the state's oldest independent brewery; Belgian-style brewer Ommegang in Cooperstown; Cooperstown Brewing in Milford, and Butternuts Brewing in Garrattsville.

- Museums, Entertainment and Culture: The Munson Williams Proctor Institute in Utica and the Arkell Museum in Canajoharie are homes to important works by such names as Jackson Pollock and Winslow Homer. The Glimmerglass Festival in Cooperstown showcases international opera stars. Some of the best watercolors anywhere are displayed annually at The View in Old Forge. And venues such as the The Stanley and Showroom at the Turning Stone Resort & Casino feature top tier concerts and shows.
- Heritage Tourism: Sites across the Mohawk Valley trace the development of the nation from its earliest days, including the Oriskany Battlefield State Historic Site, Fort Stanwix, and the General Herkimer Home.



DISCOVER
MOHAWK
VALLEY
REGION

PATH
THROUGH
HISTORY

America's First Frontier



"America's First Frontier"

KEY FINDING #2: THE ERIE CANALWAY TRAIL AND ASSOCIATED PEDESTRIAN TRAIL CONNECTIONS PRESENT A REGION-WIDE BACKBONE FOR ADVENTURE TOURISM AND VISITOR SPENDING.

In 2014, 24% of all American travelers participated in an activity such as hiking, biking, golfing or running while on vacation¹. According to research conducted in 2012, 98% of all adventure itineraries include “soft” adventure activities. Adventure travelers account for 4 out of 10 travelers. Globally they spend an average of \$947 per day while on vacation with an average trip extending 9 to 10 days².

Currently, the Erie Canalway Trail (ECT) is more than 75% complete; 277 miles are open as an off-road multi-use trail. The ECT offers New Yorkers a myriad of outdoor recreational opportunities and health, economic, and quality of life benefits. In addition to walking, jogging, bicycling, bird watching, pet walking, cross-country skiing and, in some locations, snowmobiling — the ECT offers picnic areas and opportunities to eat, stay, shop, and visit attractions in the historic cities, towns and villages along its length.

1 MMGY Global, 2015

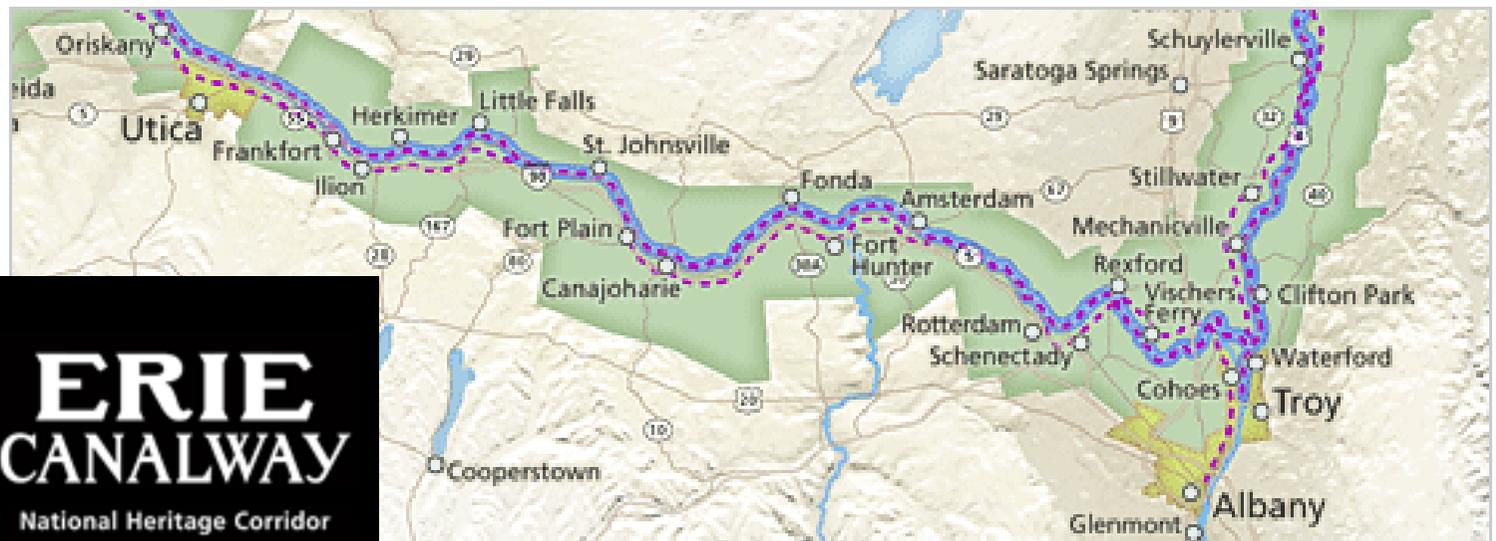
2 Adventure Travel Trade Association, 2012

Overall (including direct and secondary effects), ECT visitor spending generates approximately \$253 million in sales, 3,440 jobs, \$78 million in labor income, and \$28.5 million in taxes in the Upstate economy each year. The most conservative estimate of new money would be only the spending associated with the 2.5% of estimated annual trail visits made by persons residing outside the 35 counties surrounding the ECT. This represents approximately \$55.8 million in new sales effects, the creation of approximately 731 jobs, and \$16.7 million in labor income within the local economy³.

Almost half (47%) of non-local overnight visitor spending is for lodging or camping fees and 26% for bars and restaurants. The data confirms that overnight stays have a major impact on ECT visitor spending. While overnight visitors to the trail constitute only 18.25% of the total volume of visits, they generate 84% of overall spending. Representing 21% of overall spending, overnight visitors to the ECT and connected adventure destinations spend more than 20 times that of day visitors, so increasing the number of overnight visitors could generate significant economic benefits for ECT communities in the Mohawk Valley.



BELLAMY HARBOR ROME



**KEY FINDING
#3: TOURISM –
PARTICULARLY TOURISM
AIMED AT NATIONAL
AND GLOBAL AUDIENCES
– OFFERS TREMENDOUS
UPSIDE GROWTH
POTENTIAL FOR THE
MOHAWK VALLEY
REGION**

By building on our established and enviable tourism assets – and by pioneering with new attractions – we will rejuvenate and energize a region brimming with untapped resources and civic pride.

The top ten job-creating industries in the Mohawk Valley are in the service economy, with tourism-related professions accounting for 9.1%¹ of all jobs in the region . It must also be acknowledged that the majority of these jobs are neither high-wage nor long-term professions, paying an average of just \$23,000 per year . However, many of these jobs are entry-level, offering opportunity to those who are

currently less skilled. Moreover, the revenue generated for the benefit of the region compels us to creatively leverage Tourism as a component of a vibrant regional economy.

As a percentage of regional exports, Tourism comprises a solid 10% - on par with statewide and upstate percentages of 11% and 9%, annually. Between 2010-2014, Mohawk Valley destinations showed increasing global demand, growing by 28% in value to \$58 million – ranking Travel & Tourism fourth among the top 5 export industries in the region².

We will market the Mohawk Valley as an international destination for tourist by targeting investments in technology and regional specializations that are valuable and unique to the region, all while growing employment opportunities for those seeking pathways out of poverty and into the new economy.

Our plan includes the leveraging of broadband assets at strategic destinations to deliver multimedia and multilingual experiences that direct visitors to our long menu of attractions. By enabling visitors through mobile-friendly technology, we'll make it easy for visitors from anywhere to create memories and to stay a while.

1 Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015

2 Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015



NATIONAL BASEBALL
HALL OF FAME



ATUNYOTE, TURNING STONE
CASINO AND RESORT



McCAULEY MOUNTAIN



TOURISM KEY FINDINGS



HARD-TO-PLACE WORKERS

UNTAPPED RESOURCE TO SUPPORT & ENHANCE
GROWTH



WORKFORCE DEVELOPMENT

ADDRESS NEEDS OF INDUSTRY AND CULTIVATE
TALENT

**KEY FINDING
#4: CAPITALIZE
ON GROWTH
IN TOURISM-
RELATED JOBS TO
PROVIDE ENTRY
POINTS INTO THE
WORKFORCE AND
SKILLS-MATCHED
OPPORTUNITIES
FOR REFUGEES AND
HARD-TO-PLACE
INDIVIDUALS.**

New Americans, individuals with low educational attainment, and formerly incarcerated citizens often face insurmountable obstacles when seeking to enter the workforce. The variety of shifts and diversity of responsibilities associated with Tourism jobs presents an unique entry point for workers with language, educational, childcare, and other barriers to employment. International destinations like the Turning Stone offer entry-level, training, and advancement opportunities for hundreds of hard-to-place workers in the Mohawk Valley – and a brand new start.

Amil Catovic knows firsthand about the great opportunities available at the Oneida Indian Nation¹. Originally from Bosnia, Catovic immigrated to the Utica area in 1996. As an employee specialist with the Mohawk Valley Resource Center for Refugees, Catovic helped place qualified refugees into swing- and grave-shift positions at various locations.

Today, Catovic is a human resources specialist for the Oneida Nation. Catovic is also a recent graduate of Empire State College, earning his associate’s degree in Human Resources Management in 2008, thanks to flexibility in shifts and the culture of advancement.

“It’s great to have such an organization in this area. Not just for the refugees, I believe, for all the people who live in this area,” Catovic said. “(The) people are very nice, caring,” he said. “They (Oneida Nation) care about employees. Excellent opportunities, benefits - this is simply a place to enjoy the work.”

¹ Refugees find good jobs, great opportunities at Oneida Nation. Article, June 2008. <http://www.oneidaindiannation.com/pressroom/releases/26977144.html>



CENTRAL

BREWERY OMMEGANG



FULTON COUNTY



ONEIDA INDIAN
NATION

Starting Over

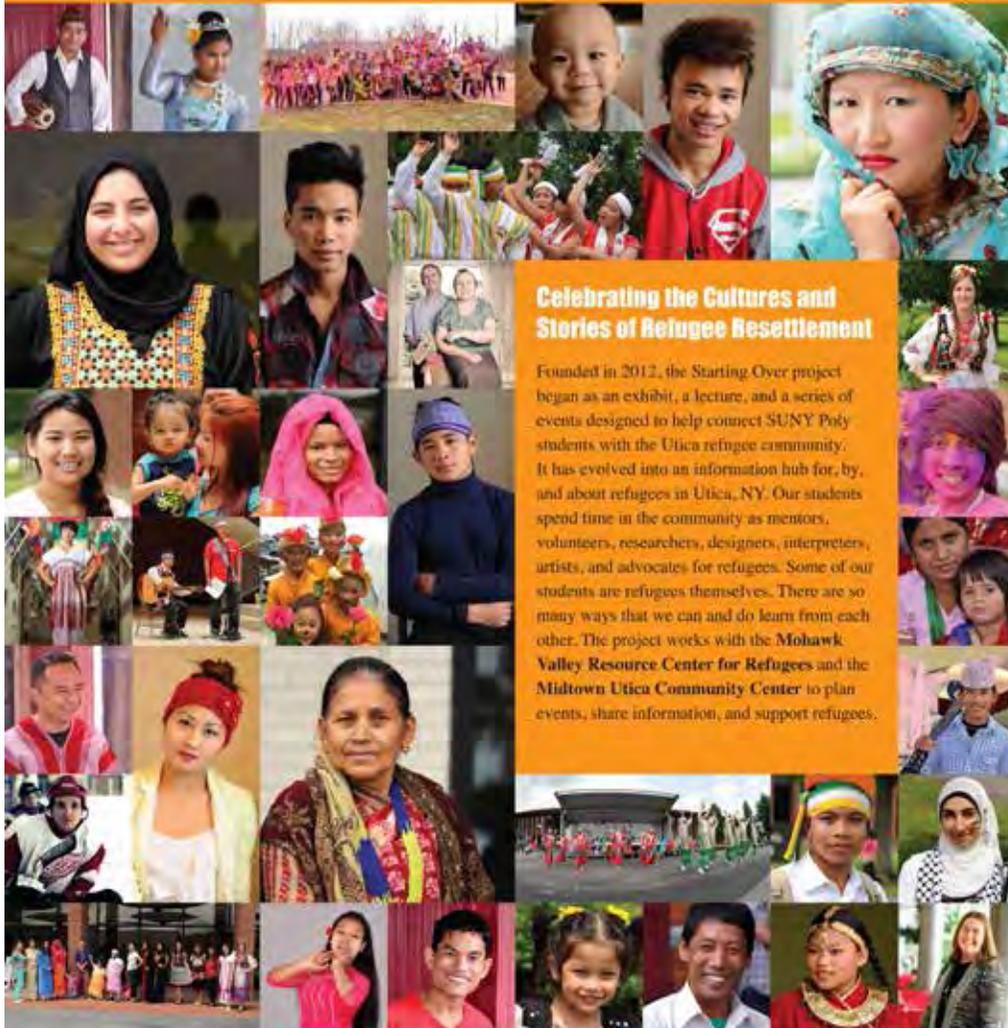
15,000+

Having choices is something fellow worker Hsernay Wah, who is originally from Myanmar (Burma), isn't accustomed to. "In my country ... there is no freedom," Wah said, adding his job has given him the chance to have a car, rent an apartment, and provide for his family.

Today, many [immigrants] enter the workforce as dishwashers, groundskeepers, janitors and housekeepers at Turning Stone², while others have found work at a Chobani, Fage USA, The Fountainhead Group, and Keymark Corporation. Flexible shifts allow entry-level workers to take advantage of educational & training programs, while employers such as the Turning Stone continue to encourage skills development and career advancement.

Destinations in Herkimer, Otsego, Fulton, and Montgomery counties are also benefiting from a diverse workforce, having opened their doors to a wider spectrum of workers. Our continued success will be driven by our ability to look forward, not backward, when matching skills and evaluating talent. As our region asks the state for a chance to prove our value to the economy, we must afford that same chance for a new life to our underserved, underrepresented, and most vulnerable populations.

2 A New Life for Refugees, and the City They Adopted. NY Times Article, August 2014.



Celebrating the Cultures and Stories of Refugee Resettlement

Founded in 2012, the Starting Over project began as an exhibit, a lecture, and a series of events designed to help connect SUNY Poly students with the Utica refugee community. It has evolved into an information hub for, by, and about refugees in Utica, NY. Our students spend time in the community as mentors, volunteers, researchers, designers, interpreters, artists, and advocates for refugees. Some of our students are refugees themselves. There are so many ways that we can and do learn from each other. The project works with the Mohawk Valley Resource Center for Refugees and the Midtown Utica Community Center to plan events, share information, and support refugees.

More than 15,000 refugees have come through the doors of the Mohawk Valley Resource Center for Refugees (MVRRC) since 1982. Fleeing war and conflict zones in: Thailand, Laos, Cambodia, Burma, Vietnam, Bhutan, Nepal, Former Soviet Union, Kenya, Ukraine, Yemen, Iraq, The Congo, Uzbekistan, Yugoslavia, Russia, Eritrea, Liberia, and more...



Interested in learning more?
Contact Dr. Kathryn Stant
startingoverutica@yahoo.com

startingoverutica.com
mvrcc.org
midtownutica.org

SUNY POLYTECHNIC INSTITUTE



SUNY POLYTECHNIC INSTITUTE



Refugees Starting Over in Utica, NY was founded in 2012



STRATEGY 1: Invest in craft food & beverage expansion and tourism promotion initiatives to strengthen these industry concentrations and create new job opportunities by increasing growth in visitor spending (14% in 2009- 2011) to equal growth of visitor spending in NYS (18% in 2009-2011) by 2020.

**SUB-STRATEGY #1:
INVEST IN CRAFT
FOOD & BEVERAGE
EXPANSION AND
TOURISM PROMOTION
INITIATIVES TO
STRENGTHEN
THESE INDUSTRY
CONCENTRATIONS
AND CREATE NEW JOB
OPPORTUNITIES**

Just behind Travel & Tourism, Food & Beverage products are the fifth strongest-growing export in our region ; with agribusiness being perhaps the most intimately connected industry to our strategy to promote regional specializations. Investing in unique industry and producer partnerships will strengthen our brand and meet a growing global appetite for craft food and beverages.

New York is among the top five states in America to capitalize on the craft brewing industry, with an economic impact of \$2.9 Billion in 2014¹ with the highest average wage (\$54k) among the fifty states. According to Ben Watson, Chief Economist for the Brewers Association,

“With a strong presence across the 50 states and the District of Columbia, craft breweries are a vibrant and flourishing economic force at the local, state and national level. As consumers continue to demand a wide range of high quality, full-flavored beers, small and independent craft brewers are meeting this growing demand with innovative offerings, creating high levels of economic value in the process.”

Craft brewing pioneer, Saranac Brewery, and Belgian brewery of international acclaim, Ommegang, are at the epicenter of the statewide economic impact, creating ripples across the

¹ Economic Impact Study of Craft Brewing, Brewers Association 2014. <https://www.brewersassociation.org/statistics/economic-impact-data/>

state and nation. The breweries have each carved out a niche in Tourism-based business, including brewery tours, summer concerts, farm-to-table events, and partnerships with sports, adventure, and cultural tourism venues. Saranac’s impact ranges from Flying Bison Brewery in Buffalo, Lake Placid Brewing in the Adirondacks, and Brooklyn Beer in New York City; while Ommegang’s Game of Thrones (HBO) line of craft brews are coveted nationwide. Both contribute mightily to the \$2.9 Billion statewide impact, and anchor the growing brewing and distilling cluster in the Mohawk Valley.



Push-pin map of visitors at Ommegang Brewery



Brewers Association, Economic Impact Study, 2014



Mitch Wojnarowicz/Brew Central <http://mitchw.com/>

ONE OF THE MANY STORIES ON TAP
IN CENTRAL NEW YORK

Chris built a community around his taps, bottles and original brews in the spirit of European pub culture. The more than 100 beers served at Nail Creek Pub & Brewery are more than beer. It's conversation. It's camaraderie. It's a true brew experience.

Chris Talgo, Co-Owner

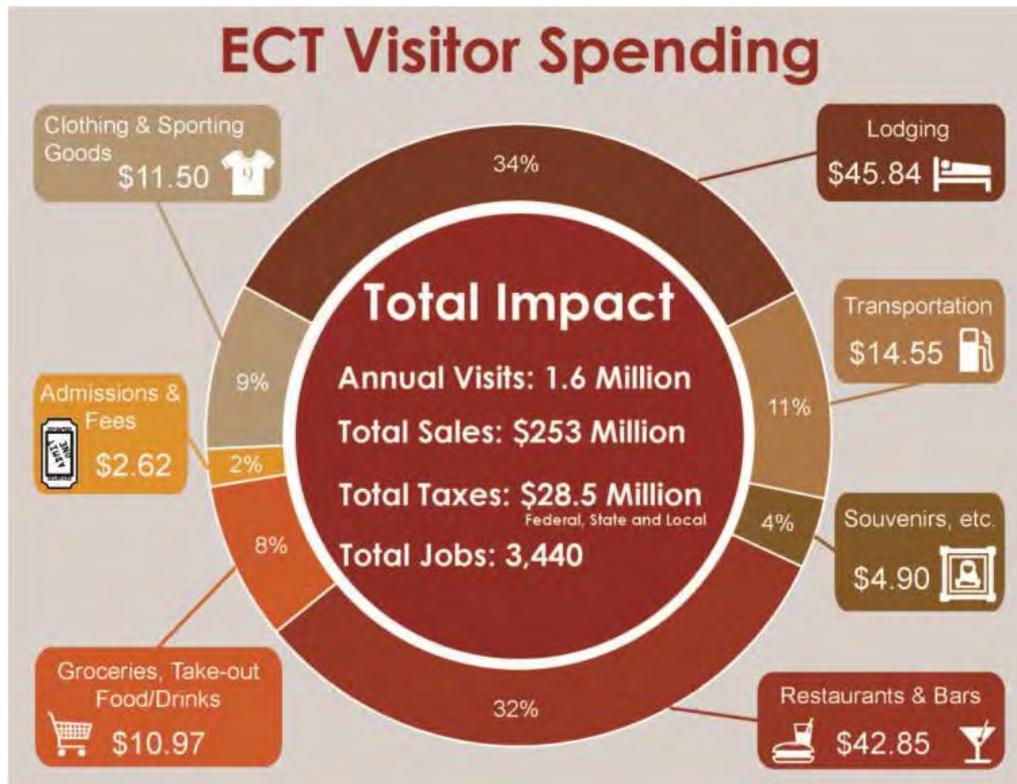
BREW CENTRAL

Setting the bar for craft pubs – just one of the stories, traditions and tastes on tap in Central New York.
Find them at brewcentralny.com

Facebook, Twitter, YouTube icons, QR code, and I ♥ NY logo.

SUB-STRATEGY #2: COMPLETE THE MV SECTION OF THE ERIE CANALWAY TRAIL FROM SYLVAN BEACH TO AMSTERDAM, INCLUDING ON-ROAD SECTIONS IN CITY AND VILLAGE CENTERS. CONSTRUCT CONNECTIONS TO TRAIL NETWORKS AND ADVENTURE TOURISM ASSETS.

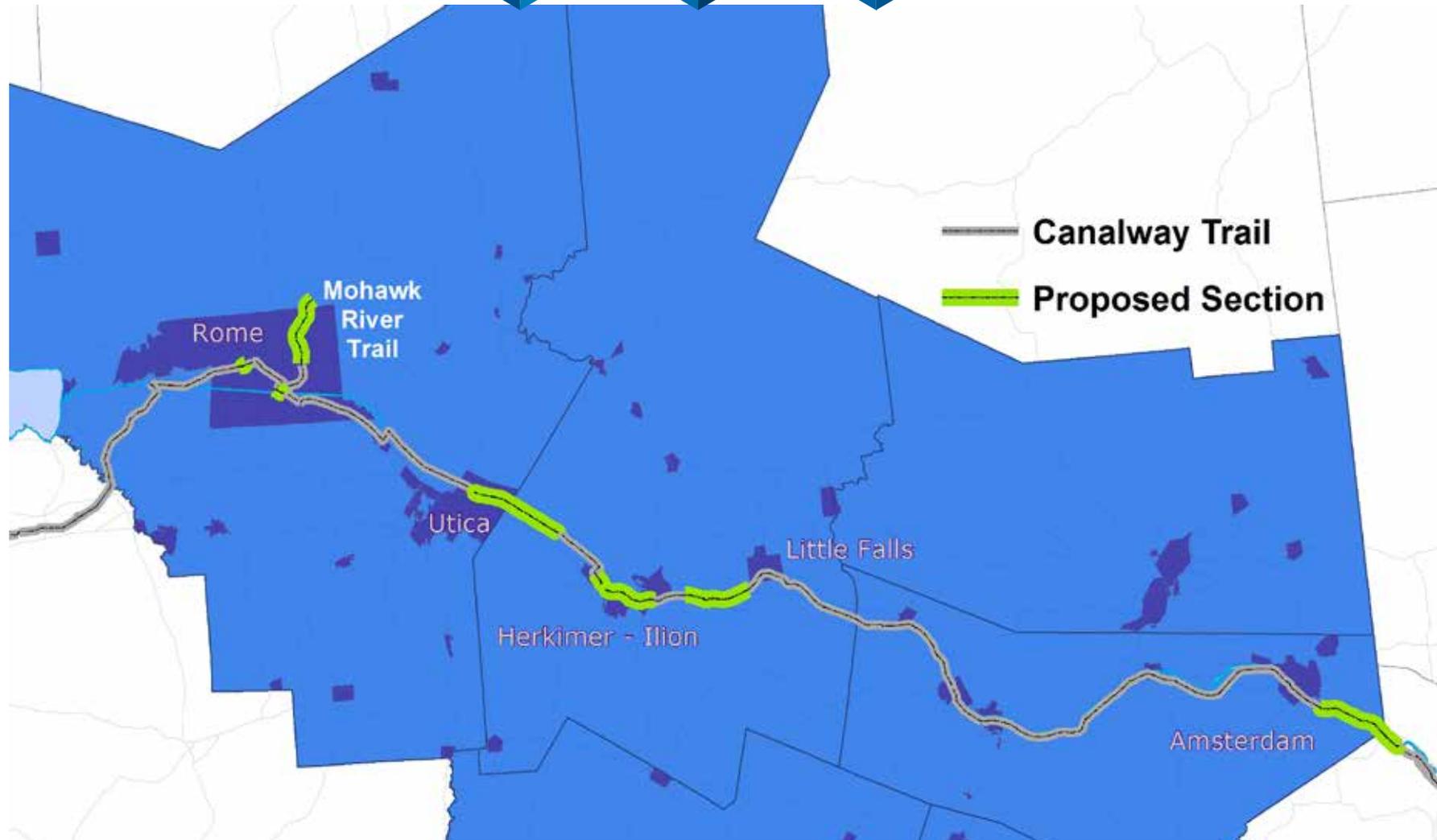
ERIE CANAL – Although it fell by the wayside with the advent of railroads and highways, there are few more iconic waterways anywhere than the Erie Canal. And, as it happens, it offers substantial untapped tourism potential to our region, not to mention the Upstate New York Corridor. In 2014, 24% of all American travelers participated in an activity such as hiking, biking, golfing or running while on vacation. Improvements to the ECT are not simply an investment in the Mohawk Valley; they are an investment in New York State as a whole. The proposed improvements and the financial gains to be had by all New Yorkers, are a major opportunity to market the region (and the State) as a premier adventure tourism destination to a national and international audience.



Economic Impact of the Erie Canalway Trail, Parks & Trails NY, July 2014



Economic Impact of the Erie Canalway Trail, Parks & Trails NY, July 2014



CLOSING THE GAPS IN THE ERIE CANALWAY TRAIL



HARD-TO-PLACE WORKERS
 UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH



WORKFORCE DEVELOPMENT
 ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT

STRATEGY 2: Create a path to prosperity for hard-to-place workers by increasing employment growth (6% in 2009-2013) to equal growth of employment in NYS (11% in 2009-2013) by 2020.

**SUB-STRATEGY #1:
 CREATE MULTI-
 INSTITUTIONAL
 EDUCATION CENTERS
 IN STRUGGLING
 DOWNTOWNS.**

Generation after generation, countless immigrants and refugees have come to call the Mohawk Valley home. These individuals often come to the region with little or no knowledge of the language or culture, and with few work skills that lend to successful careers in a new home. These immigrants and refugees can be among the most difficult segment of the hard-to-place worker population to find living-wage jobs.

Recognizing these challenges, MV500 will provide a path to prosperity for this population. Often, these groups find employment in the tourism industry – one of the region’s top employment clusters and a significant importer of wealth to the region. By providing appropriate language and cultural skills education, as well as relevant industry skills to immigrant and refugee groups, employment

opportunities will be available in the tourism industry that will serve as a starting point to prosperous lives in a new home.

One way of achieving this goal will be through the creation of several multi-institutional education centers in downtown locations in order to bring workforce development opportunities to hard-to-place populations in a non-traditional educational setting. Modeled after successful education centers like WIRED in Northwest Florida and San Antonio Works, these Centers bring together not-for-profit service providers, business leaders, and elected officials in a collaborative “one-stop” model to prepare people to work.

How does tourism employment, growth and county spending compare?

TOURISM EMPLOYMENT, GROWTH AND COUNTY LEVEL SPENDING BENCHMARKED

	MOHAWK VALLEY	UPSTATE NY	NYS
TOURISM AS % TOTAL EMPLOYMENT, 2013	7.7%	5.1%	5.3%
TOURISM EMPLOYMENT GROWTH, 2009-13	6%	6%	11%
COUNTY GOVERNMENT CULTURE & RECREATION EXPENDITURES PER CAPITA, 2013	\$8.20	\$26.31	N/A

Source: NYS Department of Labor; NYS Office of the NYS Comptroller; U.S. Census Bureau. Tourism employment reflects private sector employment only.



STRATEGY 3: Enable an entrepreneurial ecosystem by adding 50 new tourism firms by 2020.

**SUB-STRATEGY
#1: ENCOURAGE
TOURISM RELATED
ENTREPRENEURSHIP.**

The region’s tourism assets were at one time the ideas of entrepreneurs. Cooperstown’s Baseball Hall of Fame and Museum began as an idea and made Cooperstown the mecca of baseball fans. Howe’s Cavern began as a business idea and that idea is now one of the most visited natural attraction in New York State. The Turning Stone Resort and Casino began as a bingo hall and hotel, and now is one of the region’s largest employers, employing more than 4,500 people, with new and unique attractions constantly being offered to visitors.

Most recently, the Mohawk Valley has experienced strong growth in agri-businesses, particularly crafts foods and beverages. Innovative assets in the Mohawk Valley, including SUNY Cobleskill and Hartwick College’s Center for Craft

Food and Beverage, create an ecosystem that enables agri-business entrepreneurship. This in turn contributes to a tourism industry that brings in outside wealth to the region and provides jobs to thousands of Mohawk Valley residents.

The Mohawk Valley will foster growth in this industry through the Mohawk Valley Futures Fund, which will provide monetary prizes and technical support to entrepreneurs in the region’s strategic clusters, including agriculture, agri-business, and tourism. As previously described in the Mohawk Valley Futures Fund, entrepreneurs will have the ability to develop their products and services, and compete for a part of \$750,000 in forgivable loans each year.

**What do trends over time
in tourism employment
look like?**

TOURISM TRENDS, 2009-2013

TOURISM JOBS

2009 → 2013

TOURISM JOBS 10,500 11,100

AVERAGE ANNUAL WAGE \$22,200 \$23,000

% OF ALL JOBS 7.2% 7.7%

TOURISM FIRMS

2009 → 2013

TOURISM FIRMS 1,748 1,789

Source: NYS Department of Labor

UB Regional Institute

STRATEGY 4: Expand year-round attractions, capture greater numbers of international visitors, and increase the Mohawk Valley's exposure to global markets by increasing tourism as a percent of global exports by 5% by 2030.

The true path to sustainability in the Tourism industry is by investing in high-value year-round attractions. The seasonal nature of many of our international tourist attractions is a major contributor to the below-average wages associated with the industry.¹ Similarly, seasonal employment detracts from workers' ability to make long-term investments in housing, education, and communities. One strategy to increase the value of Tourism-related jobs, improve quality of life, and sustain visitor spending over a 12-month period is to target opportunities in high-density Tourism clusters.

The emerging 4-season success and international appeal of the Mohawk Valley owes largely to the rapid expansion and billion-dollar investments in the Turning Stone Resort & Casino. Recognizing that golf courses and sports fields are blanketed in snow for the winter, the resort has constructed an indoor golf and tennis domes, complemented by the variety of restaurants, concert venues, winter gardens, and cultural exhibits available throughout the year.

In 2016, the Turning Stone is embarking on a \$400 Million indoor outlet destination, featuring brands and labels previously only available in New York, Los Angeles, and Atlanta. The Turning Stone Resort is one of the most important employers of new Americans in the region. This project not only creates thousands of direct and induced construction jobs in the near term, but promises new entry level and management opportunities for an already robust international workforce.

¹ Mohawk Valley Regional Assessment: A regional Assessment Tool for the Mohawk Valley Region. University of Buffalo Regional Institute, April 2015/August 2015

Cooperstown Destination Waterpark: A Four-Season International Attraction. Currently, Otsego County is working with a developer to construct a \$160 Million indoor-outdoor waterpark between Cooperstown and Oneonta. The 400-suite resort - featuring 85,000 square feet of indoor waterpark and 43,000 square feet of outdoor waterpark - expands the options for families staying in the region for youth baseball camps, provides an alternative year-round venue for families visiting the National Baseball Hall of Fame, and offers a destination-scale attraction for families with school-aged children in the Northeast and Canada during winter vacation and spring breaks.

This project will create more than 1,200 construction-related jobs over 1.5 years, paying out more than \$150 Million in payroll. Upon opening, the destination waterpark creates nearly 600 full-time equivalent positions, with an aggregate annual payroll of \$16 Million. Over a 10-year period, the financial impact to the region tops \$800 Million. Firmly in the URI pipeline, this development opportunity presents year-round employment and recreational opportunities, further enhancing the international appeal of the Cooperstown area.

Other sports and adventure tourism projects in the pipeline targeting the expansion of year-round tourism opportunities include projects in Amsterdam and Utica. Both projects are located in the region's largest population centers, build on the momentum of unique regional destinations, and invest in our posterity.

Montgomery County has completed an opportunity analysis, and has engaged in pre-development activities with a developer to construct new indoor facilities to host



GLOBAL ECONOMY

GLOBAL MARKETING & EXPORTING

international youth sports tournaments in Amsterdam. The project site is just upriver from the impressive Mohawk River Overlook Bridge and minutes from the proposed passenger rail station.

Some call it winter; we call it hockey season. Inspired by the successes of similar endeavors Lake Placid and Buffalo, the Mohawk Valley is on track to complete the Upstate hockey trifecta. The Utica Memorial Auditorium continues to catalyze downtown revitalization, hoping to become an international youth hockey tournament destination. Leveraging the meteoric success and community impact of the AHL Utica Comets, this long-term initiative will propel New York State to the top of North America's youth hockey destinations.

The region will also continue to work with Brand USA and I Love NY to promote the region to international visitors. The region will leverage our wealth of assets based on the interests of the target markets. Using baseball and the National Baseball Hall of Fame as a hook for promotional efforts in Asian and Latin American Markets while focusing on the rich connections to American history and culture in European markets including the Erie Canal, Fort Stanwix and our successful craft beverage industry. No area of New York State is better suited to provide an authentic American experience than the Mohawk Valley. In order to meet the brand promise put forward by our marketing the region will launch hospitality training for workers to ensure that we meet the unique expectations of foreign visitors and ensure that each of the featured properties has materials available for visitors in their native languages.

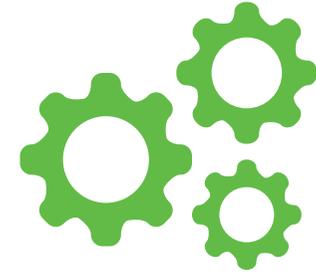


How do our tourism global exports compare?



CONNECTIVITY PROFILE

Oportunidades Para Todos- Viva Beisbol!



America's National Pastime is now a full-time obsession around the globe and nowhere is that more obvious than in Latin America - a region that produces 28 percent of the players on Major League Baseball's Opening Day rosters. The Baseball Hall of Fame in Cooperstown has increased efforts to honor the tremendous impact that Latin Americans have on the sport in a variety of ways, including the addition of a permanent exhibit "Viva Baseball", which features artifacts and a multimedia presentation celebrating the passion of Latino players and fans spanning nearly 150 years. The BHOFF also made history in 2011 when it traveled to cities across Puerto Rico to provide fans with an exclusive opportunity to view four Hall of Fame plaques honoring baseball's Latino heroes. Hosted in conjunction

with Museo del Deporte de Puerto Rico in Guaynabo, the plaques traveled to four cities and were enthusiastically received by fans, current and former players, and Puerto Rican dignitaries.

In 2016, the Hall of Fame, with the help of New York State, is proposing a project that seeks to expand its outreach to the Latin American community through increased, targeted website and social media channels, exposure, and engagement. The BHOFF will develop a marketing strategy that captures the Latino audience at home and abroad, and adapt its current marketing website tools so those visiting the site can learn about the Hall of Fame



in their native language. Investment in targeted global market strategies will result in increased access, exposure, and visitation, leading to a greater economic impact and, in turn, the creation of employment opportunities and economic growth for the region.

Success in our national pastime isn't the only way in which Latino immigrants have benefited our region. Recent growth in Latino populations in Utica and Amsterdam have provided a considerable boost to those cities entrepreneurial environments and have been a driving force in community revitalization.

The Hispanic population of the City of Utica has doubled in the last ten years, increasing from 5.5 percent to nearly 11 percent of the total population. In the last six years, the Dominican entrepreneurial presence has become especially visible, with businesses popping up in the East Utica and Oneida Square neighborhoods. There are now about 30 Dominican-owned businesses in Utica alone, all of which have emerged in just the last five years. Entrepreneurship has played a huge part in how latinos have successfully transitioned to life in the Mohawk Valley.

Latinos have been residents of the City of Amsterdam, since the post-WWII mass migration of Puerto Ricans to the mainland U.S.A. The original settlers arrived as workers in the area's once booming textile industry. Today, latinos in Amsterdam account for 26% of the population (65% increase in the last ten years), and continue to play an important roll in the City's economy.

Continuing to provide access to capital (via micro-enterprise incentives), outreach services for new immigrants (via agencies like the Mohawk Valley Latino Association, the Mohawk Valley Resource Center for Refugees, and Centro Civico) and continuum of care programming for all residents, is a cornerstone of the Mohawk Valley's long-term revitalization strategy, because our region's success, both historically, and in the future, will be driven by opportunity.





STRATEGY 1: Social Impact Bonds: A Regional Financing Model for Strengthening Civic Effectiveness.

STRATEGY 2: Integrated Regional Impact Center

STRATEGY 3: Year-long immersive education opportunities for foreign born residents and individuals with disabilities.

OPPORTUNITY AGENDA IMPACTS AND OUTCOMES

POVERTY RATE

**10%
DECREASE**

2015: 78,031
2030: 70,228

TARGETED POPULATION
HIGH SCHOOL GRAD RATES

**25%
INCREASE**

LONG TERM CARE COST

**50%
DECREASE**

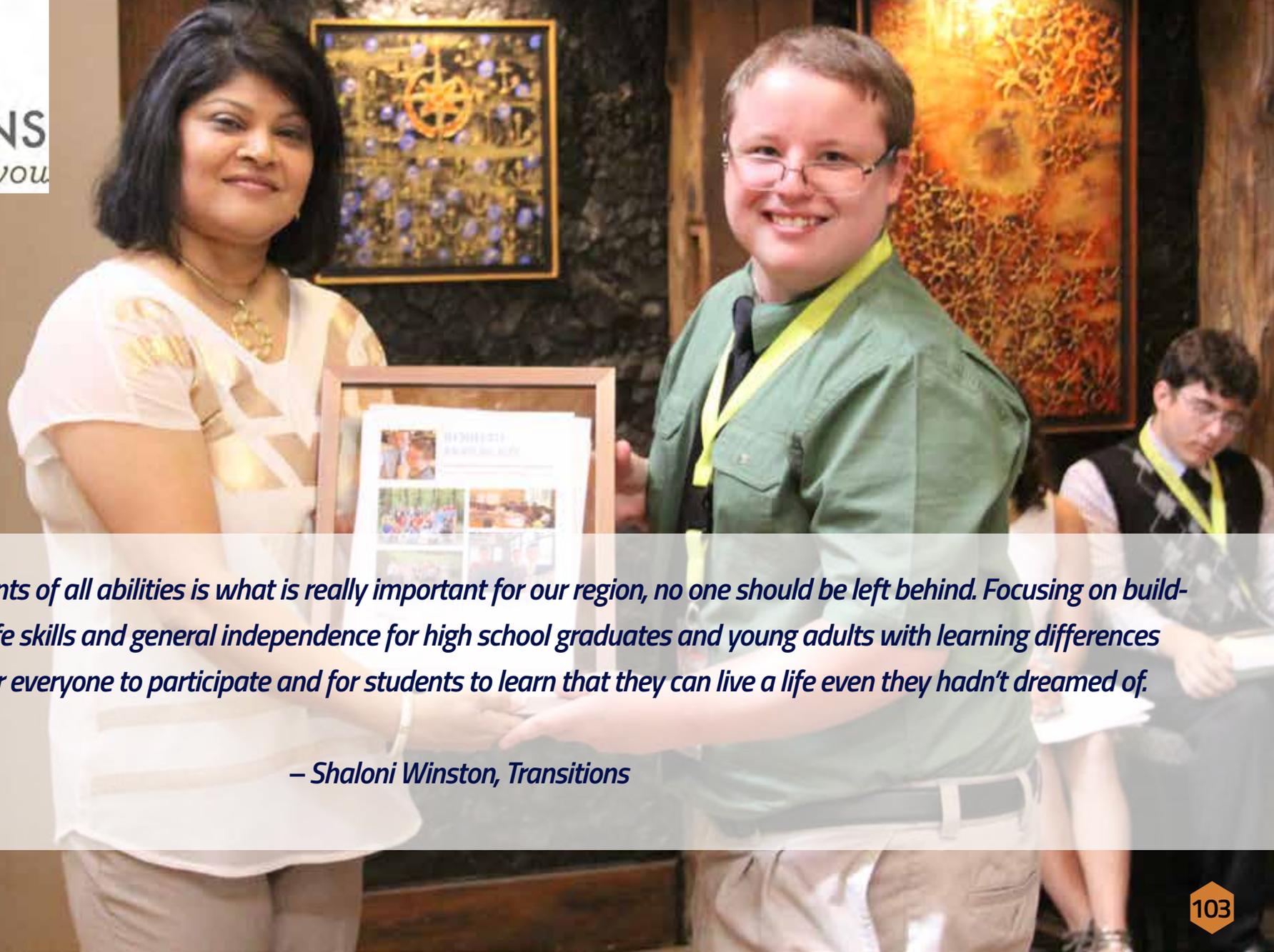
DISABLED INDIVIDUAL
EMPLOYMENT

**+250- 2020
+500- 2025
+1000- 2030**

VETERANS EMPLOYMENT

**+250- 2020
+500- 2025
+1000- 2030**

Source: NYS DOL, US Census Bureau, Bureau of Labor Statistics



Opportunities for students of all abilities is what is really important for our region, no one should be left behind. Focusing on building academic skills, life skills and general independence for high school graduates and young adults with learning differences makes it possible for everyone to participate and for students to learn that they can live a life even they hadn't dreamed of.

– Shaloni Winston, Transitions

OPPORTUNITY AGENDA

CFA Projects:

St. John's Episcopal Church - Food Pantry

Memory Lane Day Care Center II

Compassion Coalition (Your Bargain Grocer)



CONNECTIVITY

*SYNERGY AMONG INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT
CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH*



WORKFORCE DEVELOPMENT

ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT



PRIVATE SECTOR INVESTMENT

MINIMUM LEVERAGE OF 5:1



HARD-TO-PLACE WORKERS

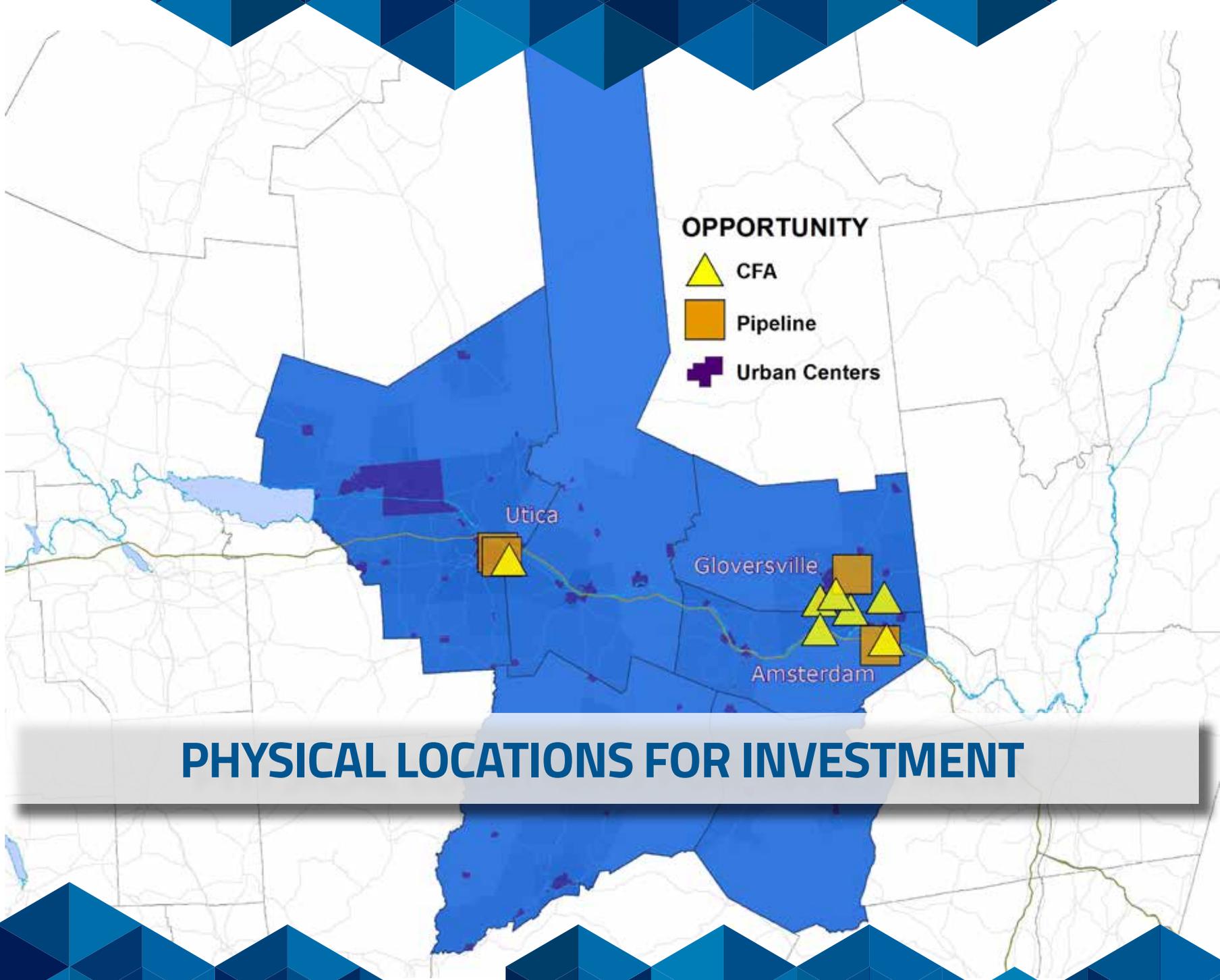
UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH



"REFUGEES AND IMMIGRANTS HAVE SETTLED WELL INTO UTICA, ROME AND AMSTERDAM. THERE ARE SOME HIDDEN JEWELS IN TERMS OF TALENTS. THE DIVERSITY IN ITSELF IS A CALLING CARD AND A THEME TO BE DEFINED."

- JOHN ZOGBY, ZOGBY ANALYTICS

CENTRO CIVICO



PHYSICAL LOCATIONS FOR INVESTMENT

OPPORTUNITY AGENDA

Path to Readiness



READINESS

READINESS TO IMPLEMENT STRATEGIES

The Mohawk Valley has adopted an opportunity agenda that focuses on securing a rewarding and affordable quality of life for all residents. This will in large part be carried out through education, job training and workforce development initiatives that support at-risk populations, as well as outcome driven services to our region's developmentally disabled population.

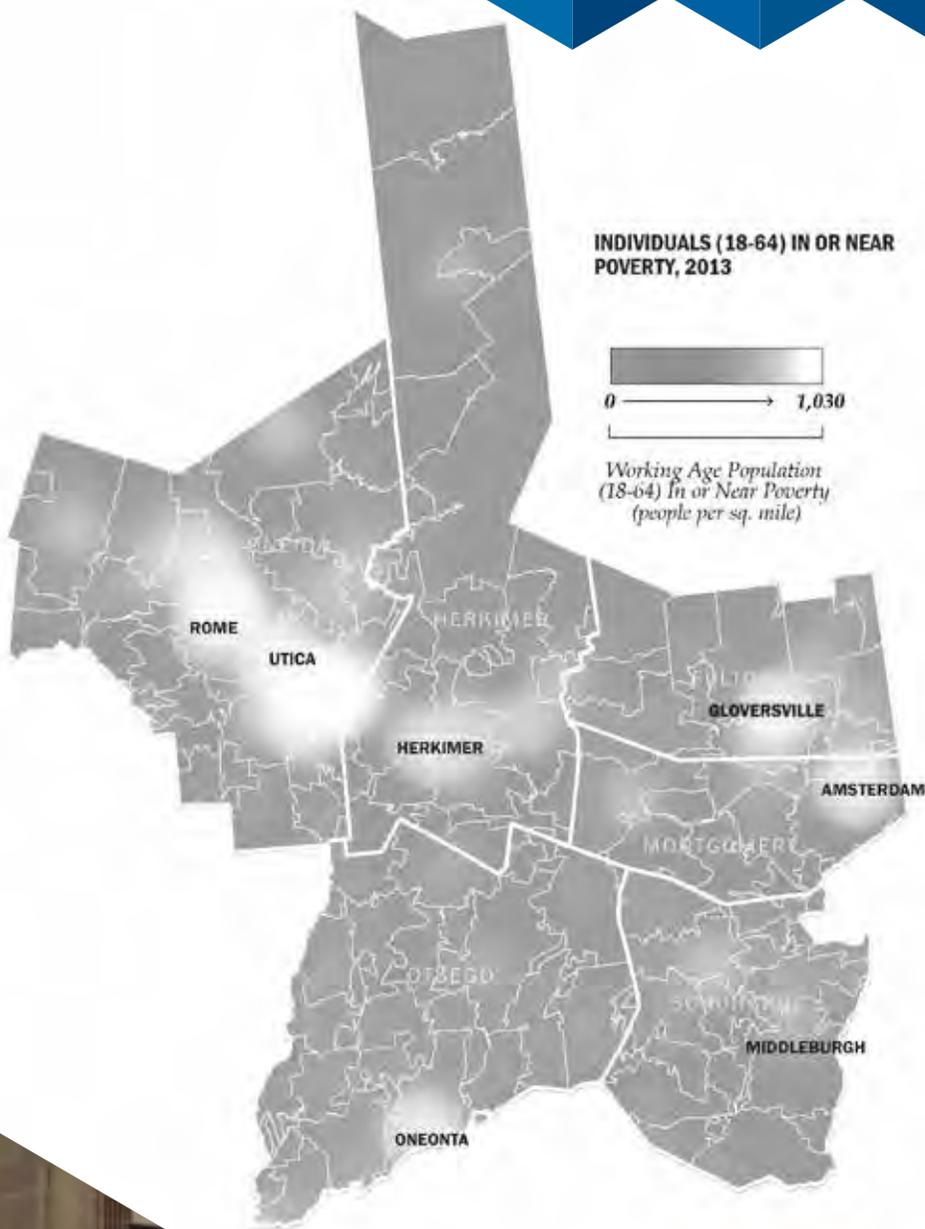
Given the diverse geography of the Mohawk Valley region, strategies must address the practical challenges of rural and urban poverty, including transportation, childcare, access to education and workforce alignment. Urban centers (Amsterdam, Herkimer, Gloversville, Oneonta, Rome and Utica) reveal a high percentage of working-age individuals that are living in or near poverty (UBRI 2015).

Cycles of poverty that stymie upward mobility are tied directly to education. Eighteen percent of our population holds a high school diploma or less. Access to appropriate educational initiatives is problematic in urban centers, with high populations of immigrants and refugees. School districts operate with limited resources, while at the same time, the cost of education for foreign-born individuals increases annually. Barriers in the classroom contribute to the difficulties in creating a viable career pipeline for our residents in urban areas.

Yet, these are purely urban problems in the Mohawk Valley. Rural areas in the region experience high levels of poverty as well. In towns with less than 5,000 people, 25% of the region's population is living in or near poverty (UBRI July 2015). Dispersed populations have limited access to workforce training and job openings and do not regularly have access to a personal vehicle in a region that is heavily vehicle dependent.



HFM P TECH



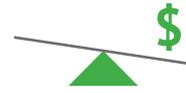
Where are the vulnerable working populations?

Source: UBRI analysis of data from the U.S. Census Bureau. **UB Regional Institute**

MVCC EOC CENTER

OPPORTUNITY AGENDA

KEY FINDINGS



LEVERAGING OTHER STATE INITIATIVES
USE OF NYS PROGRAMS TO ENHANCE URI FUNDS



HARD-TO-PLACE WORKERS
UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH



WORKFORCE DEVELOPMENT
ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT

KEY FINDING #1: NEW YORK STATE HAS ESTABLISHED ITSELF AS A NATIONAL LEADER IN SIB PAY-FOR-SUCCESS INITIATIVES, AND HAS CREATED A REPLICABLE MODEL FOR SUCCESS ON A REGIONAL SCALE.

In 2013, Governor Andrew M. Cuomo announced that New York had launched the nation's first state-led pay-for-success (SIB) project, an initiative to train and employ formerly incarcerated individuals. Private sector and foundation investors raised \$13.5 million in less than six weeks to fund the initiative. This project followed through on the Governors commitment in his 2013 State of the State address to develop innovative programs to reduce recidivism while saving money for New York taxpayers.

KEY FINDING #2: LANGUAGE BARRIERS, DISABILITIES, LIMITED EDUCATION, AND LACK OF ACCESS TO AFFORDABLE CHILD CARE CREATE WORK RELATED BARRIERS FOR TENS OF THOUSANDS OF RESIDENTS IN THE REGION.

Economic development strategies that work to overcome cultural barriers for foreign born individuals and expand educational opportunities and increased job prospects for those with disabilities can ease the hardship felt by populations where economic need is high.

Then again in the spring of 2014, the Governor selected finalists from a wide array of applicants, as part of his second pay for success initiative¹.

The Governor's groundbreaking use of SIBs provides the Mohawk Valley region with a replicable model for expanding proven solutions to challenging social issues.

KEY FINDING #3: THE MOHAWK VALLEY'S POOREST SCHOOL DISTRICTS MAINTAIN GRADUATION RATES WELL BELOW THE STATEWIDE AVERAGE.

Graduation rates within the Utica City School District have been below the State average for a number of years. In 2014, the District's graduation rate (58%) was 18% below the State Average (76%). Likewise, its Regents with Advanced Designation (-17%) and ELA/Math APM (-21%), are also far below the State average. Working against the District is a combination of students with limited English proficiency (15%), and students living

in economically distressed households (81%). These two factors work together to create a situation that must be addressed holistically, and via a long-term commitment to at-risk populations.

¹ Press Release. Governor Cuomo Announces Finalists Selected for the Pay For Success Initiative to Serve Vulnerable New Yorkers. March, 2014.

KEY FINDING #4: IN 2013, NEW YORK STATE COMMITTED TO THE LONG-TERM REDUCTION OF INSTITUTIONALIZATION, ADULT HOMES, AND SEGREGATED WORKSHOPS.

The Mohawk Valley region contains approximately 8,000 people with autism¹, and 68,000 people with developmental disabilities. The region must work to greatly reduce long term care costs for those individuals.

¹ <http://www.cdc.gov/ncbddd/autism/addm.html>

KEY FINDING #5: MILITARY VETERANS FACE CONSIDERABLE BARRIERS TO EMPLOYMENT

Veterans offer a unique set of skills, experiences and leadership abilities developed and honed during their years in the military and in the crucible of combat, yet unemployment rates reflect and highlight the difficulties returning veterans face in their search for new careers.

HARD-TO-PLACE WORKERS



	TOTAL MOHAWK VALLEY	% IN POVERTY MOHAWK VALLEY	% IN POVERTY UPSTATE NY
HIGH SCHOOL DIPLOMA OR LESS	156,292	18%	17%
LANGUAGE OTHER THAN ENGLISH AT HOME	38,360	27%	22%
DISABLED (AGE-18-64)	38,221	33%	28%
FOREIGN BORN	23,449	22%	16%
SINGLE PARENT	18,923	37%	39%
VETERAN	19,763	9%	9%

Source: U.S. Census Bureau.

UB Regional Institute

Who are the hard-to-place workers?

What is a Refugee?

[A]ny person who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country.

(UNHCR)

Utica Loves Refugees!

Utica has been called the Town that Loves Refugees. Do refugees love Utica back? YES!



startingoverutica.com | mvrcc.org | midtownutica.org

Interested in learning more?
Contact Dr. Kathryn Stum
startingoverutica@yahoo.com

SUNY POLYTECHNIC INSTITUTE



REFUGEES STARTING OVER IN UTICA, NY

Refugees Starting Over in Utica, NY was founded in 2012.



STRATEGY 1: Social Impact Bonds: A Regional Financing Model for Strengthening Civic Effectiveness.

In today's performance-driven world, public services are required to fuel innovation and provide maximize impact. Governments and foundations can make better use of their investments by demanding outcome-driven services that solve problems and deliver cost-effective results for their citizens.

Social Impact Bonds (SIB) are an innovative funding model that drives government and foundation resources toward social programs that effectively provide results to the people who need them most. The model gives highly effective service providers, including nonprofits and charities, access to flexible, reliable, and up-front resources to tackle critical social problems by tapping private funding to cover the up-front costs of social programs.¹

In an SIB arrangement, government (in this instance New York State) enters into a pay for success contract with an intermediary (the Community Foundation) and its social service provider partners (signature projects) in which the government only pays if required outcomes are met. The intermediary would raise the working capital (via donors and investors) that the social service providers need to operate the program. If the services are successful in meeting the required outcomes, then the government would pay for those successful outcomes. If the required outcomes are not met, then government pays nothing.

1 <http://socialfinanceus.org/social-impact-financing/social-impact-bonds/what-social-impact-bond>

Benefits of SIBs include:

- The public sector pays only for effective services.
- The third party investor bears all the risk of services being potentially ineffective.
- Investors and services have an incentive to be as effective as possible
- Vigorous ongoing evaluation of program impact is embedded into program operations, accelerating the rate of learning about which approaches work and which do not.
- Taxpayer dollars only fund effective programs, thus repositioning government spending to cost effective programming.
- SIB attracts new forms of capital to the social, educational and healthcare sectors.
- Independent evaluation creates transparency for all parties.²

Additionally, advocates of SIBs claim that they encourage innovation and tackle difficult social problems, asserting that new and innovative programs have the potential for success, but often have trouble securing government funding because it can be hard to rigorously prove their effectiveness on the front end. This form of financing allows the government to partner with innovative and effective service providers and, if necessary, private foundations or other investors willing to cover the upfront costs and assume performance risk to expand promising programs, while assuring that taxpayers will not pay for the programs unless they demonstrate success in achieving the desired outcomes.³

MV500 is proposing the use of social impact bonds in support of their signature modernization projects, utilizing the following structure:

2 <http://www.thirdsectorcap.org/what-is-pay-for-success/>

3 Loth, Renee. Bonds that bring social dividends. Boston Globe. August 18, 2012.

HOW DO SOCIAL IMPACT BONDS WORK

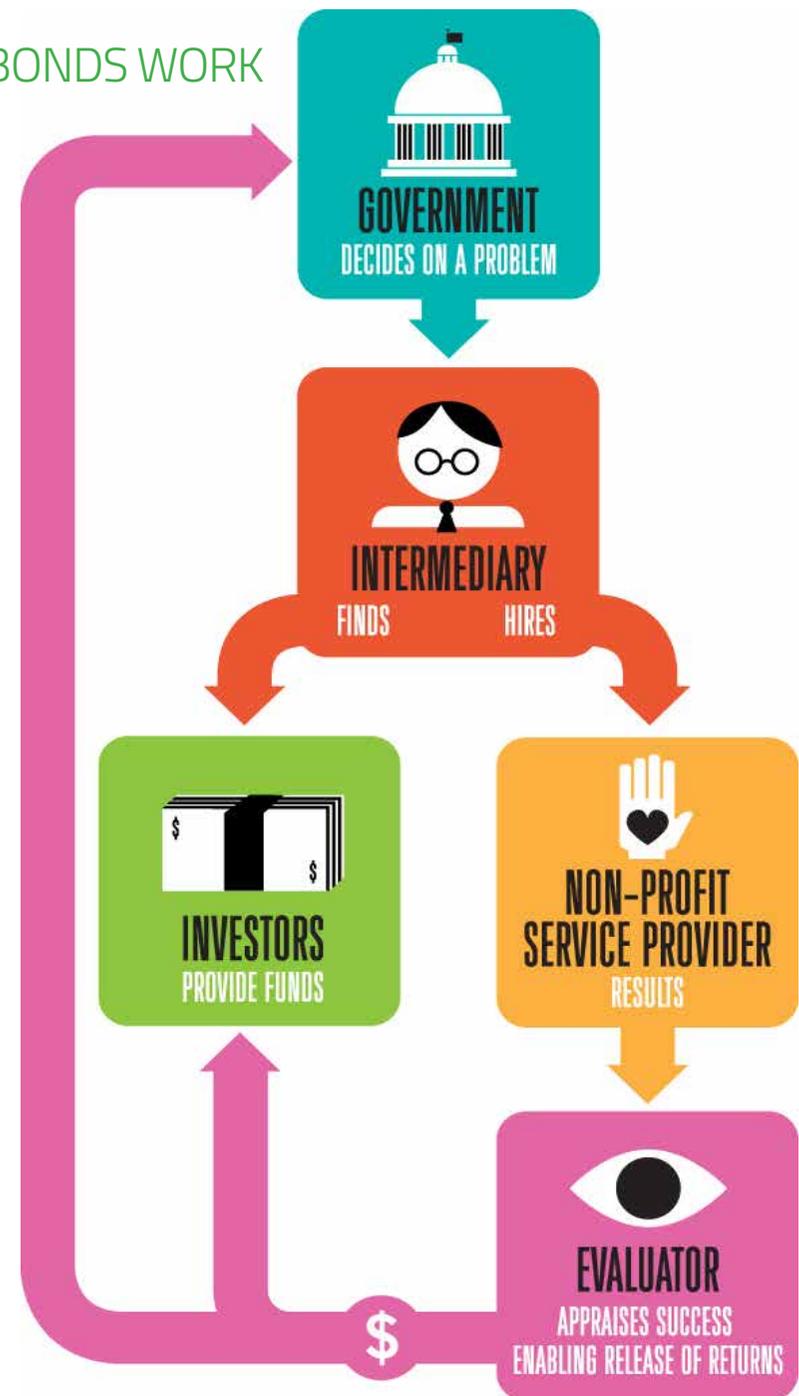
Within this structure, investors will provide funding to signature projects (with the Community Foundation acting as an intermediary), and will provide those funds to signature projects on the condition that required outcomes are met. The MVREDC would act as an independent evaluator to ensure that those outcomes have adequately been met, and if they have been met, will submit to New York State for reimbursement, which will then be returned to investors for re-use in later pipeline projects.

Best practices state that the best way to increase the success rate of SIBs is to standardize the process through consistent structures and common templates, making it easier for investors to evaluate opportunities. Another way is to promote SIBs that scale proven (rather than promising) interventions. Also, whenever practicable, SIBs should be constructed in such a way that repayment is tied to the achievement of social outcomes as opposed to government savings, since most impact first investors are more interested in the former, than they are in the latter.⁴

Projects funded within this strategy must:

1. Be a proven service model, and more importantly data-driven, and therefore be able to produce quantitative outcomes that reflect real service impacts.
2. Provide outcomes and benefits that go above and beyond those that currently exist.
3. Provide outcomes that are scalable, replicable, and self-sustaining beyond the initial investment horizon.
4. Provide a 2.5:1 leverage ratio, whereby New York State only reimburses \$1.00, for every \$2.50 supported by the SIB. The remaining return on investment must be provided by other sources.

⁴ Ragin, Luther, et al. Social Impact Bonds: Using Impact Investment to Expand Effective Social Programs. April 2013.



<http://harvardmagazine.com/>



STRATEGY 2: Integrated Regional Impact Centers

Presently 1 in 68 children are diagnosed with autism, and the rate continues to double every ten years. As it is a pervasive development disorder, individuals with autism have multiple health care needs, and as a result, they often utilize services from a variety of state systems. According to the most recent research, the lifelong cost of care for a person with autism exceeds \$2.4 million USD,¹ and the cost for those individuals who require long-term care is many times more expensive.

Overall, New York spends \$10.61 billion annually on services for people with intellectual and developmental disabilities. Per-individual spending in some New York State institutions exceeds \$600,000 per year². In 2013, New York made a report to the federal Olmstead Cabinet committing to the long-term reduction of institutionalization, adult homes, and segregated workshops and increase cross system measures that ensure integrated settings.³ Complex arrangements between New York State Medicaid programs, Centers for Medicaid Services, and the Federal Department of Justice have given way to a Multi-Year Action Plan. Led by Medicaid Redesign Teams, New York State must create scalable solutions to its \$52 billion Medicaid program.⁴

The Kelberman Center, an integrated research and human service agency that specializes in comprehensive autism services, has been conducting outcome based research in long-term care, rehabilitation, recreation and education services for many years. By integrating their tremendous experience in these fields, they have formulated a comprehensive plan to address the problems associated with Medicaid funding, poverty, and human services reform:

1. An Integrated Regional Recreation, Education and Wellness Center that resolves many of the issues faced by the poor, disabled, and underemployed, and also raises the quality of life of the entire region; and
2. The creation of an Intentional Community that will redevelop the neighborhood around the wellness center. This intentional community will create a value chain of local service providers that ensure people with disabilities, senior citizens and the community at-large support each other by forming mutually beneficial relationships. Together, the Wellness Center and the Intentional Community will create a Mohawk Valley Regional Impact Center.

The Mohawk Valley region contains approximately 8,000 people with autism,⁵ and 68,000 people with developmental disabilities. The Impact Center will greatly reduce long term care costs for those individuals, which currently consume 80% of Medicaid funding. Presently there are 1,300 individuals in this region on the Office for Persons with Developmental Disabilities waitlist; serving these individuals within the Impact Center model would save taxpayers approximately \$81,250,000. Presently, the average cost of long-term care for each person with autism living in New York exceeds \$125,000 per year.

1 Buescher AS, Cidav Z, Knapp M, Mandell DS. Costs of Autism Spectrum Disorders in the United Kingdom and the United States . JAMA Pediatr. 2014;168(8):721-728. doi:10.1001/jamapediatrics.2014.210.

2 Coleman Institute State of the States in Developmental Disability report: New York State <http://www.stateofthestates.org>

3 Report and Recommendations of the Olmstead Cabinet, A Comprehensive Plan for Serving People with Disabilities in the Most Integrated Setting, October 2013 <http://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/olmstead-cabinet-report101013.pdf>

4 https://www.health.ny.gov/health_care/medicaid/redesign/docs/mrtfinalreport.pdf

5 <http://www.cdc.gov/ncbddd/autism/addm.html>

By convening much of the local population, the Impact Center will catalyze our region's human and public health sectors by providing direct access to hard to reach populations. The space will launch a new national model in cost effective human services. An advisory board will guide the implementation of coordinated health, wellness, and vocational services. Beginning with the crisis in autism and developmental disabilities, our community will effectively coordinate cost-effective supports that will cut New York State's per person Medicaid long-term care spending in half. The concept is scalable to the population centers of our entire region. New York State is facing an ongoing Medicaid and long-term care crisis, and after five years of local, state, and federal involvement, the developmental disability system is poised for this truly transformative model. With support from government, the Community Foundation, and dozens of area nonprofit service providers, the comprehensive Impact Center will be a game changer in health, quality of life, and human services for all residents.

The Kelberman Center, as a member of OPWDD's Medicaid redesign workgroup, has already created the State's first 24/7, non-certified apartment setting for New York State's most complex developmental disability population. A key part of building New York State's first Intentional Community, will be the creation its first affordable, non-certified apartment options for people with autism. The model will scale to other vulnerable populations such as veterans, those trapped by chronic poverty, and children in foster care. Intentional Community building has been recognized by President Obama⁶, the Kellogg Foundation⁷, and McKinsey & Company as a transformative social services delivery model. Intentional Community building brings senior citizens and families into a mutually beneficial relationship with individuals needing attention and care. Both the most marginalized and most successful members of our community have an opportunity to form powerful relationships from which both benefit. First, individuals with autism will have opportunities to work, live and contribute to their community. Senior citizens

6 <https://www.whitehouse.gov/champions/service-innovators/brenda-ehart>

7 <https://www.wkkf.org/grants/grant/2006/06/accelerate-the-development-of-icis-0122140>





OPPORTUNITY AGENDA STRATEGY 2

and those enjoying successful careers will have the opportunity to engage and live in a revitalized community anchored by a state-of-the-art wellness center. The Impact Center will eliminate costly certified group homes, adult day cares, and the plague of unemployment amongst people with intellectual and developmental disabilities.

The Impact Center will represent New York's most comprehensive non-certified long term care project to date. It will achieve economy of scale by reducing per person staffing costs, and increase impacts to daily living. Through these efforts, the Governor's vision of creating integrated settings and eliminating social isolation of people with autism will be realized, offering a per person annual cost savings up to 50%.

From its inception, the Center will strive to be a self-sustaining entity. The Center's operating budget will be maintained by a nominal monthly member fee. A sliding fee scale will be available for those who can afford it, starting at \$25. Integration of Kelberman Center operations staff will offer additional savings. For example, 25 of the Kelberman Center's employees, called mentors, will be on site to support people with developmental disabilities. Six Certified Therapeutic Recreation Specialists employed at the Kelberman Center, will also be moved to the Center where they will help plan and implement daily activities suitable to the entire membership. Kelberman's preschool staff is the most well trained in the region, and will be relocated to the Center to expand and develop an integrated preschool, a major priority for county government as well as the NYSED. The Kelberman Center also employs a large team of psychologists and social workers, and these specialists will serve as an immediate

TRANSITIONS. LEXINGTON CHAPTER OF NYSARC.

Transitions is a supportive apprenticeship program for high school graduates and young adults with learning differences including Asperger's syndrome, ADHD, dyslexia, nonverbal learning disabilities, visual or hearing impairments and other medical conditions who want to attend college and/or prepare for a career but may require academic, social, medical and/or emotional support. The Transitions program's curriculum focuses on building academic, employment, life and general independence skills.

Through evidence-based services and a careful partnership with Lexington, a provider with over sixty years of award-winning disability services, Transitions students have access to state-of-the-art facilities, an experienced staff including mentors and coaches, and a uniquely designed curriculum that will provide individualized attention and training in skills students will use for the rest of their lives. They will be trained in executive functioning, self-advocacy, safety, healthy living and wellness, as well as learn social skills and set goals, putting them on the path toward college and career success, and ultimately independence.

Located in Gloversville, Transitions shares space with The Lexington Foundation's Paul Nigra Center for Creative Arts, a year-round arts center that provides a rich assortment of art and hobby-related classes for artists of all ages and interests.

Transitions has collaborated with several elite institutions including the Savannah College of Art and Design, University of Washington's DO-IT program for students with disabilities, Mayo Clinic, and Virginia Commonwealth University's Autism Center for Excellence to provide an exclusive experience for students who are interested in successful career and life outcomes.

"At Lexington, we pay particularly close attention to what is important to each individual and how we can help them achieve their goals. Once we know how we can make the greatest impact in their life, we partner with them to plan and improve areas where their wants and needs are the greatest."

— Shaloni Winston, Executive Director



STRATEGY 3: Year-long immersive education opportunities for foreign born residents and individuals with disabilities.

YOUNG SCHOLARS. UTICA COLLEGE.

The Young Scholars Liberty Partnerships Program (YSLPP) is a proven model of academic and community support that consistently meets the challenge of motivating teenage students to stay in school, graduate with a regents diploma, or a regents diploma with advanced designation, and be college and career ready. The Young Scholars LPP is a collaboration between Utica College and the Utica City School District that works with students year-round.

Young Scholars has just completed its 23rd year and in that time as served over 1100 students of promise in the City of Utica. Young Scholars currently serves 348 students in grades 7-12. The program has become a vital part of the success of a substantial number of students from the high-need Utica City School District. Since its inception, Young Scholars have graduated at a rate of 93%. Additionally, 88% of those graduates have earned Regents or Advanced Regents diplomas, compared to 61% of overall Proctor graduates for the years 1999-2013. Since 2005, 86% of YSLPP graduates have enrolled in college. The Young Scholars LPP also seeks to develop students' personal characteristics, making strong individuals who are invested in their community.

Two major components of the success of the YSLPP are the long-term investment in the students. Students enter the program in seventh grade and remain until high school graduation, and attend intensive summer learning programs. One hundred and eighty junior high school students attend a three week, academic-focused summer program on the Utica College campus. With no homework or tests, and a hands-on approach, students engage with the Math, Science and English curriculum in a way not available to them within the rigid contours of the normal school day. Students make meaningful connections: to each other, to the Young Scholars program, to their instructors, (the majority of whom are Utica City School District teachers) and, through field trips and guest speakers, to the greater Mohawk Valley region. An additional 45 high school students enjoy a three week summer STEM Scholars program which is a project-based, hands-on STEM experience taught by college professors which utilizes the full range of resources at Utica College, including the library, librarians, and biology and computer labs.

Integral elements of the Young Scholars Liberty Partnerships Program:

- Academic support, tutoring & special review sessions in the middle and high schools
- Counseling provided by social workers and staff
- Summer Program on the Utica College Campus
- Community service
- Enrichment activities, college and career exploration
- Mentor program involving community members
- Parent involvement and parent education program

YSLPP Demographics The demographics of the YSLPP are reflective of Utica itself. Students in grades 7 and 8 attend either James H. Donovan Middle School or John F. Kennedy Middle School, while students in grades 9-12 attend T.R. Proctor High School. The ethnicity of the 349 YSLPP students includes African-American, Hispanic/Latin, Asian, Native American, White/Non-Hispanic, including recent immigrants from Bosnia, Russia, Belarus, the Ukraine, Myanmar and the Sudan.



Young Scholars surrounding a statue of Albert Einstein in D.C

Teaching about diversity is easy since the YSLPP lives it everyday.

- 54 percent of Young Scholars are female
- 46 percent of Young Scholars are male
- 87 percent of Young Scholars are from minority or refugee populations



STRATEGY 4: Connecting veterans with programs and services that assist in their transition to the private sector workforce.

One of the major gateways connecting veterans with the programs and services that can assist in their transition is the Oneida County Veterans Services agency, which in 2014 provided 28,614 services to 15,716 veterans and their families.

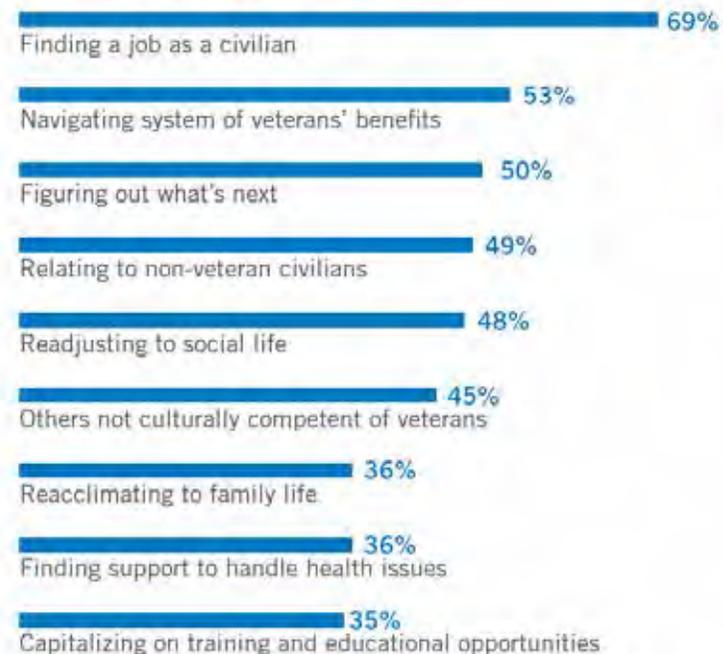
All local colleges offer specialized support services to assist veterans in their transitions from the service to education, including counseling to ensure that veterans access all benefits and services for which veterans are eligible. As a result, academic success for veterans is high. Mohawk Valley Community College, the region's largest postsecondary institution, with 252 veterans currently enrolled, has experienced a 100% increase in veteran enrollment in the past five years. Between 60 and 75% of veterans record GPAs of 2.0 or higher, far higher than the average of MVCC, an open enrollment college.

Success of education and training programs that help veterans connect to the workforce is shown in the regional unemployment rate for veterans roughly two percentage points below the non-veterans population, according to 2012 Census data and the percentage of veterans who are college graduates four percentage points above the non-veteran population.

Many area colleges are specific benefits for accepted veteran students. SUNY Cobleskill is recognized as a Military Friendly School, is approved by the Department of Defense, is a member of the Service members Opportunity Colleges and has a robust Student Veterans Association. The college has also facilitated programs off campus to help returning veterans transition into school and the workforce including parking fee waivers, public transit to the Albany VA hospital at no charge, discounted

child care, 0% interest loans for textbooks and supplies while students wait for their educational benefits to be paid and a dedicated space for student veterans that includes a comfortable "living room" environment, separate computer lab (with CAC readers) and peer support office.

Greatest challenges in TRANSITIONING to civilian life



VETERANS' EMPLOYMENT CHALLENGES

Perceptions and experiences of transitioning from military to civilian life

Prudential's study *Veterans' Employment Challenges* polled 2,453 veterans and soon-to-be veterans in an online survey from December 12, 2011, through January 23, 2012. The margin of error is $\pm 1.98\%$, at the 95% confidence level.

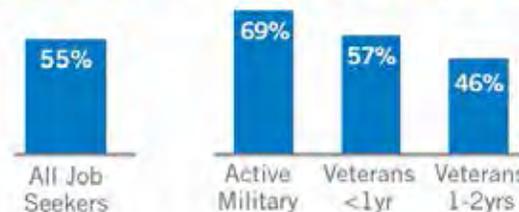
The study was designed to be inclusive of veterans from all service eras who met the following criteria:

- Veterans or Reserve Components who are inactive, individual ready reserve, inactive duty for training, or active duty operational support; or
- Active military or Reserve Components who plan to retire or separate from active duty within a year

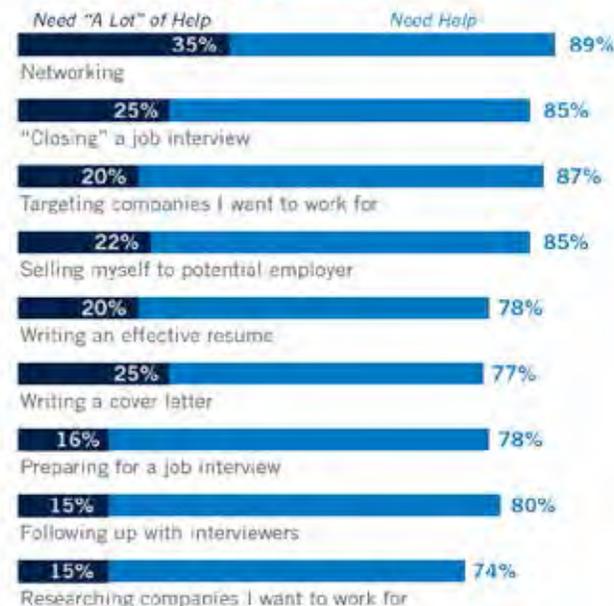
Veterans who felt ready to transition to the civilian workforce



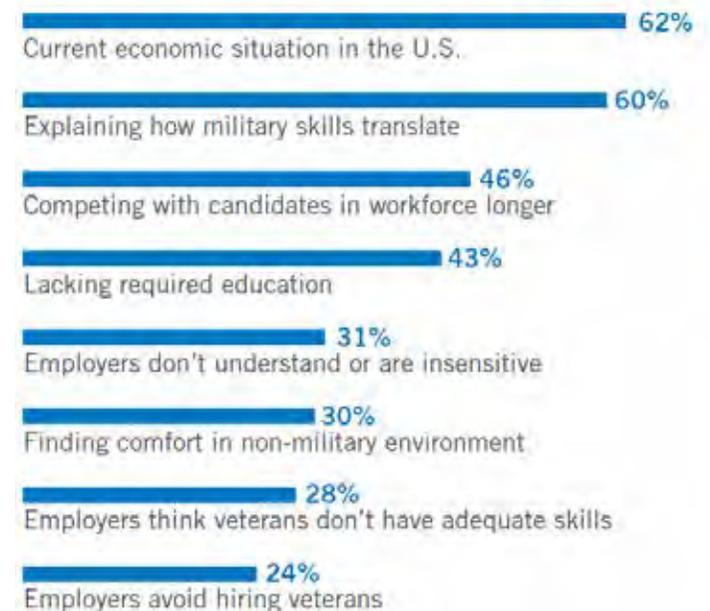
Job seekers who "definitely" believe they have the skills needed to land their ideal job



Specific needs of job seekers

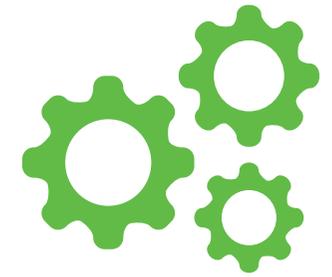


Greatest challenges in FINDING a job



CONNECTIVITY PROFILE

A tale of Opportunity in two Cities.



Each year, our region grows stronger, thanks to the Mohawk Valley's growing reputation as community of opportunity. From downtown Utica to Main Street Amsterdam, doors continue to open for displaced workers, aspiring entrepreneurs, and new Americans. Some are experiencing freedom and opportunity for the very first time; while others are grateful for a second chance and a fresh start. And most, if not all, are finding their start downtown.

Refugees came to Utica seeking a better life, like the many immigrant groups who are evident here today. Their human rights have been violated through war, ethnic cleansing, religious and cultural persecution. They have official refugee status, which means they do not have citizenship and are not welcome in their home countries. Many of them had been living in refugee camps, or hiding in the jungle, for months, years, or decades before coming here. Having survived persecution in their homelands, the squalor of refugee camps, and now, in the land of opportunity, they are beset by a fate of equal cruelty: they

are a language barrier away from jobs that can help them carry on America's immigrant tradition of rising to the top on the strength of their work.

During the past 30 years, the Mohawk Valley Resource Center for Refugees has resettled people from 31 countries in Utica. The mission of the Center is to promote the well-being of immigrants and assist them in sustaining their cultural identity, offering a wide range of services to refugees and their families. At its height in 1997, the Center welcomed more than 1,000 Bosnian immigrants. During the past five years, the center has resettled an average of 500 refugees per year, most of whom have been Karen/Burmese from Southeast Asia.

However, long-term success requires increasingly complex supports so that refugees who arrive with nothing but a dream can build the language, technology and cultural skills to rise along career ladders into higher-wage jobs. Particularly critical to the community are the young adult refugees who need a strong, career-themed center that can connect them with jobs.



Mohawk Valley Community College will establish a Community Impact Center in downtown Utica to provide high needs populations with a one-stop source to obtain education, job training, and other services. Here, the connection is finally forged between People, Programs, and Place. The Community Impact Center could serve more than 2,000 individuals per year at all levels of the refugee continuum, from those needing basic skills to those seeking advanced education. Helping 2,000 individuals per year access high-growth opportunities in technology-driven careers can help the region by providing a solid workforce that will enable future growth, and developing a stronger community as these refugees increase their wages. This project moves beyond the city's welcoming spirit to connect partners and provide a central location to provide education and training that will create opportunities for a population in grave danger of failing to fulfill its potential.

In addition to the expanding programs from the Resource Center for Refugees, the Impact Center will house the Mohawk Valley Educational Opportunity Center (EOC) – which serves approximately 1,000 individuals per year. Since locating in the heart of an underserved urban core neighborhood (where the people are), the EOC is bursting at the seams, providing extensive tutoring to prepare people for post-secondary level academics and entrance exams, as well as meeting individuals' specific needs such as difficulties in speaking English or need to obtain a high school equivalency.

The Center will also host the One World Utica Market providing entrepreneurial start-up services and retail space for microenterprise ventures owned by refugees, immigrants, veterans, minority citizens and other low-income groups, with the goal of building a thriving downtown business community to attack poverty. With the Utica School of Commerce, Utica College School of Business, and the Thincubator Innovation Hot Spot just a few blocks away from the Impact Center, our colleges are leading the war on poverty and the revitalization of the Mohawk Valley's largest urban Center.

Down river, Centro Civico has developed a long-term comprehensive strategy to attack poverty in Fulton and Montgomery counties, focusing on the hard-to-place segment (veterans, single parents, foreign born, disabled, ESL community, and those having a high school diploma or less) of the Latino population. Latinos have been residents of the City of Amsterdam, New York since the post-WWII mass migration of Puerto Ricans to the mainland U.S.A. The original settlers arrived as workers in the area's once booming textile industry. Beginning in the late 1940s, Mohawk Mills in Amsterdam began recruiting Puerto Rican laborers by posting advertisements in Puerto Rican newspapers. Glove factories and canneries were also eager to hire Puerto Rican labor. Once the Puerto Ricans established themselves, they sent for other family members to join them, and by the 1950 Amsterdam Census, there were 22 immigrants from "Other Americas" listed. Latinos now comprise 20-25% of the city's residents and are about 10% of the county population.

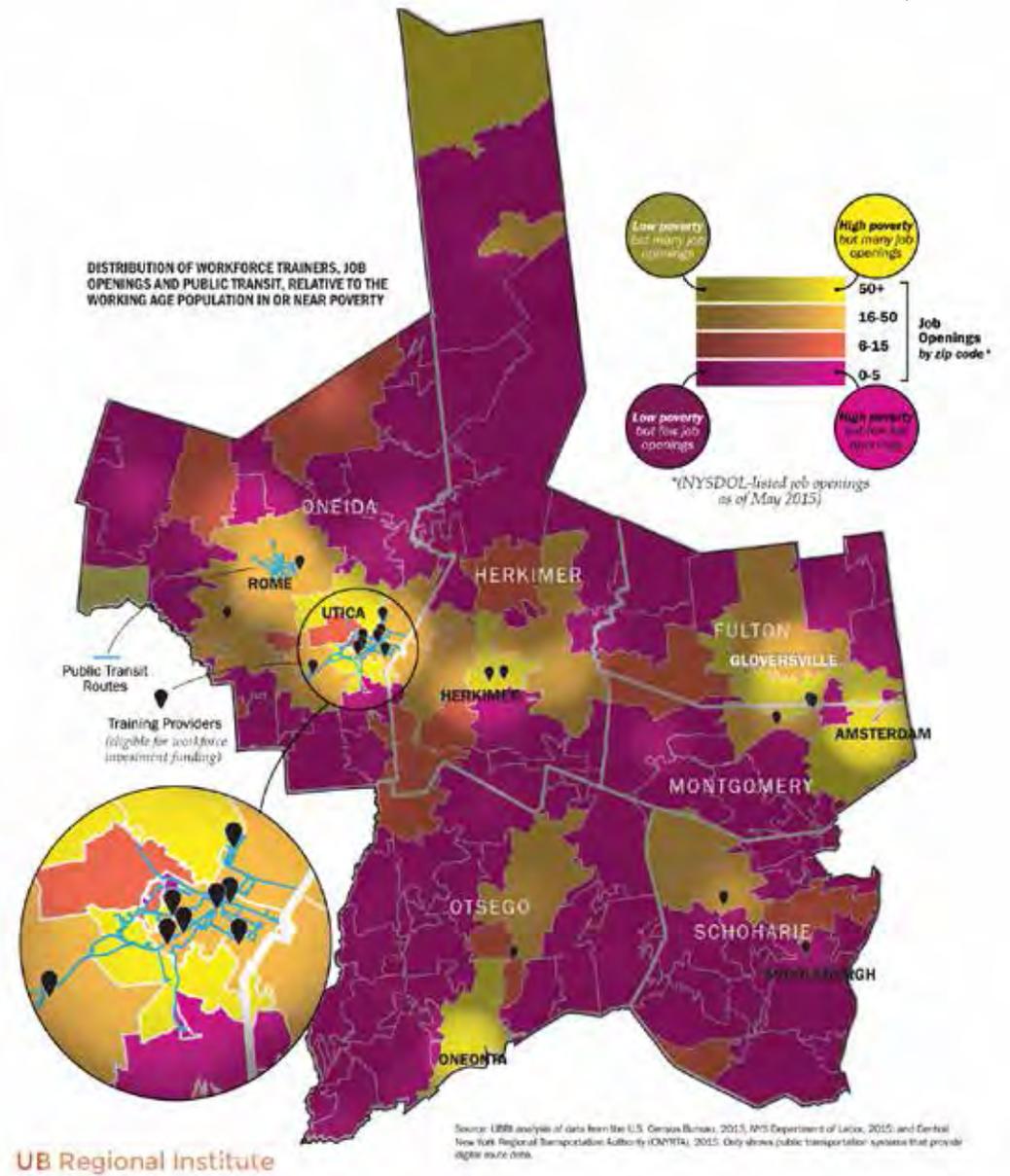
Much of the region's work in downtown revitalization work has focused on infrastructure and vacant buildings. Centro's model consists of wrap-around services that invest in individuals as a means of addressing structural poverty, decline, and individual barriers to employment. In partnership with Fulton-Montgomery Community College and the Workforce Investment Board of Fulton, Montgomery, Schoharie County; Centro Civico aims to foster self-sustainability and re-entry into the regional economy. Expected outcomes are to lower unemployment rate, increase educational attainment, and expose up to fifty unemployed individuals to meaningful employment opportunities in the first year.



CONNECTIVITY PROFILE

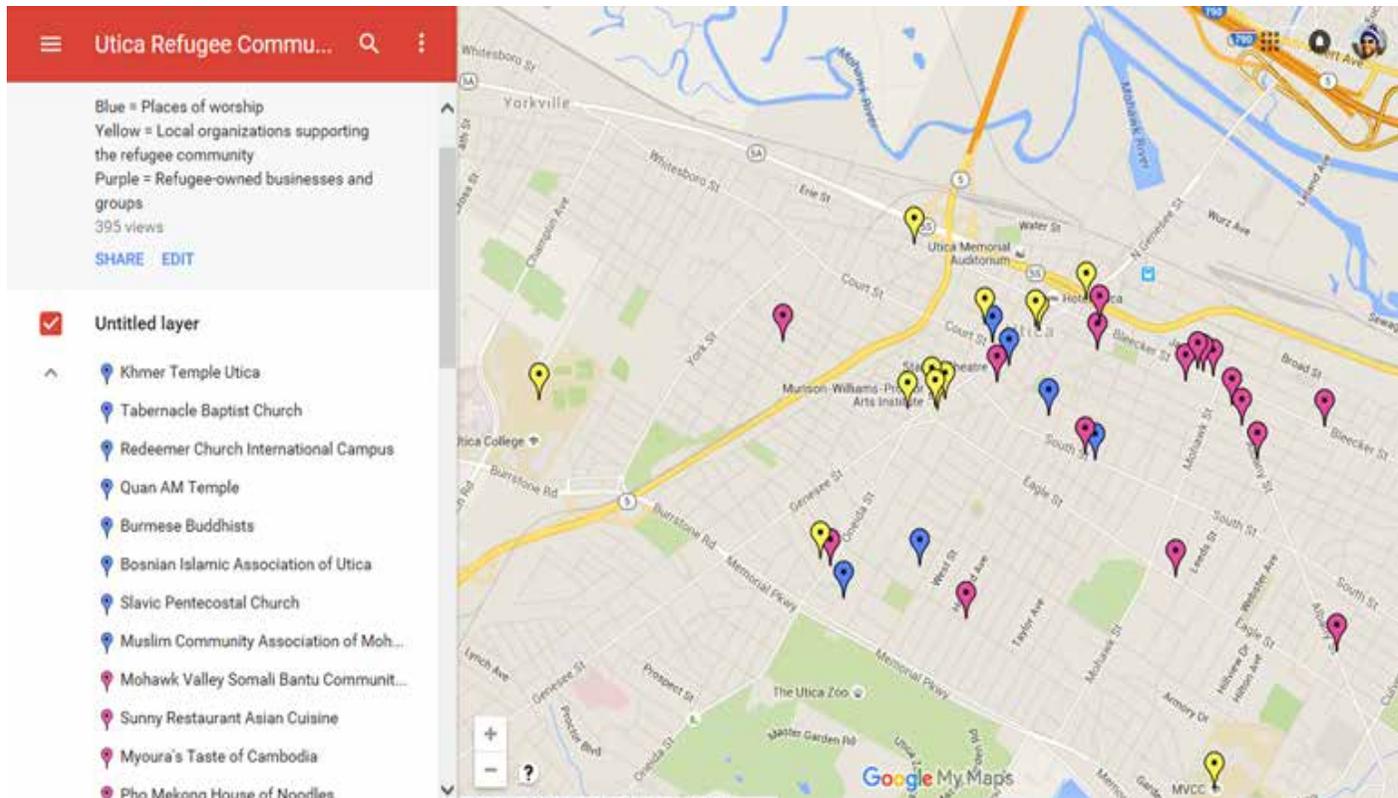
In helping to unlock the doors to opportunity, the Centro is dedicated to the comprehensive development of the community through the creation and implementation of culturally-relevant educational programs, employment and job training, small business development, housing initiatives, physical and mental health services, and other essential programs which promote self-sufficiency and greater participation in the mainstream of society.

In both cases – Utica and Amsterdam – the majority of the hard-to-place workers and their families live, learn, and play in urban core neighborhoods that suffer from blight, vacancy, and crippling poverty. The almost criminal irony is that these areas are also where the highest density of jobs and opportunity exist and where our colleges and community-based organizations are investing in people. As the region continues to invest in smart growth, it is of greater gravity and importance that we invest in our fellow citizens. Our recovery depends on it.



Giving Back

Utica Refugee Community Map



Refugees bring arts, culture, food, new perspectives and over 40 languages!

Some of the languages spoken here:

- Albanian
- Arabic
- Arakanese
- Bari/Beri
- Bengali
- Bosnian
- Burmese
- Chinese, Mandarin
- Croatian
- Dinka
- French
- Fur
- Haitian Creole
- Hindi
- Karen, Pwo
- Karen, S'gaw/Kanyaw
- Karen/Kayan
- Kikongo Kiluba
- Khmer
- Lao
- Lingala
- Maay Maay
- Masalit
- Mushungulu/Kibgula
- Nepal
- Russian
- Serbian
- Somali
- Spanish
- Swahili/Kiswahili
- Thai
- Ukrainian
- Urdu
- Vietnamese



startingoverutica.com | mvcc.org | midtownutica.org

Interested in learning more?
 Contact Dr. Kathryn Stam
startingoverutica@yahoo.com

SUNY POLYTECHNIC INSTITUTE



Refugees Starting Over in Utica, NY was founded in 2012.



STRATEGY 1: RECLAIM MV (REcovering our Community's Legacy And Incentivizing Momentum) Capital Grant Program

STRATEGY 2: 1% FOR US ALL

STRATEGY 3: Mighty Waters Action Agenda

VIBRANT COMMUNITIES IMPACTS AND OUTCOMES

POPULATION

**15,000
INCREASE**

2014: 496,791
2030: 511,721

POPULATION AGE 24-34

**8%
INCREASE**

2011: 117,938
2030: 127,373

BROWNFIELD ACERAGE

**240
ACRES**

2014: 2304
2025: 2064

COMMERCIAL VACANCY

**27%
DECREASE**

2014: 42% VACANCY
2030: 15% VACANCY

BROWNFIELD OPP AREA'S

**6 BOA'S TO
IMPLEMENTATION**

2015: 1 DESIGNATED
2025: 6 DESIGNATED

HOUSING VACANCY

**10%
DECREASE**

2013: 21%
2030: 31%

ADAPTIVE REUSE OF VACANT & UNDERUTILIZED PROPERTIES

**720,000 SQ. FT.
REDEVELOPED**

DOWNTOWN TARGET AREA PROPERTY VALUES

**5%
INCREASE**

2025: \$2.66 BILLION

Source: NYS DOL, US Census Bureau, Bureau of Labor Statistics



“Like other small Upstate communities, Little Falls faces a number of large and seemingly-impossible challenges. In this environment, it can be tempting to seek out equally large solutions. Instead, Main Street First has found more success by identifying smaller initiatives that can be highly leveraged to begin the work of revitalization. By choosing targeted and achievable goals, and bringing in as many community stakeholders as possible, we’ve started to realize real progress and build momentum.”

– Robert Richard, Main Steet First, Little Falls

VIBRANT COMMUNITIES

SIGNATURE PROJECTS

Smith Brothers Building Rehab

Bagg's Square Lofts

Rehabilitation of Main St. Properties Village of Schoharie (Parrott House)

Stevens Bldg. Redevelopment (Klugo Redevelopment)

CFA Projects:

Gloversville Public Library

Jumpstart Repair Interconnection Between 2 Cities

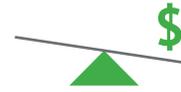
Mair Magaw

Robinson Road Sewer Project (Indium)

Oneonta Rail Yards

Main St. Reconstruction Project

Water System Storage Distribution Improvements



LEVERAGING OTHER STATE INITIATIVES
USE OF NYS PROGRAMS TO ENHANCE URI FUNDS



SUSTAINABILITY
LONG-LASTING AND SUSTAINABLE CHANGE



COMMUNITY REINVESTMENT
HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



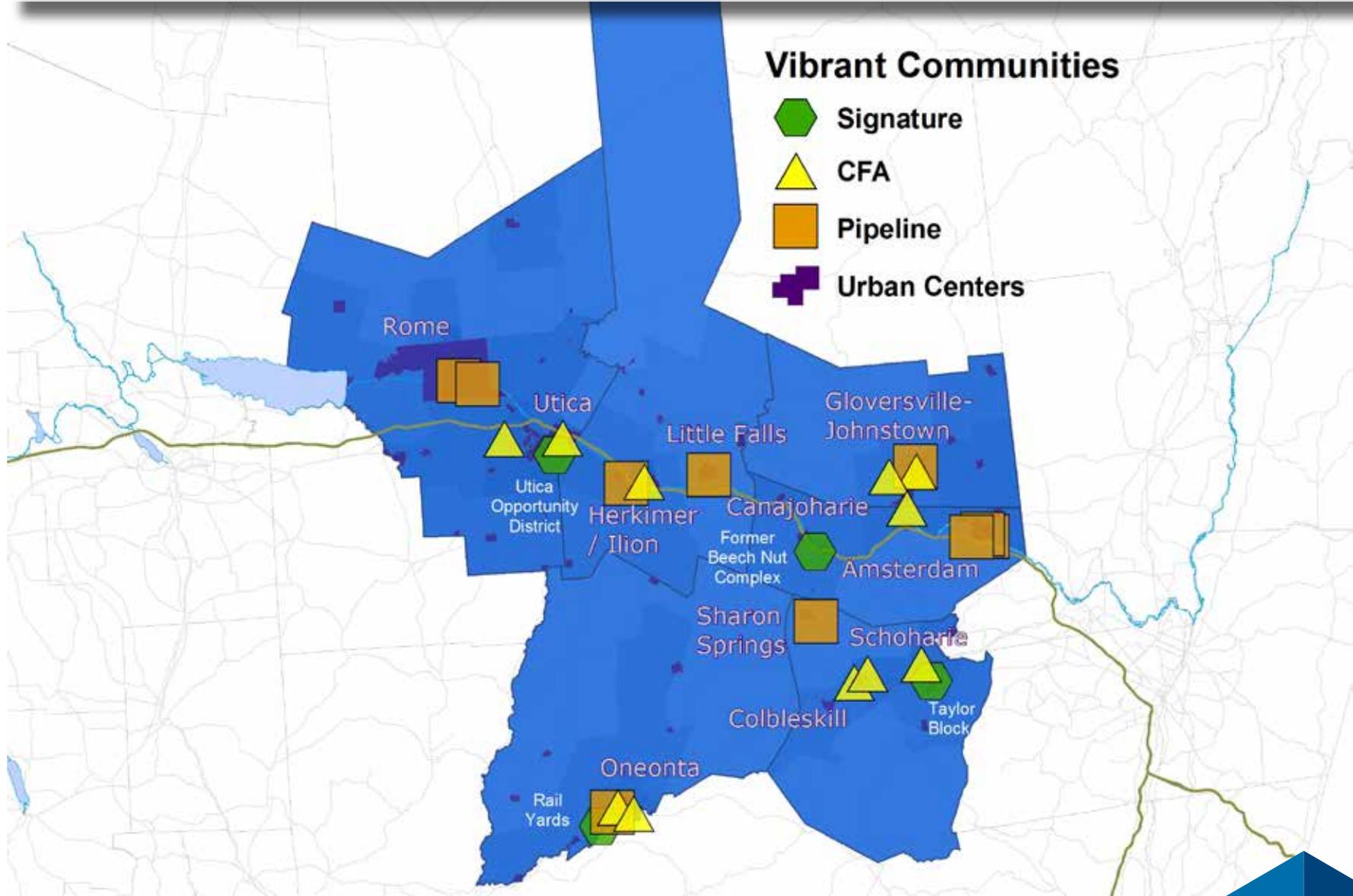
PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1



"OUR OPPORTUNITIES WILL COME FROM REHABILITATION OF DISTRESSED PROPERTIES [AND] CREATION OF NEW DEVELOPABLE LAND WITHIN COMMUNITIES BY REMOVING BLIGHTED STRUCTURES."

- DAVID D'AMORE JOHNSTOWN

PHYSICAL LOCATIONS FOR INVESTMENT



VIBRANT COMMUNITIES

Path to Readiness



READINESS
READINESS TO IMPLEMENT STRATEGIES

The Mohawk Valley strategy to build Vibrant Communities is premised upon the revitalization of population centers and urban core neighborhoods through area-wide brownfield redevelopment, activation of waterfronts, and adaptive reuse of vacant, abandoned, and underutilized anchor properties in targeted mixed-use districts. Resources will be focused on the historic manufacturing communities of the Mohawk Valley – many of which reside on the banks of the Mohawk River and NYS Barge Canal. Through targeted investment, we intend to create positive value, seize new opportunities to reinvigorate these once vibrant manufacturing centers, and capitalize on the renewed interest that is taking root as entrepreneurs and community attitudes are changing and putting more emphasis on rebuilding our urban and Main Street corridors.

Through the integration of comprehensive planning, state programs, and private capital for maximum impact, the region is experiencing a Main Street revolution. Innovations in green infrastructure have transformed the streetscapes of Cooperstown and Rome into walkable, environmentally functional corridors for tourism and commerce. Adaptive reuse of vacant commercial buildings in Oneonta and Utica are bringing families downtown to live, learn, and work. Microenterprise programs in Middleburgh and Gloversville are fostering entrepreneurship and investment on Main Street. In Little Falls and Sharon Springs, sustainability planning is paying off with new investment and public-private partnerships to create thriving commercial districts. Good things are happening, and it is no accident.

As the region transitions to an innovation-rich, knowledge-based economy, the human habitat must support a new and expanding workforce. Pedestrian-friendly neighborhoods and mixed-use downtowns connected to their waterfronts comprise the foundation of a healthy urban ecosystem¹. Coupled with a strong agricultural and food systems strategy that preserves valuable resources, revitalized downtowns will reverse the trend of sprawl that has decimated the Mohawk Valley and all of Upstate for decades.

The Mohawk Valley, through the leadership provided by Governor Cuomo via the REDC process and inspired by the Buffalo Billion, has rediscovered the latent value trapped within its downtowns, waterfronts, and brownfield properties. We are, for the first time in decades, hyper-aware of the wellspring of wealth bubbling just beneath our feet.

¹ Katz, Bruce. Revitalizing Weak Market Cities in the United States. Council on Foundations. May 2006.



GLOVERSVILLE



AMSTERDAM
BASEBALL

Our goal is to transform the physical landscape of the Mohawk Valley from a series of isolated Rustbelt municipalities into a renowned archipelago of verdant, connected, and vibrant communities. Our regional alliance of small cities and historic villages is asking New York State to partner with us as we reinvent ourselves and, by doing so, take control of our economic future

Righting the ship will take some time when it comes to the fractured state of local governments. However, a modern and efficient approach to infrastructure, architecture, and environmental design will strengthen our communities while ensuring that the benefits will be realized by future generations. The sustainability of both strategy and economy depends on the same principles: strict adherence to the foundation of Smart Growth and pursuing a vision for a region of vibrant communities. Policies and initiatives that sprout from the URI will steer the ship toward a future that thrives in the new economy. Reducing environmental impacts, maximizing spatial efficiencies in economic development, and facilitating value-added economic development that provides job opportunities for residents in dense population centers will guide this strategy over the course of the next five years, and beyond.



BOILERMAKER
ROAD RACE





VIBRANT COMMUNITIES

KEY FINDINGS



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



SUSTAINABILITY

LONG-LASTING AND SUSTAINABLE CHANGE

KEY FINDING #1: THE MOHAWK VALLEY SHOULD SEEK TO LIMIT SUBURBAN AND EXURBAN SPRAWL, WHICH HAS CONTRIBUTED TO DISINVESTMENT IN URBAN AND VILLAGE CENTERS.

The Mohawk Valley is characterized by a vast empire of agricultural land, bejeweled by a necklace of cities and villages, ranging in population from 500 (Village of Sharon Springs) to over 60,000 individuals (City of Utica). While these centers represent the confluence of innovation, jobs, and capital, they also represent the intersection of poverty, building vacancy, and unemployment.

Commercial vacancy in our cities alone approached 1,000 units. Yet each of these grim statistics conceals tremendous opportunity within; for in these same communities lies the region's great wealth of cultural diversity, civic pride, and investment potential. Tangible signs are evident throughout the region with successful brownfield initiatives in the City of Rome, renewed interest and actual investment taking place in re-purposing vacant commercial buildings and sites in the urban corridors of Oneonta, Utica, Amsterdam, and Little Falls. The water helped create the Mohawk Valley communities along the Mohawk River and Erie Canal corridor. It is no accident that these communities are focusing on reclaiming the water as an integral element in infusing new excitement and energy in reclaiming our urban centers. Thus, the Mohawk Valley's success will be measured by how well we are able to connect the greatest amount of people to the most opportunity.

Similar to Buffalo, albeit on a smaller scale, the Mohawk Valley fell victim to, systemic economic decline. While population declined in the Mohawk Valley by more than 16,000 residents from 1990-2012, the area of developed land increased by more than 13 square miles, contributing to the loss of 130,000 acres (14%) of our surrounding farmland.

For more than three decades, regional population centers have been trapped in a cycle of disinvestment, leading to depressed property values, urban blight, and household incomes far below state and national averages. For example, in the City of Gloversville, median home value is \$76,000, as compared to the NYS average of \$295,000; while the area median household income remains at \$34,000 as compared to \$54,000 for NYS.

Utica's poverty rate is over 31 percent, with nearly half (48.1%) of the children under 18 living in poverty¹.

Development on suburban/exurban sites consumes more acreage per resident or employee than urban core project areas. Greenfields, typically require 2-4 times the acreage to accommodate the same type of future development proposed on brownfield and downtown sites. Additionally, population dense locations have superior environmental performance compared to their conventional/greenfield counterparts. Automobile use by residents and employees at these locations is estimated to be substantially lower than suburban/exurban sites, producing 57% less carbon dioxide (CO2) emissions and air pollutant emissions per. Brownfield redevelopments also produce substantially lower loads of all pollutants (45% for conventional pollutants and 65% for metals). These estimates do not include the potential reduction in pollutant loads from cleanup of these brownfield properties, nor some of the pollution from contaminated properties that would remain undeveloped if the redevelopment had occurred on a greenfield instead.

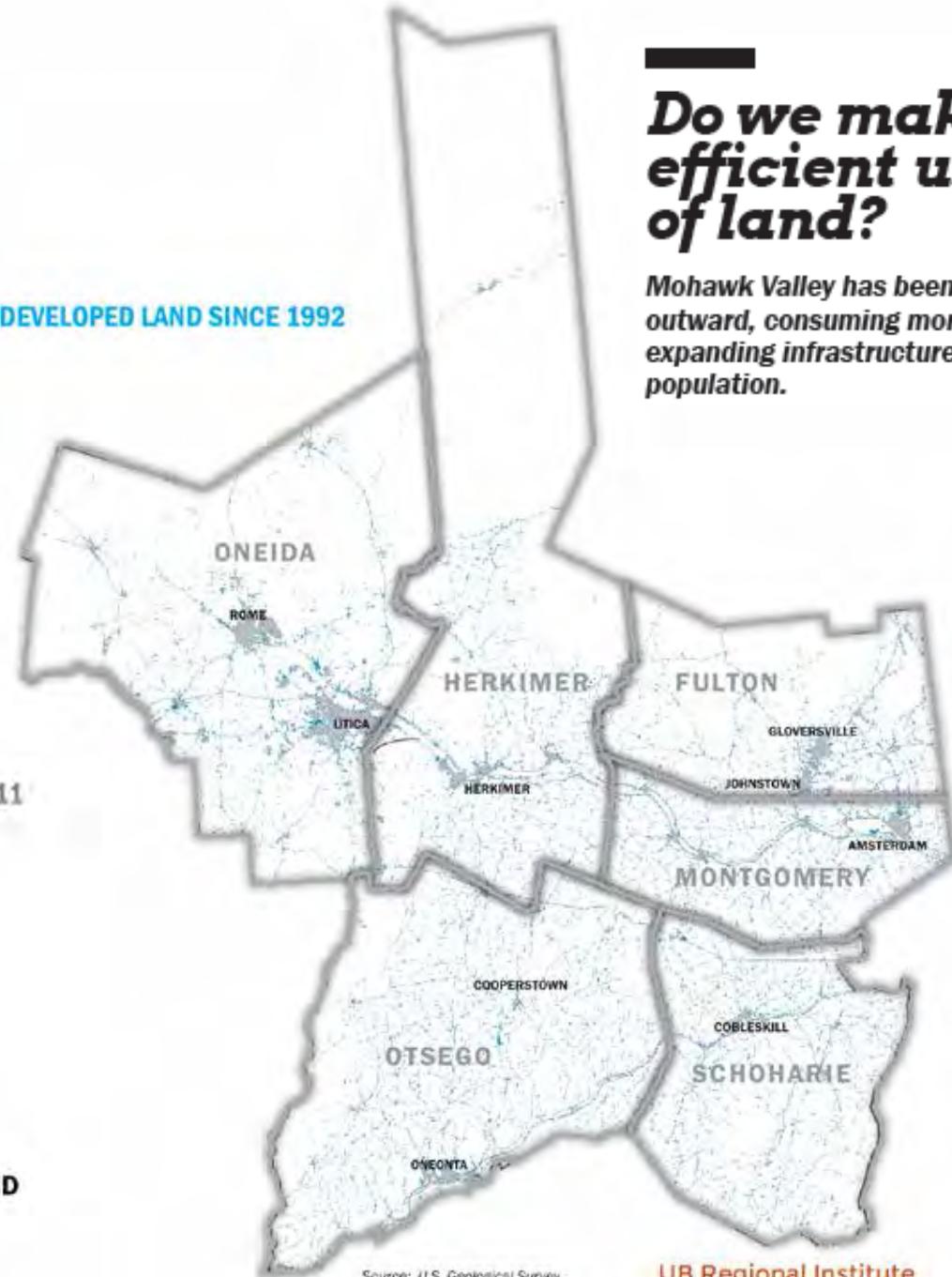
¹ NYS Community Action Association.

On average, "sprawling residential development costs more in public services: \$1.24 for every tax dollar versus 38 cents for infrastructure required by farmland or open space." This is not a sustainable practice for local governments and the MVREFC will look to avoid supporting infrastructure investments that takes farmlands and open space areas out of production and add cost burdens units of local government without any corresponding economic gain in terms of jobs or other economic indicators to warrant this type of investment.

Do we make efficient use of land?

Mohawk Valley has been growing outward, consuming more land and expanding infrastructure while losing population.

■ DEVELOPED LAND SINCE 1992



% CHANGE POPULATION AND DEVELOPED LAND, 1992-2011



CHANGE IN DEVELOPED LAND SINCE 1992

Source: U.S. Geological Survey; U.S. Census Bureau.

Source: U.S. Geological Survey.



**VIBRANT COMMUNITIES
KEY FINDINGS**



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



SUSTAINABILITY

LONG-LASTING AND SUSTAINABLE CHANGE

KEY FINDING #2: THE MOHAWK VALLEY WILL INVEST IN REVITALIZATION OF BROWNFIELDS AND ADAPTIVE REUSE/MIXED-USE REDEVELOPMENT OF VACANT AND UNDERUTILIZED PROPERTIES.

The Mohawk Valley is not alone. Similar-sized municipalities across the Rustbelt bear a striking resemblance; partially owing to chasing smokestacks and subsidizing the deployment of infrastructure and utilities far beyond city and village limits. In fact, how and where states have historically distributed economic development resource also makes a big difference.

In almost all states throughout the country, policies were created (referred to as the “rules of the development game” by Bruce Katz) that favored the creation of new communities over the redevelopment of older ones, rules that promoted and even subsidized greenfield development rather than brownfield remediation, rules that often consigned low-wage workers and minorities to the “wrong side of regions.”

The economic, environmental, and social benefits of brownfield redevelopment are staggering. For example:

Investment in Brownfields.

Leverages Private Investment and Creates Jobs: \$1 of public investment in brownfields leverages \$8 in total investment; \$10,000 to \$13,000 in public investments creates/retains one job.

Brownfield Redevelopment Revitalizes Neighborhoods As Measured by Adjacent Property Value Increases.

Cleanup and redevelopment of brownfield properties lead to property value increases on the order of 5% to 15% for properties that are up to 3/4 mile from the site.

Public Investment in Brownfields Results in Direct Generation of Local Tax Revenue.

Public investments in brownfields are generally recouped from local taxes generated by the project within about three years. A national survey found that redeveloping brownfields in just 105 surveyed cities could lead to \$2.2 billion in local tax revenue, annually.

Brownfields Redevelopment Has Lower Infrastructure Costs.

The cost of providing infrastructure (roads, water, sewer, electricity, etc.) to a greenfield site averages \$50,000 to \$60,000 per unit, compared to \$5,000 to \$10,000 per unit for a brownfield or greyfield site.

Urban Brownfields Redevelopment accommodates Growth without Sprawl.

One acre of redeveloped brownfields saves 4.5 acres of farms and countryside from sprawl development due to higher density of development on brownfield sites and the elimination or reduction of the additional lands for associated infrastructure for greenfield development.

Brownfield Redevelopment Has a Lower Carbon Footprint and produces Air Quality and Greenhouse Gas Improvements.

A recent report from the Urban Land Institute (ULI) documents that compact urban development, as an alternative to sprawl, could reduce vehicle miles traveled (VMT) by 20 to 40 percent.¹ Studies of brownfields projects indicate similar VMT savings.² These reduced VMT translate directly to emission reductions and greenhouse gas savings of a similar or greater magnitude, in part due to proximity to mass transit.

Brownfield Redevelopment has Water Quality Benefits/Less Run-off.

Brownfields development, because it tends to be higher density than alternative greenfields development, lowers run-off and improves water quality.

¹ Urban Land Institute, Smart Growth America, the Center for Clean Air Policy, and the National Center for Smart Growth, “Growing Cooler, Evidence on Urban Development and Climate Change,” <http://www.smartgrowthamerica.org/gcindex.html>

² US Conference of Mayors, “Clean Air/Brownfields Report,” December, 2001.



Former General Cable Complex, Downtown Rome BOA Implementation & Green Infrastructure Project



KEY FINDING #3: INVESTMENTS IN PHYSICAL ASSETS AND PUBLIC SPACES ARE KEY TO ATTRACTING RESIDENTS, NEW CAPITAL, AND INNOVATION TO OUR POPULATION CENTERS. THE MOHAWK VALLEY REGION SHOULD PRIORITIZE PLACEMAKING, WATERFRONT REVITALIZATION, AND NEIGHBORHOOD CONNECTIVITY.

Recent events have set us firmly on a trajectory toward regional prosperity and provides an opportunity for a sharing in the region's opportunity for renewed economic prosperity. Now, the place-making begins. Within a decade, Mohawk Valley communities like Rome, Amsterdam, Oneonta, Gloversville, Little Falls, Sharon Springs, and Utica will enjoy equal parlance with Buffalo as among the great unique places to live and work in America.

Investments planned at the Marcy Nanocenter, Tryon Technology Park & Incubator, Oneonta Rail Yards, and SUNY Cobleskill all portend growth and opportunity for neighboring cities and village centers across the entire region. As we have learned from communities like Portland, Asheville, Burlington, and Buffalo, the place is as important as the industry. Transforming our cities and historic villages into vibrant centers is essential in attracting talent and workers to drive our region's quest to be part of the next economy. One cannot thrive without the other.

"Physical assets are the public and privately-owned spaces designed and organized to stimulate new and higher levels of connectivity, collaboration and innovation." There are few physical assets in Upstate that can deliver on the promise of enhanced connectivity, greater collaboration, and sustained innovation than the NYS Barge Canal and Mohawk River.

The draft NYS Mighty Waters Economic Development and Community Revitalization Strategy has compiled priority projects born of local planning frameworks. To date, more than a dozen Local Waterfront Revitalization Plans (LWRP) and canal-centric Brownfield Opportunity Area (BOA) plans are complete or underway in the communities of Sylvan Beach, Rome, Utica, Ilion, Herkimer, Little Falls, Fort Plain, Fultonville, Fonda, and Amsterdam (graphic). Each of these cities and villages has a unique yet mutually reinforcing vision for development on the banks of the canal to connect neighborhoods and business districts to the waterfront.

As early as 2001, the Western Montgomery County Local Waterfront Revitalization Area identified the goal to "Promote Physical Public Access and Recreation Throughout the Western Montgomery County WRA" to "attract tourists, improve the quality of life for residents, and generate revenue." Fundamentally, these concepts remain as true today as they were 15 years ago. Each and every local planning effort since has echoed these elemental principles for revitalization.

The proof resides firmly in the construction of the Mohawk River Gateway Overlook in Amsterdam – a pedestrian bridge that connects the emerging South Side mixed-use district to downtown Amsterdam – where it promises to open doors of opportunity to thousands living and working in the city today, with thousands more to come. Nowhere in the region is the opportunity for the development of transit-oriented development greater than at the very landing of the bridge. Key to this vision is the redevelopment of the former Chalmers site and the relocation of the Amsterdam Rail Station. Leveraging Montgomery, Fulton, and Schoharie Counties' relationship to the Capital District, Amsterdam is positioned to develop workforce and market-rate housing on the existing Empire rail corridor within commuting range (ref) in order to capitalize on economic development success both within and beyond the Mohawk Valley.

Similarly, canal-side improvements at Rome's Bellamy Harbor, Utica's Harbor Point, Herkimer's GEMS Along the Mohawk, Canal Place in Little Falls, Fonda Canalside Park, and Riverlink Park in Amsterdam are inspiring new pedestrian infrastructure that connects downtowns to the waterfront and spinning off new, sustainable public spaces. Hulking industrial relics and acres of contaminated brownfields are giving way to unprecedented access and amenities at the water's edge, and creating attractive, viable real estate for residential, commercial, and small-batch clean manufacturers – a phenomenon this generation has never before experienced.

In the heart of the region's largest city, the Utica Memorial Auditorium, an engineering marvel of the 20th Century, languished for years in a deteriorating industrial neighborhood on the fringe of Bagg's Square. In 2013, an American Hockey League franchise, the Utica Comets, became anchor tenant in a refurbished

auditorium. In just two short years, a sleepy shell became the veritable epicenter of a City's rebirth. An explosive combination of vision, energy, and investment transformed "The Aud" into a place where thousands of people – from virtually every socioeconomic background – could come together to enjoy professional sports, Saranac beverages, and even locally made hot dogs.

Restaurants and pubs within a mile of the Utica Auditorium are full, vacant mill buildings in nearby Baggs Square, downtown and the Brewery district are being developed into loft apartments, and people throughout the Utica-Rome metro area have another reason to look forward to winter. In 2015, the building underwent an ultra-modern façade renovation that will complement the interior renovations and re-affirm the Aud's prominence in the Utica skyline.

The \$9 million renovation of the former HSBC bank building into the Landmarc building is nearing completion. A building abandoned and left for the wrecking ball has been transformed into a mixed-use development with ground floor fully occupied commercial uses, upper floor market rate rental housing and a new roof top structure has been built for Ocean Blue – Utica's new restaurant that adds to Utica's skyline with rooftop seating and a fresh seafood restaurant.

Recently Governor Cuomo announced plans to assist Utica College with plans to move its Business School into downtown Utica at Clark Center. This will bring more than 400 students and faculty into downtown Utica and complements the ongoing activist that are revitalizing downtown.

To continue the momentum that is underway, the City of Utica in concert with other business and community partners is looking to transform approximately 34 acres of largely vacant, underutilized and functionally obsolete properties in downtown Utica and transform that area into a new vision for downtown that will include technology oriented development that is linked with nano-bio opportunities emerging at SUNY Poly and Masonic Medical Research Laboratory, healthcare, offices, medical education, recreation and entertainment, and continued commercial development opportunities. The proposed site is bounded by major highways and commercial arteries and is bounded by exciting transformational investments underway at Baggs Square, the Landmarc Building, Utica Auditorium and other pivotal commercial buildings that are proximal to the development district that are ripe for redevelopment. URI funding would be used for site assemblage, demolition, infrastructure modifications and parking improvements that will leverage other funding that will continue the metamorphosis of Downtown into a vibrant area that complements the region's quest to build an innovation economy that will attract skilled workers and millennials.

GLOVERSVILLE



UTICA



COOPERSTOWN





VIBRANT COMMUNITIES
KEY FINDINGS



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS



SUSTAINABILITY

LONG-LASTING AND SUSTAINABLE CHANGE

KEY FINDING #4: AREAS OF GREATEST OPPORTUNITY EXIST AT THE INTERSECTION OF JOB DENSITY, HIGH POVERTY, AND COMMERCIAL VACANCY.

By focusing on specific, transformative investments in municipal centers, we intend to create valuable real estate and energize the workforce residing in these population centers. Of the region’s nearly 94,000 working age individuals straddling the poverty line, nearly three quarters reside in

the cities of Rome, Utica, Little Falls, Gloversville, Johnstown, Amsterdam, Cobleskill, and Oneonta. Not coincidentally, the region’s most distressing vacancy rates are glaringly geosynchronous. Logically, our investments must land geographically where the greatest good can be realized by the greatest number of our citizens.

Vacant property generally reduces market values in the respective block group by 6.5% and by as much as 20% in neighborhoods with a significant number of empty lots and structures. Vacant properties also consume millions of dollars in municipal services a year, much of which is spent on code enforcement and maintenance, and police and fire services. Among those most hurt by the damage vacant property inflicts on housing values are long-time homeowners, many of them senior citizens and working class residents—the very people who are trying to hold together what is left of a declining neighborhood.

Even now, partnerships are materializing to bring educational and training programs directly to underrepresented populations while providing the necessary spark for innovation and entrepreneurship. The ThINCubator – the Mohawk Valley region’s Innovation Hot Spot – has recently announced plans to expand into adjacent vacant commercial property in Utica’s Bagg Square. Another example is Mohawk Valley Community College’s Educational Opportunity Center (EOC), which provides outreach and training to refugees, new Americans, and hard-to-place workers within walking distance of many of Utica’s underserved neighborhoods. The EOC is strategically

located in a marginal downtown neighborhood characterized by high commercial vacancy, extreme poverty, and a history of disinvestment. MVCC is looking to expand its EOC in downtown to expand its ability to support refugees populations and other hard to place workers so that they can take advantage of new economic development and employment opportunities that are emerging.

Further down the canal, childcare providers in Amsterdam are partnering with the IDA to site a modern daycare facility in an industrial employment concentration – addressing two of the top barriers to sustainable employment identified by regional stakeholders – in a vacant property on the city’s south side. To the north, a co-op of local farmers and city-dwelling revitalization visionaries redeveloped a historic vacant building in downtown Gloversville to provide access to fresh, healthy food alternatives for low-income and transportation-challenged families. Finally, a new Innovation Hot Spot is being proposed by the REDC to establish an appropriately tailored and long overdue Agribusiness Incubator for value-added dairy processing in Cobleskill, leveraging latent talent and the abundant natural and agricultural resources in the surrounding towns and villages of Schoharie County.

The Mohawk Valley has chosen Cyber Technology as its targeted industry cluster. Soon to be classified as a “manufacturer,” this industry is uniquely and almost perfectly suited to our metropolitan and micropolitan centers. Unlike many traditionally manufactured products, cyber technology can be manufactured in redeveloped residential, commercial, industrial and historic properties – the remains of which are strewn throughout communities from Rome to Amsterdam, Gloversville to Cobleskill, and most villages in between. “Tech driven industries most likely to be found in Innovation Districts include: high-value, research-oriented sectors such as applied sciences and the burgeoning ‘app economy;” a finding that particularly aligns with growing a cyber-cluster in the region’s micropolitan communities.

Our cities and villages are the confluence of infrastructure, culture, and capital. Building vibrant communities will also depend on how well we export our regional specializations to the rest of the world. Planned projects will improve rail access to our urban manufacturers and agricultural producers while simultaneously elevating the profile of our communities as destinations for foreign investment, refugee resettlement, and establishment of a global supply chain.

Coupled with new investments in modern housing, green infrastructure, and cultural amenities, the foundation is being laid for the intersection of people and ideas in our largest metropolitan center. Planned investments will be prioritized, then, on projects that grow the tax base in areas of greatest population for maximum impact.

Where are the vulnerable working populations?

COMMERCIAL VACANCY RATES VS JOB DENSITY

JOB DENSITY PER SQ. MI. (2011)



COMMERCIAL VACANCY RATES BY CENSUS TRACT, 2014

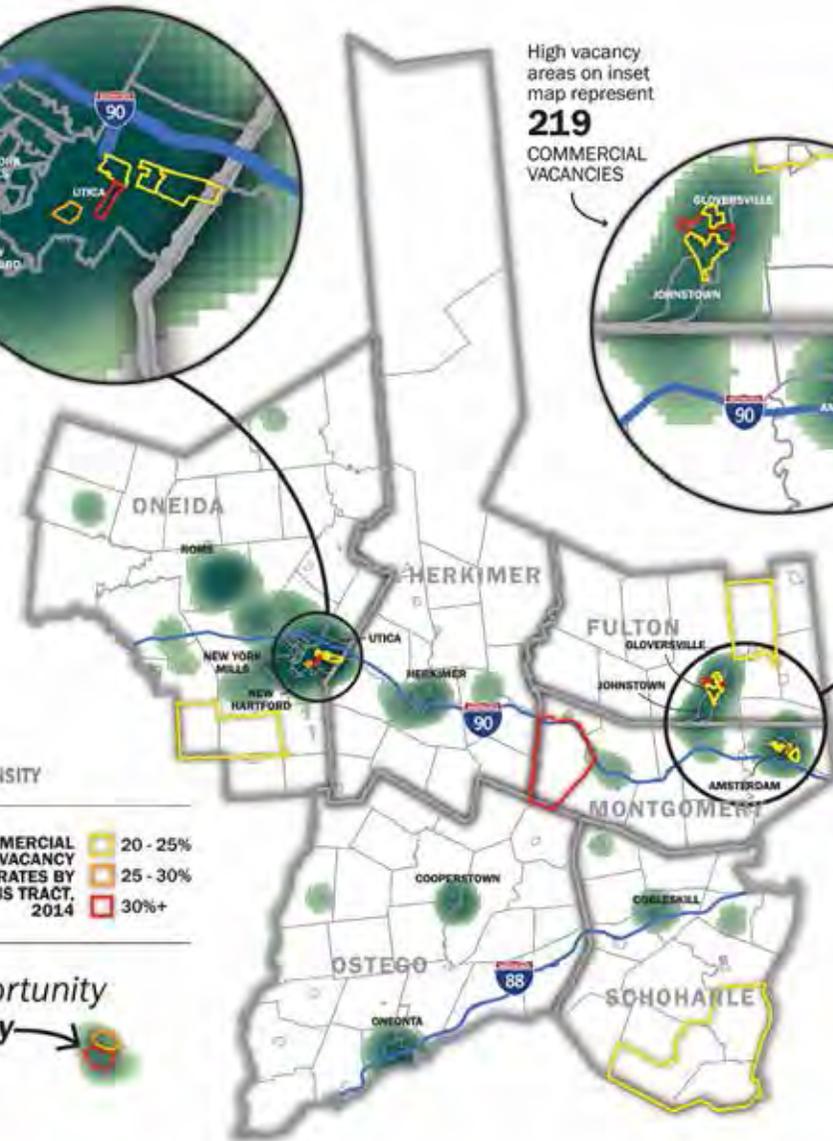


Areas of greatest opportunity exist where **job density** and **vacancy** overlap

High vacancy areas on inset map represent **256** COMMERCIAL VACANCIES



High vacancy areas on inset map represent **219** COMMERCIAL VACANCIES



UB Regional Institute



VIBRANT COMMUNITIES KEY FINDINGS

KEY FINDING #5 ATTRACTING STEM INTENSIVE INDUSTRIES AND BUILDING A WORKFORCE DEVELOPMENT PIPELINE IS STRONGLY LINKED TO SUCCESSFUL EFFORTS TO CREATE VIBRANT COMMUNITIES THAT WILL HELP ATTRACT AND REAIN POPULATION AND TALENT TO SUPPORT A STEM INTENSIVE INDUSTRY BASE.



HARD-TO-PLACE WORKERS

UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH

The loss of jobs and population has impacted the region's cities and population centers. The focus on building the region's STEM Intensive Industry base provides renewed opportunities to encourage reinvestment opportunities that will create vibrant communities that will retain attract population and talent to the region. The Mohawk Valley is beginning to see tangible signs of renewed vitality in its key population centers. Utica, Oneonta, Amsterdam, Sharon Springs, and Little Falls all

are exhibiting signs of revitalization. Mixed-use commercial uses with ground floor commercial and upper floor housing are starting to gain traction in the Mohawk Valley's key population centers.

Arts and entertainment districts, sporting venues, creation of open space development, development of connective corridors, reuse of waterfront areas, and using institutions such as healthcare, education, innovation-acceleration centers, and R&D as key downtown anchors are successful tools for rebuilding the urban corridors. Transforming our cities and historic villages into vibrant centers is essential in attracting talent and workers to drive our region's quest to be part of the next economy. One cannot thrive without the other, and our URI strategy will look to invest in initiatives that will restore the vibrancy of our cities and key population centers.

An example of a project is Mair Magaw Information Systems, LLC (a 2015 CFA recommendation). This is a STEM Intensive Industry opportunity that is also aligned with goals to reinvest in downtown Amsterdam and work with Fulton Montgomery Community College to offer internships to students who are interested in information technology jobs.



COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS

The company is interested in purchasing, renovating, furnishing and equipping a vacant building in downtown Amsterdam, which is consistent with its mission as an applied technology firm that produces software that is designed to aid entities (government, not-for-profit agencies and others) working to deliver services to low-income, underserved populations in the United States and abroad.

The REDC process has helped attract investments that are repurposing key commercial buildings throughout the Mohawk Valley. Specific commercial revitalization efforts are proposed in Utica's Bagg's Square area that is attracting considerable private interest as store fronts have been converted into restaurants, coffee and other eateries and former warehouse buildings are being targeted for upper floor loft housing. Similar initiatives are being considered in Herkimer, Oneonta and the Village of Schoharie.

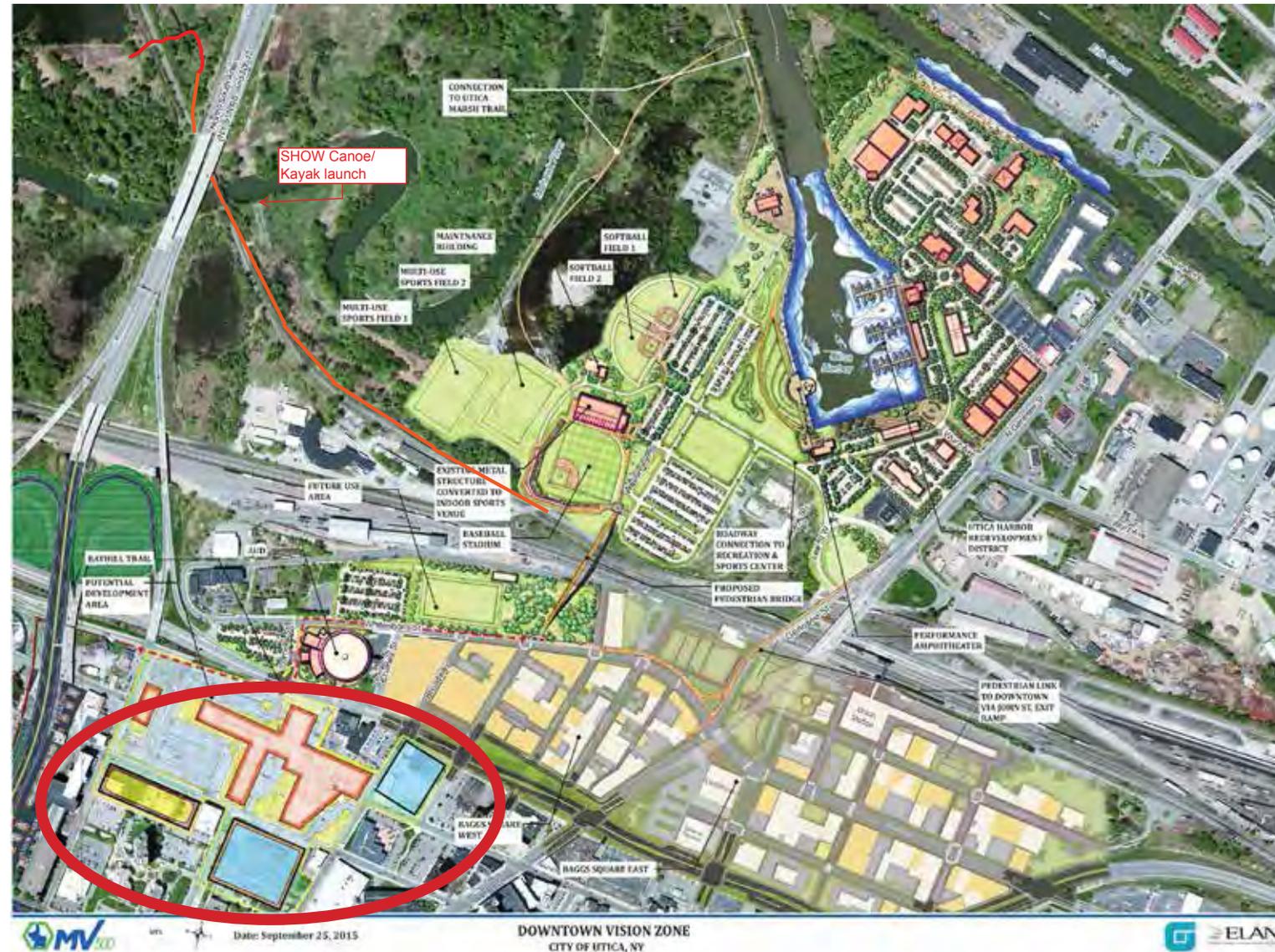
The MV500 process has solicited ideas and proposals throughout the region. One opportunity that has emerged is Project Fibonacci that would establish a scientific Research and Technical Arts and Science Academy in Rome that seeks to create a nexus of art and science to support the region's economic revitalization.

The most exciting transformational opportunity under consideration is taking a 34-acre worn out section of downtown that is prime for a new economic vision. Known as the Downtown Utica Transformational Opportunity District, this district is bounded by key exciting economic developments that are underway with the emergence of the auditorium as a major entertainment attraction, the continued success of Bagg's Square as an up and coming mixed-use urban neighborhood, opportunities that are emerging with the master plan development at nearby Harbor Point, reuse of the Clark Center for Utica College's business school and its on-line programs, the recent completion of the Landmarc building and Basset Hospital leasing a portion of the former Saving Bank Office annex as a back office operations center.

The Downtown Utica Transformational Opportunity District is bounded by major highways and is within minutes of SUNY Poly, which overlooks downtown Utica

and provides an exciting view of the Mohawk Valley and downtown Utica in particular. The link between the exciting developments at SUNY Poly with downtown Utica's transformation is critical as a vibrant downtown is essential to building investor confidence with the tech community and in the marketing of the area to a global workforce.

To continue the momentum that is underway, the City of Utica in concert with other government, business and community partners is looking to transform approximately 34 acres of a largely vacant, underutilized and functionally obsolete area in downtown Utica and transform this area into a technology oriented development that is linked with nano-bio opportunities emerging at SUNY Poly and Masonic Medical Research Laboratory, healthcare, offices, medical education, recreation and entertainment opportunities at the nearby auditorium, gateway site and nearby Harbor Point. The proposed development area will also provide complementary commercial development opportunities that are popping up with the emergence of downtown as a mixed use urban neighborhood.



Downtown Utica Transformational Opportunity District



STRATEGY 1: RECLAIM MV (REcovering our Community's Legacy And Incentivizing Momentum) Capital Grant Program

A Capital Grant Program, matching up to 50% of the initial investment in the cleanup and redevelopment of our region's most blighted properties to catalyze reinvestment in population centers.

To attract new investment in urban centers and discourage further sprawl and development of agricultural land, communities and investors must have access to matching capital to mitigate risk. While the adaptive reuse of vacant, contaminated, and underutilized properties requires greater up-front investment, it also carries the greatest and most sustainable value proposition for the region.

Regions that possess vibrant downtowns and dense labor markets frequently attract and retain young, mobile, highly educated workers.¹ The Mohawk Valley must link its economic revival to practical initiatives driven by high-tech industries, higher education, curbing sprawl and revitalizing the region's beleaguered cities, historic villages and population centers.

Most Mohawk Valley population centers can point to a declining or closed industrial site. Returning these sites to productive use does more than create jobs and tax revenues; it produces social, environmental, and aesthetic benefits to residents in distressed neighborhoods across our region.

Despite the potential of these sites and the interest in their revitalization, serious obstacles impede progress. Chief among these is contamination affecting the land and buildings on these sites, even if it exists only at small levels. In some situations, owners have decided to "mothball" their facilities, letting them sit idle rather than grappling with the reuse challenges they face. In other cases, private owners have simply given up on their properties, allowing them to revert to the public domain. This

¹ Katz, Bruce. Selling the Rust Belt Short. Cleveland Plain Dealer. August, 2004.

means that local governments, often pressed for cash, are being forced to deal with the problems of contamination and decay themselves in order to see these facilities returned to productive and tax generating uses.² A lack of funding for these sites has become a constant reminder of bad times and can spawn blight in adjoining areas. Many brownfields are caught in this vicious cycle of decline, which only exacerbates the problems that our communities face.

Property values surrounding brownfields decrease as a function of the size of the given brownfield (and in some instances the type of contamination) for up to one mile. Demolition and environmental remediation has a positive effect that is significant in most cases, within 0.5 miles from the brownfield, and with a maximum discernible impact of two miles, post redevelopment.³ Averaging the experiences of brownfield redevelopment across a nationally representative sample of properties, cleanup leads to housing price increases between 5.0% and 15.2%.⁴ Conservatively, RECLAIM MV will look to capture a 5.0% increase in property values, but expects that the average increase across all signature projects will far exceed this amount.

RECLAIM MV will measure leverage, analyze cost-benefit, and calculate economic impact over a five-year investment horizon. That analysis will begin with tracking property values within 0.5 miles of the project site before and after demolition, remediation, and if applicable in the five-year horizon, redevelopment. Return on investment will include increased property tax revenue within the 0.5 mile catchment

² Bartsch, Charles. Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania. Brookings Institution. December 2003.

³ Schwarz, Peter M. Estimating the Effects of Brownfields and Brownfield Remediation on Property Values in a New South City. Contemporary Economic Policy. 2013.

⁴ Hanninger, Kevin, et al. The Value of Brownfield Remediation. National Bureau of Economic Research. July 2014.

area, in addition to private capital invested in redevelopment. In that scenario, houses located within 0.5 miles of the project site are considered to be in the treatment group, while houses located outside of that distance (where the site has no effect regardless of cleanup) are designated as controls. Reporting outcomes will be measured against the control group to ensure accuracy.

Target areas include neighborhoods adversely affected by the presence of vacant, blighted, underutilized, and/or brownfield properties in the following communities:

- City of Amsterdam
- Village of Canajoharie
- Village of Sharon Springs
- Village of Richfield Springs
- City of Gloversville
- Villages of Herkimer-Ilion
- City of Little Falls
- Village of Northville / Town of Northampton
- City of Oneonta
- City of Rome
- Village of Schoharie
- City of Utica

These communities were selected based on extensive outreach, feedback, and alignment with strategic REDC and URI investments in workforce, technology, and tourism. With few exceptions, the selection of these communities is further validated by the 2015 demographic and geospatial analysis performed by the University of Buffalo Research Institute, demonstrating the intersection of poverty, population density, commercial vacancy, and employment opportunities across the region.

PROJECT REQUIREMENTS

Projects funded within this strategy will encourage community development and neighborhood growth through the elimination and redevelopment of blighted structures and the inducement of private sector investment.

Funding will be made available to projects involving the demolition, deconstruction, rehabilitation and or reconstruction of vacant, abandoned, condemned and surplus properties.

Applicants must demonstrate:

A minimum of 10% cash equity match

a minimum ratio of Non-URI to URI funding of 2.5:1 (for example, \$2,5 million in URI Funding will need to leverage \$6.25 million in Non-URI funding),

A commitment to finance the entire project

Projects will be broken out into Year 1 (Signature), Year 2 (Pipeline), Year 3 (Planning Stage), Year 4 (Feasibility Stage), Year 5 (Long Range).

Priority will be given to projects in Brownfield Opportunity Areas, projects identified in the Mighty Waters Action Agenda, projects that leverage significant private investment, projects that leverage local, state or federal remediation or planning program funds, as well as projects from economically distressed census tracts (defined as having an unemployment rate average over the last 24 month period that is 1% or more above the state average or; a per capita or personal income that is 80% or less than the state average; or a poverty rate greater than 30 percent).

Table R-1: Strategic Site Leverage Calculation Via Increased Property Tax Revenue

Site	Current Value (.5 mi)	5% Growth	5Y Revenue Increase
Duofold	\$89.6M	\$4.5M	\$1.3M
Beech-Nut	\$60.8M	\$3.0M	\$1.1M
Downtown Utica	\$142.4M	\$7.1M	\$2.3M
Parrot House	\$72.6M	\$3.6M	\$0.99M
2-26 S Main Street	\$173.9M	\$8.7M	\$2.3M
Rome Cable	\$110.7M	\$5.5M	\$1.6M

OUTCOMES

- 90% of properties will reach the highest level of redevelopment (clearance, remediation and redevelopment)
- 5% increase in property values within .5 miles of the project site, within 5 years of project inception
- Reduce housing vacancy rates within the project census tract by 10%, within 5 years of project start
- Adaptive reuse of 720,000 square feet of vacant/underutilized mixed-use property, region-wide



STRATEGY 2: 1% FOR US ALL

INITIATIVE #2: 1% FOR US ALL

Based loosely on NYC’s 30-year-old Percent for Art program, and modeled after the Knight Cities Challenge, the Mohawk Valley’s 1% FOR US ALL strategy will require that one percent of the funds provided for eligible MV500-funded capital projects be spent on public artwork, cultural programming, civic innovations, or connections to underserved neighborhoods.

METHODOLOGY

Research shows that attracting and retaining creative class talent, expanding economic opportunity, and creating a robust culture of civic engagement are key drivers of overall community success.¹

Talent: Attract and retain creative class residents

Cities are stronger for everyone when they can attract creative people with skills, education and the ability to succeed. To succeed, cities must make it clear that they offer a diverse culture and vibrant lifestyle for creative individuals, both young and old.

Opportunity: Expand economic prospects and break down class divides.

To succeed, cities need to be spaces where opportunity is expanding and open to all. They need economies that are both strong and fair. That means cities need to create places where people of diverse backgrounds can connect across economic divides, so strengths can be shared throughout the community. They need to support the way people work in today’s mobile and interconnected economy, so that everyone can find a job that works for them.

¹ Knight Cities Challenge. (<http://www.knightcities.org/about.html>). 2015.

Engagement: Spur connection and civic involvement.

Residents must take hold of the future of their cities if they want their cities to succeed. Engagement is about creating spaces for people to come together and help shape their city’s future. Engaged residents are helping set the agenda for change in their cities and connecting with their communities to take concrete, collective action.

PROJECT REQUIREMENTS/OUTCOMES

1% projects will be developed by the recipient of MV500 funds, in coordination with an existing local not-for-profit, and must be connected with the community in which the recipient is located, or directed towards a key target population².

Projects must also include at least one of these key drivers to be considered for funding:

Placemaking

Enhancing walkability and access to alternative transportation

Physical and/or programming connections between underserved neighborhoods and downtown, waterfront, STEM education programs, and employment/training centers, Green infrastructure investments and other investments in infrastructure improvements that satisfy NYS/DEC sewer consent orders (e.g., sewer separation projects).

Increase the region’s culture of civic engagement

Examples of 1% Project

The ams project receives \$50 million in Year 1 capital funding (\$200 million over five years). Project developer (FSMC-EDGE) receives a set aside of \$200,000 for a 1% project, in collaboration with a local not-for-profit. That project might include pedestrian improvements that create greater connectivity between the SUNY Poly campus and the Marcy Nanocenter, additional public artwork along the SUNY-Marcy Parkway, STEM programming that specifically

² 1% funds would be limited to the first \$10 million in project costs. The percentage would drop to .25% on all costs in excess of \$10 million.

targets providing greater opportunities for ESL students and refugees, or programming that connects new employees relocating to the area with local civic and eleemosynary organizations.

Oneonta rail yards receives \$25M in capital funding over the course of the URI. Norfolk Southern and Otsego IDA receive set aside of \$137,500 for a 1% project. That project might include pedestrian, bike, or city transit improvements to connect hard-to-place workers to new employment opportunities at the rail yards, investments in local food systems marketing, or funding a connective corridor improvement in the City's downtown.





STRATEGY 3: Mighty Waters Action Agenda

The NYS Barge Canal, Mohawk River, and their tributary waterways are inextricably linked to many of our downtown districts. In many cases, downtown revitalization is synonymous with waterfront development. Predominantly an industrial conduit for raw materials, produce, and industrial goods over the course of its history, the canal has never before enjoyed such interest in public access and programming. This initiative focuses on catalytic projects that connect people to the water for recreation, and, more important, inspiration.

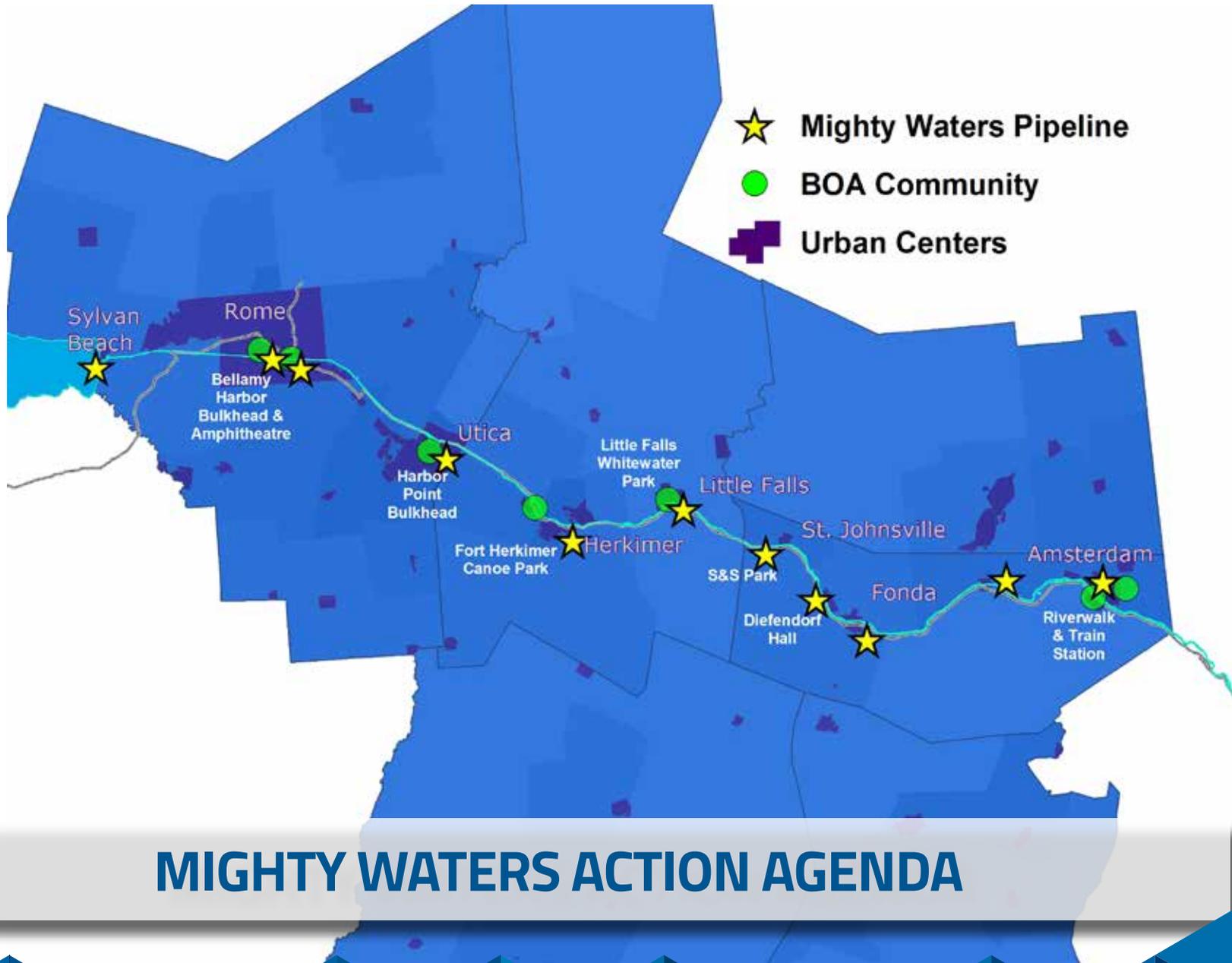
The Mohawk Valley intends to leverage the NYS Barge Canal as a vital component of the new ecosystem. The Mighty Waters strategy will be used to focus State and Federal resources to advance priority projects in the Mighty Waters communities. Working with the Department of State and New Partners for Community Revitalization, we have identified twelve high-priority, high-impact capital projects in canalfront communities to be completed over the next five years.

The Amsterdam Amtrak Station Relocation, Utica Harbor Point, Rome Bellamy Harbor Park, and the Amsterdam Riverwalk are all strategically designed to transform the downtown landscape and, ultimately, the identity of our region’s largest canalfront communities. Also included are the next wave of pipeline projects to complete the necklace of main streets along the canalfront, in the Villages of Fonda, Herkimer, and Sylvan Beach – opening the waterfront to hundreds of thousands of residents, businesses, and visitors for the first time in generations.

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The NYS Mighty Waters Action Agenda, lists more than two dozen projects in the Mohawk Valley that represent high-impact priority investments for the sponsoring communities. Of these projects, we have selected eight (8) projects that best-demonstrate the connectivity and accessibility required to foster the geography of innovation.



MIGHTY WATERS ACTION AGENDA

CONNECTIVITY PROFILE

The Mohawk Valley: A Community of Centers.



Whether grappling with issues of energy costs, water quality, wildlife habitat, sprawl, or community vitality, intelligent land use is a common thread between our urban centers and historic rural villages (collectively - our vibrant communities). Regardless of residence, the location of our homes and businesses determines whether we have choices other than driving, which affects things like our carbon footprints as well as the location of consumer goods and services.

The Mohawk Valley's distinctive sense of place is largely the result of its cultural and economic heritage. This heritage has created, and maintained, the region's historic landscape of compact cities and bucolic villages surrounded by working farms and preserved public recreation lands. By promoting good planning and

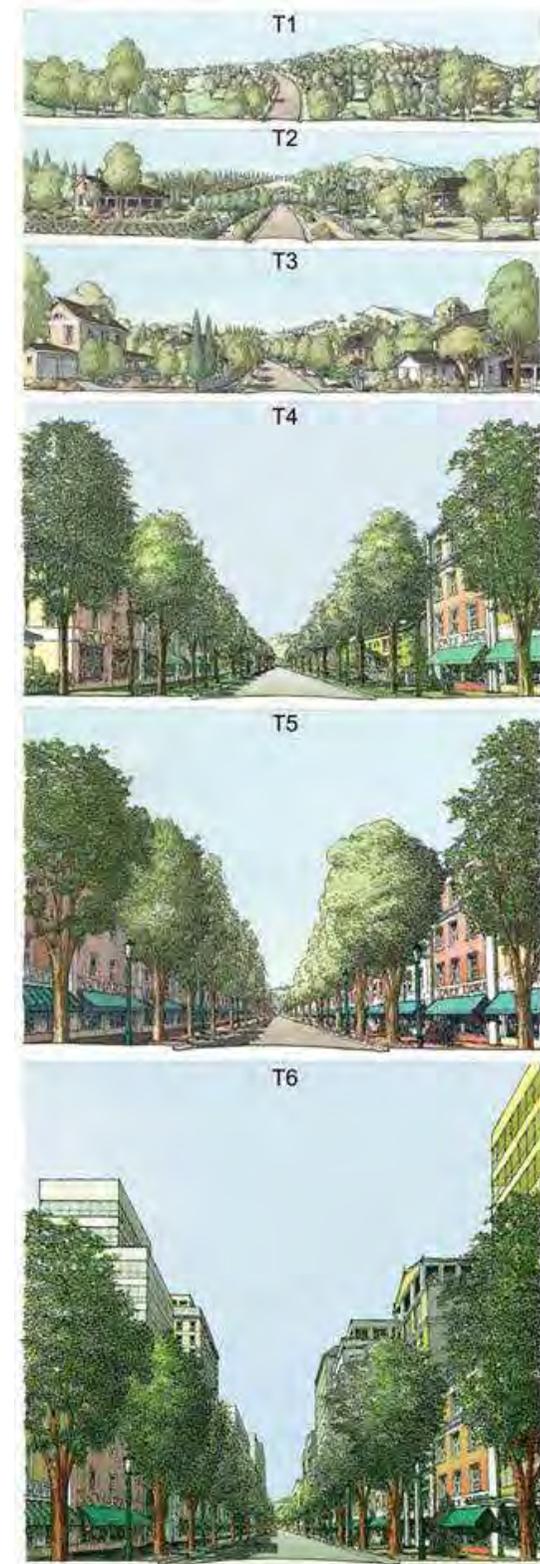
advocating for future investments in our historic villages and downtowns, we ensure that we use our land efficiently, reinforce community vitality, protect natural resources, provide more transportation options, increase access to local food and products, and produce a smaller carbon footprint.

What makes our urban centers great, is also what makes our historic rural villages great. For all human-occupied environments in the Mohawk Valley, one can identify what makes a vibrant community by their relative level and intensity of urban character - a continuum that ranges from urban central business district to rural main street.



Each vibrant community throughout the Mohawk Valley contributes to the continuum of the transect - they are places that have an integrity and coherence because of their particular combination of life sustaining elements that contribute to the larger whole. That isn't to say that all of our vibrant communities are homogeneous. Communities that are rural might consist of wide streets, historic civic buildings and open fields, while communities that are more urban will likely consist of multi-story buildings, high traffic transportation routes and public squares. This proper geographic alignment of land use elements across the region serves to maximize the unique qualities of our vibrant communities, and is what will continue to make our region great as we grow our region's population and economy over the next fifteen years.

This range of environments, known as an urban-to-rural transect (a term coined by New Urbanist, Andrés Duany). Transects are the basis for organizing the components of our built world: building, lot, land use, street, and public spaces. Transects begin with zones that are entirely rural in character: rural preserve (protected areas in perpetuity); and rural reserve (areas of high environmental or scenic quality that are not currently preserved, but perhaps should be). The transition zone between countryside and village is called the edge, which encompasses the most rural part of the village, as well as the countryside just beyond. The edge is primarily single family homes along a rural thoroughfare. Next is the general zone, which is primarily residential, but more urban in character (somewhat higher density with a mix of housing types and a slightly greater mix of uses allowed). At the end of the spectrum are two zones which are primarily mixed use: center (this can be a small neighborhood center or a larger village center, the latter serving more than one neighborhood); and core (serving the region — typically a central business district). Core is the most dense and diverse of all the zones.





SUSTAINABILITY
LONG-LASTING AND SUSTAINABLE CHANGE



V. SUSTAINABILITY

This strategy is more than the “sum of the individual parts.” What makes the Mohawk Valley URI strategy sustainable is that it is not a mere distribution of funds for a series of projects that are developed and funded in isolation of one another. Rather this strategy focuses on the importance of the “whole” and how the guiding principles embodied in the URI strategies interact to create synergy that has a far greater effect than the sum of the individual parts. This binds the region together with a unified vision, and an established framework focused on how best to bring about long-lasting transformational economic impacts.

The unifying principles that are essential to showing sustainability are as follows:

To sustain momentum the region needs to capitalize on the opportunities that are at its threshold and success needs to spread to other parts of the region.

The ams/GE announcements are transformational and in part are reflective of prior REDC support. These recent game changing announcements provide the impetus for attracting similar investments for the build-out of the Marcy Nanocenter and Quad C sites as both projects were planned to support additional buildout and that is likely as the semiconductor and nanotechnology industry thrives on clustering.

With a second major nanotechnology investment anchored in Utica and the other being in the Capital

Region there is an opportunity to attract supply chain growth that can be extended along the I-90 corridor and in other parts of the region (e.g., Otsego County if Commerce Business Park is developed). There is enough critical mass in place and plans are underway to ramp up marketing efforts for supply chain growth that can be attracted and several areas within the Mohawk Valley region are strategically located to serve industry needs at SUNY Poly’s Utica site and the Capital Region.

Building an innovation ecosystem is critical to establishing an environment that is successful in attracting new STEM Intensive Industry growth from new businesses considering expansions within the region, and existing employers are willing to reinvest in the region.

What makes the region’s pending success sustainable is that it is connected to a major innovation ecosystem that started in Albany, with SUNY Poly’s College of Nanoscale Science and Engineering (CNSE). That industry ecosystem has attracted more than \$20 billion in public and private investment, and has more than 300 industry partners and in excess of 3,000 jobs. SUNY Poly’s sphere of influence has extended beyond the immediate geographic boundaries of the Capital Region with key anchors in Utica and anchors are also taking root in Rochester and Buffalo.

This ecosystem is deep-rooted and is able to be at the forefront of advances in technology. This is evident with

the Power Electronics Consortia announced last year and the most recent announcement of the American Institute for Manufacturing Integrated Photonics (AIM Photonics) AIM. Both of these consortia’s are headed by SUNY Poly and are next generation technologies that will maintain New York’s competitive advantage in innovation. The ams and GE announcements, coupled with the planned development of the Innovation Acceleration Center reflect of the ecosystem that has been built and which will continue to attract, and support ongoing innovation investments.

Existing businesses are also reacting to the region’s new found success. PAR and Indium are looking to invest and expand in the region. This is due to the fact that they have confidence in the region and believe that it is headed in the right direction and therefore it makes sense to invest here as opposed elsewhere. The same is true in Amsterdam with the decision by AGT to invest in new equipment to support the growing power generation industry cluster that exists within the region.

The region has several regional industry concentrations that are also sources of competitive strengths and therefore are platforms for additional growth.

The nanotechnology ecosystem has been nearly 20 years in the making. The Mohawk Valley is also at the forefront of several other expanding or emerging industry sectors. These clusters are opportunities to



SUSTAINABILITY

build STEM Intensive Industry growth and fuel the region's economic growth.

One is the pharmaceutical manufacturing project with Empire State Health Solutions that will manufacture medical cannabis at its Tryon Technology Center in Fulton County. The potential growth of this medical cannabis market is expected to spur other pharmaceutical opportunities.

A second opportunity is to leverage additional opportunities out of the region's dairy industry including the booming yogurt and cheese business. New Age Renewables is a product of this growth as it is delivering an innovation solution for dealing with acid whey and finding new markets for this byproduct that has created barriers for further growth.

The third emerging opportunity is in UAS systems with the Griffiss UAS Technology Center and emerging UAS corridor that is being created in Upstate New York.

A fourth industry cluster that is a source of sustainability is the region's proximity to GE and its Turbine division. The power generation cluster that existing in and around GE, including the cluster in Montgomery County and businesses in and around the Greater Utica area are opportunities in which to build.

Success is infectious. Regional attitudes are critical for infusing a new sense of purpose and optimism about the region's short and longer term economic prospects and ability to attract and retain population and talent.

It is no secret that investment and people are attracted to areas that exhibit a new sense of confidence. URI funds that are attracting and developing job creating businesses; building a successful education and workforce development system that bridges the mismatch where employers claim that they cannot find people to fill available jobs and people claim there are no jobs; and building vibrant communities as downtowns and waterfronts are transformed create a sense of optimism about the region's future. The MVREDC firmly believes that it has critical momentum and the successful implementation of its strategy will help turn attitudes that often reflected the region's low self-esteem to one where people believe that their community is on the rise.

It is no surprise that the Utica Comets have helped the region think better of its community and those who are not from here have seen how a community has come together to rally behind their hockey team but in the process also have become ambassadors of good will who convey a sense of affection, pride and confidence about their community's future.

Connections across the region are crucial, but it is equally important to establish and maintain connections with other regions in the State to build permanent alliances that will create success.

Cross-regional collaboration is essential to our current and future success. The region's success in nanotechnology is a product of its ability to forge an alliance with SUNY Poly. Cross regional partnerships are underway to build greater economic success in industry clusters ranging from Unmanned Aerial Systems as the Syracuse MSA and Utica-Rome MSA are working collaboratively to build a UAS corridor; to the upstate collaboration that is being fostered to bring together critical academic and industry assets to build more success in cyber security. Cross regional partnerships are underway to build success in tourism with Brew Central, as the Mohawk Valley is looking to expand the number of craft breweries and distilleries that also align with the region's and New York's tourism initiatives.

Connections are also being established to provide opportunities to link workforce development needs in other regions with emerging opportunities taking place here. Examples include soliders from Fort Drum who might be attracted to employment opportunities in nanotechnology, aircraft maintenance, UAS industry, or jobs in other advanced industries. SUNY Poly and MVCC work closely with Fort Drum to support additional training initiatives that will help returning soldiers transition to civilian jobs within the Upstate economy and not be forced to relocate outside New York.

Realizing net new wealth in the region is largely dependent on the region's ability to create and sustain a workforce development pipeline.

An essential element of the Mohawk Valley's strategy is the significant commitment that is being made to build an education and workforce development system that will help build and sustain a talent pipeline. The region needs to build a deeper base of talent to support its STEM Intensive Industries if we are to grow the region's economy. This also requires the region to reduce the number of residents who are categorized as hard to place workers as regional prosperity is contingent on expanding economic opportunities for those who to date have been largely disenfranchised. The MVREDC's URI Plan focuses on required investments for STEM Education, P-Tech Programs, community colleges and SUNY Poly to develop a comprehensive pipeline that includes K-12 education, the community colleges, and the region's undergraduate institutions.

Developing vibrant communities throughout the six-county area to change the outside view of the region as being tired, worn, and a region down on its luck is critical to the region being able to elevate its profile within New York State, nationally and globally if it is to be viewed as a place to invest and choose to live.

This is a clear cut example of how the whole is greater than the sum of its parts. The region's economic transformation is not complete

unless the region is able to successfully develop vibrant communities. The I-90 stretch from Amsterdam to Rome conveys a strong view of what one sees and thinks about the Mohawk Valley. Undeveloped brownfields in Amsterdam, an abandoned Beechnut plant in Canajoharie, a declining Main Street in Herkimer, vacant buildings in Utica, and abandoned factory buildings in Rome conveys a view that these are not communities that are poised for success. The same impression would also be realized with undeveloped and underutilized commercial buildings in Oneonta and the communities along Route 20 that have tired underutilized Main street commercial districts.

The Mohawk Valley's strategy recognizes that looking at the collective needs of our region's key population centers is critical to transformation. Businesses and people who travel between Syracuse and Albany along I-90 or travel from Albany to Binghamton on I-88 need to see that investment is wide spread and the region is rebuilding its key population centers.



VI. PROJECTED URI BUDGET- SIGNATURE PROJECTS



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1

SIGNATURE PROJECTS	TYPE OF PROJECT	STRATEGY	TOTAL INVESTMENT	NON-URI FUNDING	URI FUNDING	YEAR 1	YEAR 2-5
ams Wafer Fabrication Expansion/ GE Global Research SIC Power Elec- tronics Packaging Center	URI	STEM	\$3,000,000,000	\$2,800,000,000	\$200,000,000	\$50,000,000	\$150,000,000
AGT Services	CFA	STEM	\$15,000,000	\$12,000,000	\$3,000,000	\$3,000,000	
PAR Technology	CFA	STEM	\$5,900,000	\$4,720,000	\$1,180,000	\$1,180,000	
New Age Renewable	CFA	STEM	\$12,430,000	\$10,430,000	\$2,000,000	\$2,000,000	
Indium	URI	STEM	\$60,000,000	\$50,000,000	\$10,000,000	\$1,000,000	\$9,000,000
Griffiss UAS Technology Center	CFA	STEM	\$14,300,000	\$11,440,000	\$2,860,000	\$2,860,000	
FSMC-SUNY Poly Innovation Accel- eration Center	CFA	STEM	\$30,000,000	\$24,000,000	\$6,000,000	\$6,000,000	
FSMC – SUNY Poly Workforce De- velopment Center	CFA	Build	\$7,500,000	\$6,400,000	\$1,100,000	\$1,100,000	
MVCC Advanced Manufacturing Institute	CFA	Build	\$9,000,000	\$7,200,000	\$1,800,000	\$1,800,000	
Smith Brothers Building Rehab	CFA	Vibrant Communities	\$919,103	\$649,910	\$269,193	\$269,193	
Bagg's Square Lofts	CFA	Vibrant Communities	\$4,500,000	\$3,600,000	\$900,000	\$900,000	
Rehabilitation of Main St. Properties Village of Schoharie (Parrott House)	CFA	Vibrant Communities	\$1,784,208	\$1,436,368	\$347,840	\$347,840	
Malt & Barley Manufacturing	CFA	Agribusiness	\$1,516,916	\$1,213,533	\$303,383	\$303,383	
Stevens Bldg. Redevelopment (Klugo Redevelopment)	CFA	Vibrant Communities	\$800,000	\$680,000	\$120,000	\$120,000	
B&B Ranch	CFA	Agribusiness	\$1,100,000	\$990,000	\$110,000	\$110,000	
Subtotal:			\$3,164,750,227	\$2,934,759,811	\$229,990,416	\$70,990,416	\$159,000,000
Leverage Ratio					12.76		

VI. PROJECTED URI BUDGET- CFA PROJECTS



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1

CFA PROJECTS	TYPE OF PROJECT	STRATEGY	TOTAL INVESTMENT	NON-ESD FUNDING	ESD FUNDING	YEAR 1
FMCC Global Village	CFA	Build	\$37,803,032	\$33,803,032	\$4,000,000	\$4,000,000
Robison & Smith	CFA	Business Investment	\$8,620,000	\$6,920,000	\$1,700,000	\$1,700,000
Nathan Littauer Hospital Kidney Dialysis Center - Gloversville	CFA	Business Investment	\$1,500,000	\$1,200,000	\$300,000	\$300,000
Gloversville Public Library	CFA	Vibrant Communities	\$7,452,939	\$6,951,385	\$501,554	\$501,554
Nathan Littauer Hospital Primary Care - Perth	CFA	Business Investment	\$1,200,000	\$960,000	\$240,000	\$240,000
St. John's Espiscopal Church - Food Pantry	CFA	Opportunity Agenda	\$539,659	\$459,659	\$80,000	\$80,000
Jumpstart Repair Interconnection Between 2 Cities	CFA	Modernize	\$255,000	\$204,000	\$51,000	\$51,000
Ace of Diamonds -2016 Tourism Enhancement Project	CFA	Tourism	\$276,936	\$166,936	\$110,000	\$110,000
TJ Allen Bulk Services LLC	CFA	Agribusiness	\$230,000	\$184,000	\$46,000	\$46,000
Mair Magaw	CFA	STEM/Vibrant Communities	\$2,447,525	\$1,958,075	\$489,450	\$489,450
Nathan Littauer Hospital Primary Care - Fonda	CFA	Business Investment	\$1,040,000	\$832,000	\$208,000	\$208,000
Memory Lane Day Care Center II	CFA	Opportunity Agenda	\$254,260	\$204,260	\$50,000	\$50,000
Erie Pellet	CFA	Business Investment	\$6,841,413	\$6,141,413	\$700,000	\$700,000
Robinson Road Sewer Project (Indium)	CFA	Infrastructure	\$1,800,000	\$1,440,000	\$360,000	\$360,000
Compassion Coalition (Your Bargain Grocer)	CFA	Opportunity Agenda	\$925,000	\$740,000	\$185,000	\$185,000
Hartwick College Center for Craft Food and Beverage	CFA	Entrepreneurship	\$342,900	\$274,320	\$68,580	\$68,580
Oneonta Rail Yards	CFA	Vibrant Communities	\$2,500,000	\$2,000,000	\$500,000	\$500,000
Main St. Reconstruction Project	CFA	Vibrant Communities	\$1,143,000	\$923,000	\$220,000	\$220,000
Water System Storage Distribution Improvements	CFA	Infrastructure	\$800,000	\$600,000	\$200,000	\$200,000
Subtotal:			\$75,971,664	\$65,962,080	\$10,009,584	\$10,009,584
Leverage Ratio:					6.59	

VI. PROJECTED TOTAL URI BUDGET



PRIVATE SECTOR INVESTMENT
MINIMUM LEVERAGE OF 5:1

	Total Investment	Total Non-URI Funding	URI Funding	Yr.1	Yr.2
Subtotal: Signature Projects	\$3,164,750,227	\$2,934,759,811	\$229,990,416	\$70,990,416	\$159,000,000
Leverage Ratio			12.76		
Subtotal 2015 CFA Rollover:	\$75,971,664	\$65,962,080	\$10,009,584	\$10,009,584	\$0
Leverage Ratio:			6.59		
Total URI + 2015 CFA	\$3,240,721,891	\$3,000,721,891	\$240,000,000	\$81,000,000	\$159,000,000
Combined Leverage Ratio:			12.50		
URI Pipeline					
Mohawk Valley Futures Fund	Create				
Reclaim MV	Vibrant Communities				
Mighty Waters	Vibrant Communities				
Workforce-Education-Opportunity Agenda	Build & Opportunity Agenda				
Strategic Sites	Business Investments				
Economic Development Business Investment Projects (STEM, Tourism, Agribusiness)					
URI Pipeline	\$1,560,000,000	\$1,300,000,000	\$260,000,000	\$0	\$260,000,000
Leverage Ratio			5.00		
Total URI (5 Yrs):	\$4,800,721,891	\$4,300,721,891	\$500,000,000	\$81,000,000	\$419,000,000
Leverage Ratio:			8.60		

VII. URI IMPLEMENTATION



IMPLEMENTATION AND REPORTING
*ORGANIZATIONAL STRUCTURE FOR
CARRYING OUT THE PLAN*

GOALS

Provide an efficient and representative method to implement the MV500 URI Plan in coordination with MVREDC

Provide a foundation for transforming the six County Mohawk Valley Region

Build networks to support a high functioning mega-region anchored in the strategies for the future

URI IMPLEMENTATION

Six months of unrelenting outreach, engagement, and listening yielded something new and rather unexpected. As our transformational strategies materialized, so did a diverse cadre of professionals and experts to set the strategic vision. Strategy-based thinktanks were manifest in the top minds and entrepreneurs from around the region in food systems, tourism, technology, smart growth, and education. The resulting work groups hold the key to project development and economic sustainability, and have solidified to the point where they have a life and purpose beyond the planning process.

We are dedicated and determined to provide an efficient and representative method to implement the MV500 Investment Plan, guide our collective future and truly transform our six-county region. We are committed to building on what we have learned to advance a comprehensive governance model to guarantee our growth. The mv500 regional leadership initiative will ensure that the NYS URI is successfully executed by managing partnerships, stakeholder commitments, metrics and accountability and ensures the integrated coordination of our key strategies throughout our vast geography.

STEWARDSHIP & ACCOUNTABILITY. The gravity of this situation is not lost on us. The MVREDC is fully cognizant of the extraordinary opportunity presented by a \$500 million injection into our regional economy. We are consciously and deliberately asking the Governor and the people of New York State to entrust us with this precious resource. As steward of this resource, the MV500 Implementation Group will be responsible for tracking project success, moving the needle on key indicators, meeting milestones, and a relentless adherence to our strategic vision.

The ultimate success of the URI is a function of each region's contribution to a true and lasting statewide economic revitalization. We have one chance to get this right. This necessitates a fundamental cultural shift in how our regional economic development entities collaborate and execute. The future of Upstate New York is depending on the Mohawk Valley to deliver upon our promise – a responsibility that demands laser-focus and unbroken vigilance.

FORM & FUNCTION. Structurally, the approach is bottom-up. Functionally, the objectives are strategic alignment and accountability as we move projects from concept to reality.

Strategy-based committees focused on Advanced Industries & STEM Education, Agriculture & Food Systems, Tourism & Marketing, Smart Growth & Vibrant Communities, and Expanded Opportunity. Today, each of these groups range in size from 5 to 25 committed individuals. These Strategy Committees are responsible for identifying transformational projects, community & industry partnerships, and leverage potential. Strategy Committees bring projects to the Project Development Committee of the MVREDC.

The Project Development Committee (PDC) is composed of the primary Economic Development professional from each county. Their responsibility is to prioritize projects based on impact and readiness, making recommendation to the MVREDC for URI funding.

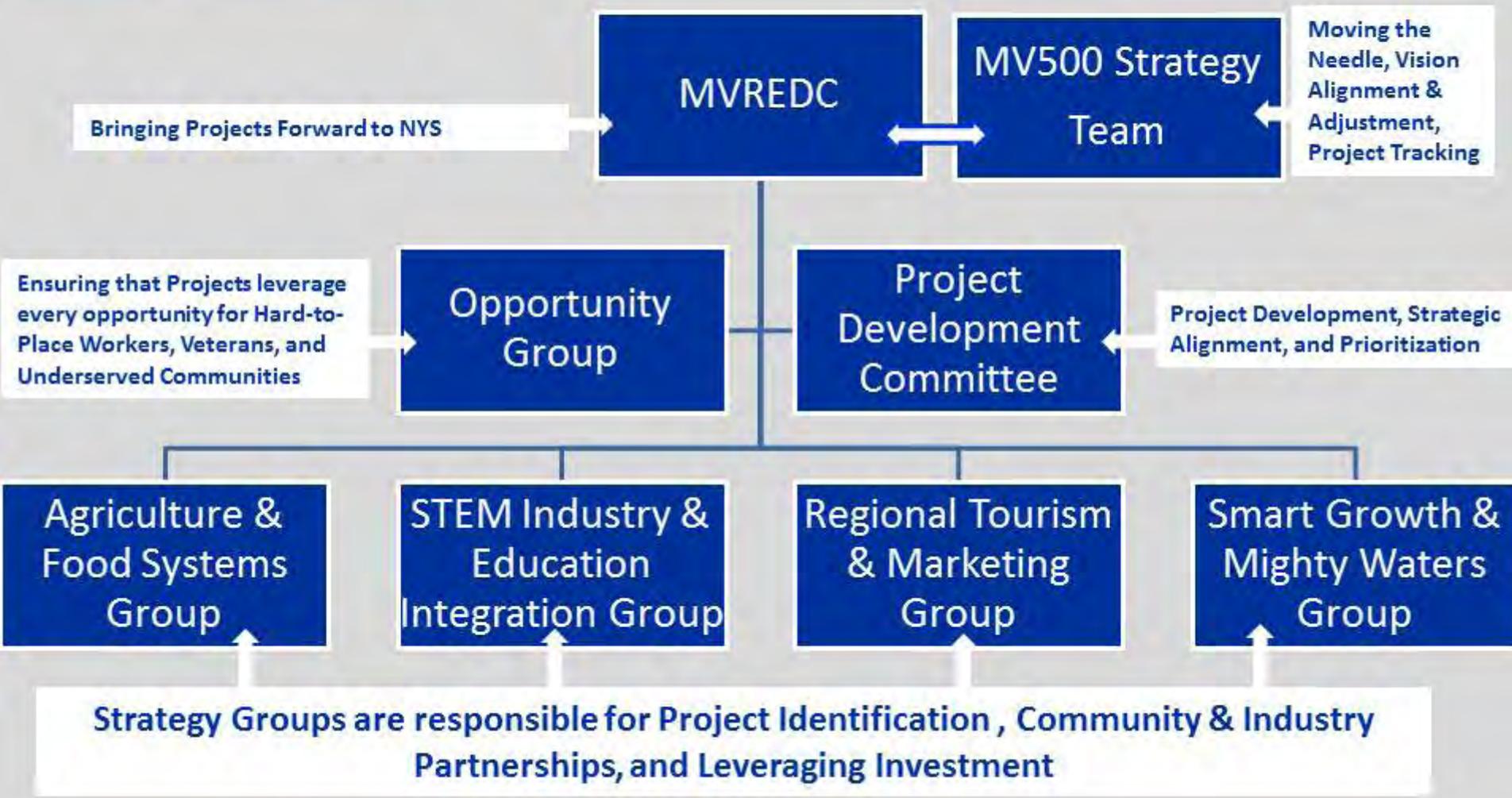
Concurrently, the PDC collaborates with the MV500 Opportunity Group, consisting of leaders from MVCC, FMCC, MVRRCR, Centro Civico, and regional Workforce Investment Boards. The primary function of this group is to ensure that every opportunity is taken to leverage training programs and guarantee access for hard-to-place workers to each and every transformative project proposed. A comprehensive economic recovery depends on it.

The REDC operates largely through the Executive Committee and under the guidance of the Executive Director (ESD). The PDC determines strategic alignment and makes the final project recommendations to New York State for funding.

PERFORMANCE METRICS AND REPORTING. Metrics are indicated at the beginning of each strategy section. The MVREDC will maintain the www.MV500.com website with project tracking, regional economic performance and strategy specific dashboards.

URI Implementation Structure

NEW YORK STATE | EMPIRE STATE DEVELOPMENT



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APPENDIX A



Upstate Revitalization Initiative

PLAN CONCEPTS



INNOVATION

CORNERSTONE OF THE ADVANCED ECONOMY

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READINESS

READINESS TO IMPLEMENT STRATEGIES

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CONNECTIVITY PROFILES

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LEVERAGING OTHER STATE INITIATIVES

USE OF NYS PROGRAMS TO ENHANCE URI FUNDS

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CONNECTIVITY

SYNERGY BETWEEN INDIVIDUALS, INDUSTRIES, ACADEMIA, NON-PROFIT & GOVERNMENT CREATE IDEAL CONDITIONS FOR ECONOMIC GROWTH.

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COMMUNITY REINVESTMENT

HOW PHYSICAL FABRIC WILL CONTRIBUTE TO SUCCESS

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IMPLEMENTATION AND REPORTING

ORGANIZATIONAL STRUCTURE FOR CARRYING OUT THE PLAN

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PRIVATE SECTOR INVESTMENT

MINIMUM LEVERAGE OF 5:1

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SUSTAINABILITY

LONG-LASTING AND SUSTAINABLE CHANGE

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WORKFORCE DEVELOPMENT

ADDRESS NEEDS OF INDUSTRY AND CULTIVATE TALENT

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HARD-TO-PLACE WORKERS

UNTAPPED RESOURCE TO SUPPORT & ENHANCE GROWTH

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COLLABORATION

REGIONAL CONSENSUS

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GLOBAL ECONOMY

GLOBAL MARKETING & EXPORTING

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Project Title: ams High Performance Analog Semiconductor Expansion

County	Oneida	Linkage to Strategy	Grow STEM Intensive Industries
Project Sponsor	ams-Fort Schuyler Management Corporation (FSMC)-Mohawk Valley EDGE (EDGE)		
Description	FSMC to build and lease 300 mm enabled wafer fabrication facility to ams for its high performance analog semiconductor operations. ams is Austrian based company that is looking to expand semiconductor operations with new facility at SUNY Poly's Marcy Nanocenter site. URI funds to be used for site and infrastructure development for 428 acre approved semiconductor site along with investment for tooling and funding of "Joint Projects" between SUNY Poly and ams.		
Timeframe	<ul style="list-style-type: none"> • Construction start: Q2 2016 • Facility completion for tool installation Q2 2017 • Tool installation-facility certification Q3 2017 • First Wafer Ramp: Q4 2017 		
Total Project Cost	\$3,000,000,000	Projected Job Creation (Direct & Indirect)	1,500 (1,000 direct and 500 indirect supply chain)
		Job Retention	NA
Est. URI Investment	\$ 200,000,000	Est. Construction Job Creation	1,000
Sources	Amount	Uses	Amount
ams	\$ 2,271,000,000	OpEx	\$ 2,000,000,000
FSMC	\$ 500,000,000	Facility, Substation & Utilities	\$ 500,000,000
Excelsior	\$ 27,000,000	Tooling	\$ 334,000,000
EDGE-PIF (Job Training)	\$ 2,000,000	Job Training	\$ 2,000,000
URI	\$ 200,000,000	Site Development & Infrastructure	\$ 114,000,000
		R&D Joint Projects	\$ 50,000,000
Total:	\$ 3,000,000,000	Total:	\$ 3,000,000,000
Non URI Investment	\$2,800,000,000	Leverage Ratio (Non URI \$\$/URI):	14:1

Project Title: AGT Services Expansion (AGTS)

County	Montgomery	Linkage to Strategy	GROW: STEM Intensive Industries
Project Sponsor	City of Amsterdam IDA		
Description	AGTS provides repair and rebuild services for power generators manufactured by any and all OEM's from around the world. Project will allow for purchase and installation of a new high speed balance machine which will allow company to enhance its global competitiveness. The public utilities, municipalities, industries, independent power producers and municipalities that comprise AGT Services' customer base are located everywhere from South America, Mexico, Canada, Korea, Europe, the Caribbean islands, the Philippines and the US - with the main customer base being within the continental US and Hawaii. Repairs and services for the field, or rotating portion of the generators, are typically performed off-site / at the AGT Services facility in Amsterdam, NY. Some companies that currently have the capability & sell high speed balance for generator fields within the continental US: GE, Siemens, Alstom, and Hitachi.		
Timeframe	<ul style="list-style-type: none"> Equipment Purchase & Installation Completed Q4 2016 		
Total Project Cost	\$15,000,000	Projected Job Creation (Direct & Indirect)	25
		Job Retention	70
Est. URI Investment	\$ 3,000,000	Est. Construction Job Creation	20
Sources	Amount	Uses	Amount
Owner Equity	\$ 2,000,000	Construction Renovation	\$ 2,190,900
Industrial Revenue Bonds	\$ 9,625,000	M&E	\$11,859,100
Other State Funds	\$ 375,000	A/E & Soft Costs	\$ 950,000
URI	\$ 3,000,000		\$
	\$		\$
			\$
Total:	\$ 15,000,000	Total:	\$ 15,000,000
Non URI Investment	\$12,000,000	Leverage Ratio (Non URI \$\$/URI):	4.0:1

Project Title: PAR Technology –Facility & Equipment Upgrade

County	Oneida	Linkage to Strategy	GROW: STEM Intensive Industries
Project Sponsor	PAR Technology Corporation		
Description	<p>Project reverses outflow of jobs from PAR Technology’s New Hartford corporate headquarters. PAR will relocate its customer service center from Boulder Colorado site to New Hartford. Project will also relocate functions from Asia back to New Hartford. To accommodate relocation and insourcing of operations back to company’s Oneida County site following improvements and upgrades are required:</p> <ol style="list-style-type: none"> 1. Renovation facility for new customer service center that encompasses 60 jobs. Relocation of manufacturing functions from Asia will add another 12 jobs. 2. Expand offices for engineering and marketing personnel in PAR’s hospitality business 3. Retrofit facility for light manufacturing functions that will be moved from 3rd party manufacturing partners in Asia. 4. Purchase and install new ERP software systems to enhance productivity 		
Timeframe	<ul style="list-style-type: none"> • Phase 1: Q1 2016 • Phase 2: Q3 2016 • Phase 3: Q2 2017 • Phase 4: Q1 2018 		
Total Project Cost	\$5,900,000	Projected Job Creation (Direct & Indirect)	73
		Job Retention	391 (50 at risk without project)
Est. URI Investment	\$1,180,000	Est. Construction Job Creation	
Sources	Amount	Uses	Amount
Financing/Company	\$ 4,720,000	Construction/Renovation	\$ 800,000
URI funding	\$ 1,180,000	M&E	\$ 100,000
	\$	FF&E	\$ 300,000
	\$	A/E & Soft Costs	\$ 4,700,000
Total:	\$ 5,900,000	Total:	\$ 5,900,000
Non URI Investment	\$ 4,720,000	Leverage Ratio (Non URI \$\$/URI):	4.0:1

Project Title: Johnstown Renewables

County	Fulton	Linkage to Strategy	GROW: STEM Intensive Industries
Project Sponsor	New Age Renewable Energy Resources		
Description	New Age Renewable Energy proposes to construct an acid whey treatment facility in the Johnstown Industrial Park. Project would convert FAGE's acid whey with a high biological oxygen demand load into ethyl alcohol for industrial use as well as livestock feed product (dry yeast). Facility will produce 3 million gallons/year of ethyl alcohol and 2.4 million lbs. of dry yeast. Proposed processing facility removes barrier that inhibits growth for yogurt and cheese industry.		
Timeframe	<ul style="list-style-type: none"> • Facility Design & Permitting Q1 2016 • Facility Construction & M&E Installation Q3 2016 • Project Completion – Commencement of Operations Q4 2016 		
Total Project Cost	\$12,430,000	Projected Job Creation (Direct & Indirect)	27
		Job Retention	NA
Est. URI Investment	\$ 2,000,000	Est. Construction Job Creation	150
Sources	Amount	Uses	Amount
Bank debt	\$ 6,430,000	Machinery & Equipment	\$ 10,930,000
Equity	\$ 4,000,000	A/E & Soft Costs	\$ 1,500,000
URI Funding	\$ 2,000,000		\$
	\$		\$
	\$		\$
			\$
Total:	\$ 12,400,000	Total:	\$ 12,430,000
Non URI Investment	\$ 10,430,000	Leverage Ratio (Non URI \$\$/URI):	5.22: 1

Project Title: Indium Corporation

County	Oneida	Linkage to Strategy	Grow STEM Intensive Industries
Project Sponsor	Indium Corporation		
Description	Indium is an established global manufacturer of nanotechnology and advanced materials for thin-film, semiconductor, electronics industries. Transformational investments at SUNY Poly Utica with GE and ams announcements, and proposed SUNY Poly IAC project, coupled with NYS improved business environment, has caused company to rethink investment strategy and commit to expansion of operations in Oneida County with strategic investments that will increase operations capacity, result in insourcing of operations (vertical integration), and invest in public-private simulation lab.		
Timeframe	Five year Investment Program in local plant & Operations		
Total Project Cost	\$ 60,000,000	Projected Job Creation (Direct & Indirect)	105 (Oneida County)
		Job Retention	545 (Clinton, Rome, Utica)
Est. URI Investment	\$ 12,000,000	Est. Construction Job Creation	8-12
Sources	Amount	Uses	Amount
Indium	\$ 48,000,000	Infrastructure & Capital Investments –New and Expanded Product Lines	\$ 42,000,000
URI	\$ 12,000,000	Insourcing Operations	\$ 11,800,000
	\$	Simulation Lab-Semiconductor Packaging Research (eliminate services provided out of Asia)	\$ 6,200,000
	\$		\$
	\$		\$
			\$
Total:	\$ 60,000,000	Total:	\$ 60,000,000
Non URI Investment	\$ 48,000,000	Leverage Ratio (Non URI \$\$/URI):	4:1

Project Title: Griffiss UAS Technology Center

County	Oneida	Linkage to Strategy	GROW: STEM Intensive Industries
Project Sponsor	Oneida County (Department of Aviation)		
Description	Project will add to capability of Griffiss International Airport for UAS Test Center. Project will acquire additional radars (see below) are part of Phase II and will allow for high accuracy data collection and advance testing capability of Griffiss Test Range. Project will supply aircraft tracking data for safety and awareness of UAS operations with a future opportunity to support capabilities of the MQ Reaper mission of the 174 th NYANG Wing, 10 th Mountain Division M!-1C Gray Eagle Operations AFRL Rome, NYS Governor’s civil support. Installation gives FAA NY UAS Test Site the potential to lead development of a detect and avoid system for safe UAS operations in national airspace, which will enhance opportunities for other UAS firms looking to locate at Griffiss.		
Timeframe			
Total Project Cost	\$14,300,000	Projected Job Creation (Direct & Indirect)	306 (69 direct & 237 indirect)
		Job Retention	Military missions at Rome, Syracuse, Watertown
Est. URI Investment	\$ 2,860,000	Est. Construction Job Creation	
Sources	Amount	Uses	Amount
Oneida County/FAA MAP	\$ 11,440,000	Construction Renovation	\$ 11,400,000
URI Funding	\$ 2,860,000	Radars (SAAB Sesis WAM Surveillance & SR-3 Airport Surface Radar, & SRC LSTAR V3 Air Surveillance Radars). Acquisition & installation of surface movement X band radar to provide surface radar coverage at Griffiss to enable UAS pilots to comply with air traffic control instructions on the ground;	\$ 2,860,000
Total:	\$ 14,300,000	Total:	\$ 14,300,000
Non URI Investment	\$11,440,000	Leverage Ratio (Non URI \$\$/URI):	4.0:1

Project Title: FSMC IAC Project Innovation for Technology Convergence Facility

County	Oneida	Linkage to Strategy	GROW: STEM Intensive Industries
Project Sponsor	Fort Schuyler Management Corp. (FSMC)		
Description	FSMC will construct a 100,000 SF nano-cyber Innovation Accelerator Center (IAC) on a greenfield parcel adjacent to SUNY Poly campus in Marcy. Project expands SUNY Poly's advanced manufacturing ecosystem by creating an integrated research, development, prototyping, and educational training center. Project includes: (1) strategic support to the region's advanced nano-manufacturing initiative including support of the Quad C and ams fabrication facilities at the Marcy NanoCenter); (2) technology acceleration and business incubation of nano-cyber and UAS systems technology with AFRL Rome; (3) advanced computational infrastructure for nano-analytics, and system integration and testing; (4) cutting-edge nano-manufacturing training infrastructure. Project hosts the Advanced Manufacturing Performance (AMP) Center – a partnership between Edwards Vacuum, Inficon, SEMATECH and other industry partners for developing the next generation defectivity and contamination control.		
Timeframe	<ul style="list-style-type: none"> • Construction Q2 2016 • Completion Q4 2017 		
Total Project Cost	\$30,000,000	Projected Job Creation (Direct & Indirect)	75
		Job Retention	NA
Est. URI Investment	\$ 6,000,000	Est. Construction Job Creation	100
Sources	Amount	Uses	Amount
FSMC	\$ 24,000,000	Construction	\$ 24,000,000
URI	\$ 6,000,000	Fitout of Labs & Data center	\$ 6,000,000
	\$		\$
	\$		\$
Total:	\$ 30,000,000	Total:	\$ 30,000,000
Non URI Investment	\$ 24,000,000	Leverage Ratio (Non URI \$\$/URI):	4:1

Project Title: FSMC IAC Advanced Manufacturing Workforce Development Center

County	Oneida	Linkage to Strategy	BUILD: Workforce Development
Project Sponsor	Fort Schuyler Management Corporation		
Description	<p>The WIC project is specifically requesting funds to support the acquisition and installation of cutting-edge nano tech manufacturing training equipment in the IAC facility and SUNY Poly's Donovan Hall. The outcome will be an integrated training facility for advanced manufacturing in semiconductor fabrication, PV, MEMS, mixed signal, IT, and power electronics. It will include a full telepresence facility for remote and hybrid training, (specifically configured for training of veterans (especially those separating from Fort Drum) in nano tech manufacturing in conjunction with the NSF NEATEC Center and Bridge360, a Texas-based workforce training company. Firstly, project supports workforce training programs for the operation of the Quad C and ams facility at the Marcy Nanocenter. Secondly, it will be a critical resource for providing trained personnel for the partner companies involved with SUNY Poly's Innovation Accelerator Facility and its Advanced Manufacturing Performance (AMP) partnership. Thirdly, the investment is essential to establishing a state-of-the-art training facility (targeting returning veterans) to help support the Mohawk Valley's high-tech workforce as well as the workforce across the upstate nano-corridor.</p>		
Timeframe	<ul style="list-style-type: none"> • Tooling & Equipment Q2 2016 (Donovan Hall) • IAC Fitout Q4 2017 		
Total Project Cost	\$ 7,500,000	Projected Job Creation (Direct & Indirect)	20
		Job Retention	NA
Est. URI Investment	\$ 1,100,000	Est. Construction Job Creation	NA
Sources	Amount	Uses	Amount
FSMC	\$ 6,400,000	Tooling & Equipment	\$ 7,500,000
URI	\$ 1,100,000		\$
	\$		\$
Total:	\$ 7,500,000	Total:	\$ 7,500,000
Non URI Investment	\$ 6,400,000	Leverage Ratio (Non URI \$\$/URI):	5.8 to 1

Project Title: MVCC - Mohawk Valley Advanced Manufacturing Institute (AMI)

County	Oneida	Linkage to Strategy	BUILD – Workforce Development
Project Sponsor	Mohawk Valley Community College (MVCC)		
Description	<p>MVCC is proposing creation of Mohawk Valley Advanced Manufacturing Institute on its Utica campus. Project adds fully functional cleanroom for nanotechnology program and a lab for Mechatronics. Investment will dramatically expand colleges capacity in Semiconductor Manufacturing, HVAC (nanotechnology focus)- HVAC systems in cleanroom), Robotics, 3D Fabrication, and more. Once completed, AMI will have capacity to provide nanotechnology education and training (emphasis on Mechatronics and Semiconductor Manufacturing) for more than 1,000 students in its 1st five years. AMI will assist existing employers with training and provide support for dislocated workers looking to be retrained. Program will focus on Hard to Place Workforce to build workforce pipeline. Project complements investments planned at SUNY Poly with its IAC Workforce Development Center.</p>		
Timeframe	<ul style="list-style-type: none"> • Final Plan Approval end of Q1 2016 • Commencement of Construction: Q 2 2016 • New Structure Opens: Q3 2017 		
Total Project Cost	\$ 9,000,000	Projected Job Creation (Direct & Indirect)	NA
		Job Retention	NA
Est. URI Investment	\$ 3,000,000	Est. Construction Job Creation	NA
Sources	Amount	Uses	Amount
Other Public Funds	\$ 6,000,000	Construction-Renovation	\$ 9,000,000
URI Funding	\$ 3,000,000		\$
	\$		\$
Total:	\$ 9,000,000	Total:	\$ 9,000,000
Non URI Investment	\$ 6,000,000	Leverage Ratio (Non URI \$\$/URI):	2.0:1

Project Title: Bagg's Square Lofts

County	Oneida	Linkage to Strategy	Vibrant Communities
Project Sponsor	Bagg's Square Partner's LLC		
Description	Redevelopment of property in historic Bagg's Square area. Former ConMed property will be converted into mixed-use property, which includes ground floor commercial and upper floor left apartments (27). Balance of property is being re-purposed for MVCC Building Trades Program and expansion of MVCC's thINCUBATOR		
Timeframe	2016 project		
Total Project Cost	\$4,500,000	Projected Job Creation (Direct & Indirect)	NA
		Job Retention	NA
Est. URI Investment	\$ 900,000	Est. Construction Job Creation	
Sources	Amount	Uses	Amount
Developer	\$ 525,000	Construction/Renovation	\$3,975,000
URI	\$ 900,000	A/E – Soft Costs	\$ 225,000
Bank Financing	\$3,075,000	Infrastructure/Site Work	\$ 200,000
	\$	FF&E	\$ 100,000
	\$		\$
			\$
Total:	\$ 4,500,000	Total:	\$ 4,500,000
Non URI Investment	\$ 3,600,000	Leverage Ratio (Non URI \$\$/URI):	4:1

Project Title: Rehabilitation of Main St. Properties (Parrott House)

County	Schoharie	Linkage to Strategy	Revive
Project Sponsor	Village of Schoharie		
Description	The Village of Schoharie is seeking to support the adaptive re-use of the Parrott House, an anchor structure at the core of the village. Built in 1870, the building suffered major flooding during Hurricane Irene and has been vacant since. The adaptive re-use concept includes the building's use for low-to-moderate income rental housing. The project also involves a planning process for the Taylor Block, the Parrott House's complementary structure from the same period, immediately across Main St. The Taylor Block also was badly damaged during flooding from Hurricane Irene and is currently vacant.		
Timeframe	Architectural design is expected to begin in the fourth quarter of 2015 and be completed in the first quarter of 2016. Construction will begin in April 2016 and be completed by December 2016. Permitting will occur in the late 2015-early 2016 time frame. The Taylor Block feasibility and marketing studies will be initiated in April 2016 and will be completed by October 1, 2016.		
Total Project Cost	\$ 1,784,208	Projected Job Creation (Direct & Indirect)	0
		Job Retention	0
Est. URI Investment	\$ 347,800	Est. Construction Job Creation	49
Sources	Amount	Uses	Amount
Empire State Development	\$ 347,840	Construction/Renovation	\$ 485,000
New York Main Street	\$ 500,000	Construction/Renovation	\$ 312,840
New York Rising	\$ 299,368	Administration	\$ 15,000
ESDC Planning & Feasibility	\$ 35,000	Construction/Renovation	\$ 462,000
Owner Equity	\$ 175,000	Planning	\$ 35,000
Lending Institution	\$ 462,000	Architectural/Engineering/Soft Costs	\$ 175,000
		Construction/Renovation	\$ 299,368
Total:	\$ 1,784,208	Total:	\$ 1,784,208
Non URI Investment	\$ 1,436,408	Leverage Ratio (Non URI \$\$/URI):	5.1:1

Project Title: Smith Brothers Standard Furniture Rejuvenation

County		Linkage to Strategy	
Project Sponsor	Village of Herkimer		
Description	Renovation of vacant landmark building in Village of Herkimer to support commercial redevelopment		
Timeframe	2016-17		
Total Project Cost	\$919,013	Projected Job Creation (Direct & Indirect)	NA
		Job Retention	NA
Est. URI Investment	\$ 269,193	Est. Construction Job Creation	NA
Sources	Amount	Uses	Amount
URI	\$ 269,193	Construction/Renovation	\$ 820,618
Other Public Funds	\$ 500,000	A/E Soft Costs/Administration	\$ 98,395
Private Equity	\$ 150,000		\$
	\$		\$
	\$		\$
			\$
Total:	\$ 919,013	Total:	\$ 919,013
Non URI Investment	\$649,820	Leverage Ratio (Non URI \$\$/URI):	2.41:1

Project Title: Malt & Barley Manufacturing

County	Otsego	Linkage to Strategy	Agriculture
Project Sponsor	Generations Malting Company		
Description	Currently in New York State, base and premium malted barley varieties are in high demand. However the infrastructure necessary to process all the barley grown from local farmers is not in place, forming a bottleneck to the greater consumer market created by the growth in craft brewing. This project will address the bottleneck issue plaguing farmers by opening and operating a mid-size malthouse to produce malted barley in Oneonta. The malthouse will operate in the Northern Eagle Beverages Inc.'s building in Oneonta, NY, and will produce 480 tons annually once fully operational.		
Timeframe	Year 1 2016 will consist of legally establishing the company, confirming the lease agreement with Northern Eagle, purchasing the initial malting equipment, initiating a marketing campaign and lastly contracting barley farmers. The company will also be establishing working relationships with Cornell University, professional associations and SUNY Oneonta and Hartwick College to establish Start Up New York status. The goal of the proposed development's timeline is to link the essential components of the proposal so that production of malt could begin as quickly as possible, keeping in mind the 12 month lead time on malt equipment and the July/August harvest period.		
Total Project Cost	\$ 1,516,916	Projected Job Creation (Direct & Indirect)	4
		Job Retention	0
Est. URI Investment	\$ 303,383	Est. Construction Job Creation	0
Sources	Amount	Uses	Amount
Empire State Development	\$ 303,383	Equipment and Machinery	\$ 303,383
Owner Equity	\$ 151,689	Equipment and Machinery	\$ 151,689
Private: Other	\$ 1,059,844	Equipment and Machinery	\$ 718,847
	\$	Property Acquisition	\$ 127,832
	\$	Architectural/Engineering/Soft Costs	\$ 215,165
Total:	\$ 1,516,916	Total:	\$ 1,516,916
Non URI Investment	\$ 1,211,533	Leverage Ratio (Non URI \$\$/URI):	5:1

Project Title: Steven's Bldg. Renovation

County	Otsego	Linkage to Strategy	Vibrant Communities
Project Sponsor	Klugo Enterprises		
Description	Renovation of current vacant building in downtown Oneonta as mixed use property with ground floor commercial and upper floor residential. Klugo has been principal developer in Oneonta (Bresee Bldg.) and has established track record.		
Timeframe	2016-2017		
Total Project Cost	\$800,000	Projected Job Creation (Direct & Indirect)	NA
		Job Retention	NA
Est. URI Investment	\$120,000	Est. Construction Job Creation	NA
Sources	Amount	Uses	Amount
URI	\$ 120,000	Construction/Renovation	\$ 550,000
Other Public	\$ 303,000	Property Acquisition	\$ 250,000
Developer Equity	\$ 127,000		\$
Private Debt	\$ 250,000		\$
	\$		\$
			\$
Total:	\$ 800,000	Total:	\$ 800,000
Non URI Investment	\$ 680,000	Leverage Ratio (Non URI \$\$/URI):	\$5.66:\$1.00

Project Title: B & B Ranch Manufacturing Expansion

County	Otsego	Linkage to Strategy	Agriculture
Project Sponsor	B & B Ranch, Guest House, Spa & Equestrian Center		
Description	The B&B Ranch, Spa and Equestrian facility is a boutique resort located minutes outside of Cooperstown. This agri-tourism business and specialty food manufacturer is designed to leverage rural upstate natural resources, bringing down-state tourism dollars and 15-25 new jobs to this rural community. Under the proposed project plan and with the aid of CFA funding, this year-round resort will move into value-added production in meat and pasta products all in a farm-to-table business model. Specifically, the project will focus on manufacturing pre-packaged foods, the B&B Guest House and horse boarding stables.		
Timeframe	The pasta production facility can be designed at the end of 2015-beginning of 2016, with construction beginning in mid-2016 after the building permit from the Town of Otsego is acquired.		
Total Project Cost	\$1,100,000	Projected Job Creation (Direct & Indirect)	20
		Job Retention	12
Est. URI Investment	\$ 110,000	Est. Construction Job Creation	12
Sources	Amount	Uses	Amount
Empire State Development	\$ 110,000	Equipment and Machinery	\$ 110,000
Excelsior Jobs Program	\$ 110,000	Construction/Renovation	\$ 110,000
Cash Equity	\$ 110,000	Equipment and Machinery	\$ 110,000
Lending Institution	\$ 770,000	Working Capital/Reserves	\$ 770,000
	\$		\$
			\$
Total:	\$ 110,000	Total:	\$ 1,100,000
Non URI Investment	\$ 990,000	Leverage Ratio (Non URI \$\$/URI):	10:1



APPENDIX C- PIPELINE PROJECTS

REclaim NY	Location
Overlook Ridge Conservation Development	Little Falls
Beechnut Redevelopment Phase 1	Canajoharie
Downtown Utica Transformational Opportunity District	Utica
Duofold site	Ilion
Rome Cable Complex 4	Rome
Estee Commons	Gloversville
Herkimer Hydro-electric	Herkimer

Mighty Waters	Location
Relocation of Amsterdam Rail Station	Amsterdam
Bellamy Harbor Bulkhead	Rome
Canalside Parks	Fultonville - Fonda
Amsterdam Riverwalk	Amsterdam
Little Falls Whitewater Park	Little Falls
Diefendorf Hall Restoration Project	St. Johnsville
Sylvan Beach Waterfront Welcome Center	Village of Sylvan Beech
Mohawk River Trail Phase II	Rome

Agribusiness	Location
Mohawk Valley Food Systems Network Asset Mapping	Region

Tourism	Location
Doubleday Field	Otsego

Strategic Sites	Location
Fulton-Montgomery Regional Business Park	Fulton - Montgomery Counties
Oneonta Rail Yards	Oneonta
5S North Business Park	Frankfort
Tryon Technology Park & Incubator	Perth

Economic Development Business Investment Projects	Location
Indoor Waterpark-Resorts Complex	Cooperstown
dataRAMPART	Rome
Malaware Analysis & Training Center	Utica
Griffiss UAS Technology Center	Rome
Project Fibonacci	Rome

Opportunity Agenda	Location
Community Impact Centers	Utica, Gloversville
CENTRO Civico	Schoharie, Montgomery, Fulton
Young Scholars	Utica

APPENDIX D- MOHAWK VALLEY HISTORY

The Mohawk Valley has been at the forefront of key events in our nation's history. The region played a major role in winning independence from England during the American Revolution. It is here where the nation's transportation revolution began, and transportation improvements, along with our strategic location, was the catalyst that drove industrial growth that launched a vibrant chain of manufacturing communities – sustained by a large influx of immigrants during the 19th and early 20th centuries.

The Mohawk Valley has played a remarkable role as a center of innovation that molded the development of the Upstate corridor stretching from Albany to Buffalo. Early in the 19th century, the construction of an unprecedented marvel of transportation and commerce, the Erie Canal—beginning in the Mohawk Valley—vaulted New York into the role of a world leader in design, engineering, technology, finance, and entrepreneurial dominance.

The Mohawk Valley's manufacturing and innovation know-how is evident throughout its history:

- Eliphalet Remington designed the Remington rifle in Ilion, NY, where the company will celebrate its 200th anniversary in 2016.
- The 19th-century advent of steam power helped make the region a leading industrial center of textiles, carpet making, and leather through WWII.
- The Metals Division of Utica Drop Forge and Tool Company's (now Special Metals) invented the process, in 1952, for producing nickel-based superalloys, which helped launch the modern aviation industry.
- In Herkimer, Mohawk Data Sciences (1964) co-founder George Cogar invented the data recorder magnetic tape encoder that replaced key punches and punched cards for computers. Cogar went on to invent the "intelligent terminal," a precursor to the personal computer.
- Rome Air Development Center (AFRL Rome) was at the cutting edge of radar development, computing, command-control, and information technology developments and helped foster the transition of military technologies into commercial markets (e.g., PAR Technology, Oneida Research Services).
- Oneonta was a huge rail town, and in 1906, Oneonta built the largest railroad roundhouse in the world, a record that stood for 25 years; legend has it that Abner Doubleday invented baseball in a cow pasture in Cooperstown in 1839





Throughout its history, the Mohawk Valley has had to continuously adapt to change as certain industry sectors flourished and declined forcing the region to adapt and reinvent itself. This occurred with the rise and fall of the textiles and leather industry that was a main underpinning of the region's early manufacturing economy. The ramp up to World War II saw a rise of defense manufacturing and the establishment of Rome Air Depot (later known as Griffiss Air Force Base). The post-war manufacturing boom that anchored the region's economy led to the emergence of the region's core capability in radar, defense and consumer electronics, aerospace and machine tools. This post-WWII economic boom - often termed the "loom-to-boom" era - brought about a resurgence of manufacturing with companies like General Electric, Chicago Pneumatic, Univac and Bendix settling within the region.

The high point was through the mid 1960s; for the Mohawk Valley's economy but the region's manufacturing base began a steady decline as manufacturing jobs shifted to lower-cost markets, and several key employers were unable to sustain the level of innovation needed to maintain a competitive edge in their respective industry sectors.

The breadth and depth of the community and economic crisis that inundated the region in the late 1990s has forced the region to once again adapt and seek new opportunities to revamp its economy as a result of major economic dislocations caused by:

:

- The loss of Griffiss Air Force Base in Rome (1995) and its 4,500 jobs;
- Closure of Lockheed Martin's (formerly GE Aerospace until GE divested its defense aerospace business) Utica operation (1995);
- Closure of Chicago Pneumatic's Herkimer County plant (1996)¹;
- Globalization and continued erosion of manufacturing jobs off-shore.

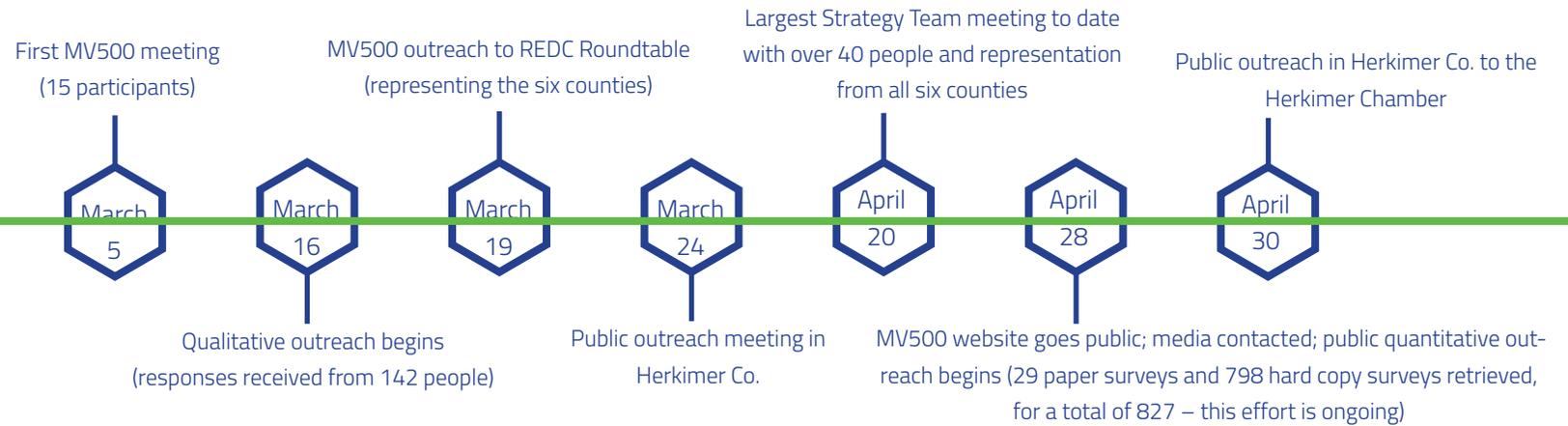
The steady exodus of population from the cities contributed to a loss of vibrancy in the region's population centers; more college-educated and skilled workers left for better economic opportunities. Over the past half-century the region has struggled to reverse the demographic and economic indicators that marked a prolonged period of disinvestment and economic stagnation that has characterized the Mohawk Valley as part of the nation's RustBelt. This plan clearly illustrates the foundations for economic change that will re-energize the Mohawk Valley's economy and reestablish its role as a cradle of innovation and economic prosperity for the next fifty years.

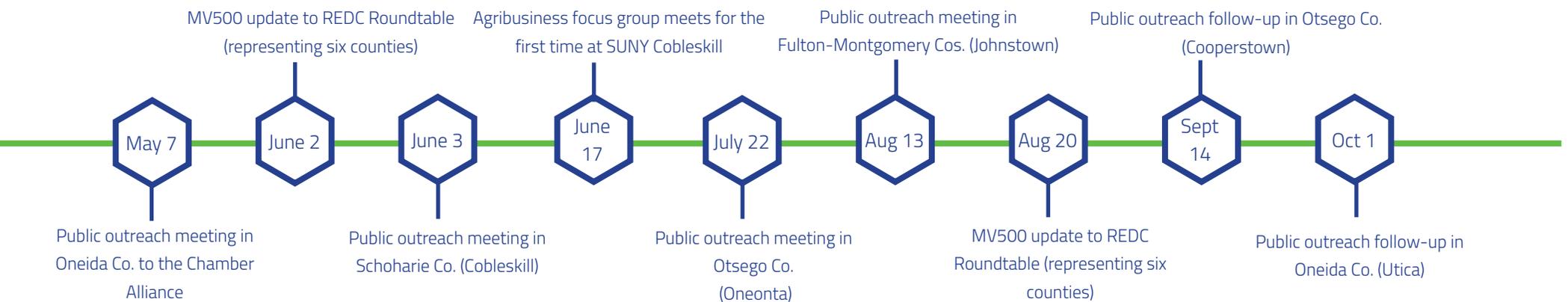
¹ Lockheed Martin facility had over 3,000 jobs in early 1990s and Chicago Pneumatic had 430 jobs at the time of its announced closure



APPENDIX E- PUBLIC PARTICIPATION

MV500 TIMELINE







APPENDIX F- SUPPORT LETTERS



September 22, 2015

Dr. Robert Geer, Co-Chair
Larry Gilroy, Co-Chair
MVREDC
C/o Empire State Development
207 Genesee Street
Utica, New York 13501

Re: MV500 URI Submittal

Dear Dr. Geer and Mr. Gilroy:

As the state legislators from each county in the Mohawk Valley Regional Economic Development Council, we are writing with regards to the 2015 Upstate Revitalization Initiative.

At the direction of the Regional Council, we have formed the MV500 process to create a meaningful strategy to meet Governor Cuomo's upstate challenge. We have assembled talent from each of our six counties to seize this once-in-a-life-time opportunity for transformation. The plan details focused wealth-generating economic strategies in the areas of **STEM, agriculture, and tourism** – enabled by **vibrant communities** and **expanded opportunity** for all of our citizens. We believe these are the strategies that will pave the path to widespread prosperity and a new economic future here in the Mohawk Valley.

As of today, the MV500 has finalized our plan to compete for 500 million dollars from the State of New York. Speaking with one voice, we unanimously and wholeheartedly endorse the MV500 plan as the Mohawk Valley Regional Economic Development Council's Upstate Revitalization Initiative submission to the State of New York.

Sincerely,



September 22, 2015

Dr. Robert Geer, Co-Chair
Larry Gilroy, Co-Chair
MVREDC
C/o Empire State Development
207 Genesee Street
Utica, NEW York 13501

Re: MV500 URI Submittal

Dear Dr. Geer and Mr. Gilroy:

As the Chief Elected Officials from each county in the Mohawk Valley Regional Economic Development Council, we are writing with regards to the 2015 Upstate Revitalization Initiative.

At the direction of the Regional Council, we have formed the MV500 process to create a meaningful strategy to meet Governor Cuomo's upstate challenge. We have assembled talent from each of our six counties to seize this once-in-a-life-time opportunity for transformation. The plan details focused wealth-generating economic strategies in the areas of **STEM, agriculture, and tourism** – enabled by **vibrant communities** and **expanded opportunity** for all of our citizens. We believe these are the strategies that will pave the path to widespread prosperity and a new economic future here in the Mohawk Valley.

As of today, the MV500 has finalized our plan to compete for 500 million dollars from the State of New York. Speaking with one voice, we unanimously and wholeheartedly endorse the MV500 plan as the Mohawk Valley Regional Economic Development Council's Upstate Revitalization Initiative submission to the State of New York.

Sincerely,

The block contains six handwritten signatures arranged in two rows and three columns. The signatures are: Row 1: Kathleen Clark, Ralph Altuso, Vincent Basso; Row 2: [Illegible], [Illegible], [Illegible].



September 23, 2015

Dr. Robert Geer, Co-Chair
Larry Gilroy, Co-Chair
MVREDC
C/o Empire State Development
207 Genesee Street
Utica, New York 13501

Re: MV500 URI Submittal

Dear Dr. Geer and Mr. Gilroy:

As Chamber of Commerce Board of Directors from all six counties in the Mohawk Valley, we are writing you today to declare our support for the MV500 plan, our region's Upstate Revitalization Initiative submission.

We recognize our region has formed the MV500 Process to create a meaningful strategy that can be successfully implemented throughout our six counties. The plan details wealth-generating economic strategies in the areas of **STEM, agriculture and tourism** – enabled by **vibrant communities** and **expanded opportunity** for all of our citizens. We believe that these strategies will pave the way to widespread prosperity and a new economic future in the Mohawk Valley.

As of today, MV500 has finalized a meaningful strategy to compete for Governor Cuomo's transformational opportunity of investing \$500 million in our region. Speaking with one voice, we unanimously and wholeheartedly endorse the MV500 plan.

Sincerely,



Speaking with one voice, we unanimously and wholeheartedly endorse the MV500 plan as the Mohawk Valley Regional Economic Development Council's Upstate Revitalization Initiative submission to the State of New York.

Randall VanWagoner, Ph.D.

Jane Kulczycki

Donna Dvoracek

Rosemary Bonacci

Brenda Wolak

Lisa Kaiding

Nick Rose

Frederick Lieber

Kevin Van Detta

Robert Lambe

Michael Pentaris

David Casullo

Neil Rosenbaum

Gail Wood

Gene Allen

Kelly Ulrich

Beth Irons

Gary Hartman

Robert Smith

Kelly Blazosky

Robert Albrecht

Elizabeth Marosek

Mark Greene

Joe Johnson

Carlena Ficano, Ph.D.

Joanne Ernst

Kyle Jenks

Larry Bascom

Al Turo

William C. Gaetano

Mary Carol Chruscicki

Joan Cullen

Maria T. Abraham

Ed Talerico

Barbara Ann Heegan

Debra Richardson

Cyndy Andela

Ron Peters

Ken Rose

Paul MacEnroe

Thomas A. Rahn

Alice Savino

Vincent Gilroy

Carolyn Lewis

John J. Calabrese

Tammy Wilson

Andria Heath

Bob Scholefield

Joan Drummond

Mary Lyons Bradley

Randy Smith

Tolga Morawski

Doug Plummer

Mike Dorsino

Ann Peconie

Bill Rabbia

Jan Squadrito

James Dean

Deborah Grimshaw

John Scarano

Patrick Michel

Tim Reed

Kevin Crosley

Thomas Roehl

Chester Cohen

Ryan Siepiola

Fred Quist

Immaculata M. Lieber

Karl Schrantz

Jamie Place

Monika Burczyk

Margaret Brown

Amber McGiver

JoAnn Ballard

Jennifer Potter Hayes

Louis B. Tehan

Speaking with one voice, we unanimously and wholeheartedly endorse the MV500 plan as the Mohawk Valley Regional Economic Development Council's Upstate Revitalization Initiative submission to the State of New York.

Chris Papageorgiou
Stephen B. Waters
Howard B. Mathewson
Bill
Thomas J. DiMuro
James M. Crockett

Jim Wells
Sean P. Jordan
Stephen P. ...

Lee ...

Bill ...

Thomas ...

Kate ...

Ana ...

AT King
NO ...

John ...
Debra ...

Kirk Blawie

Stephen R. ...

Val ...

H ...

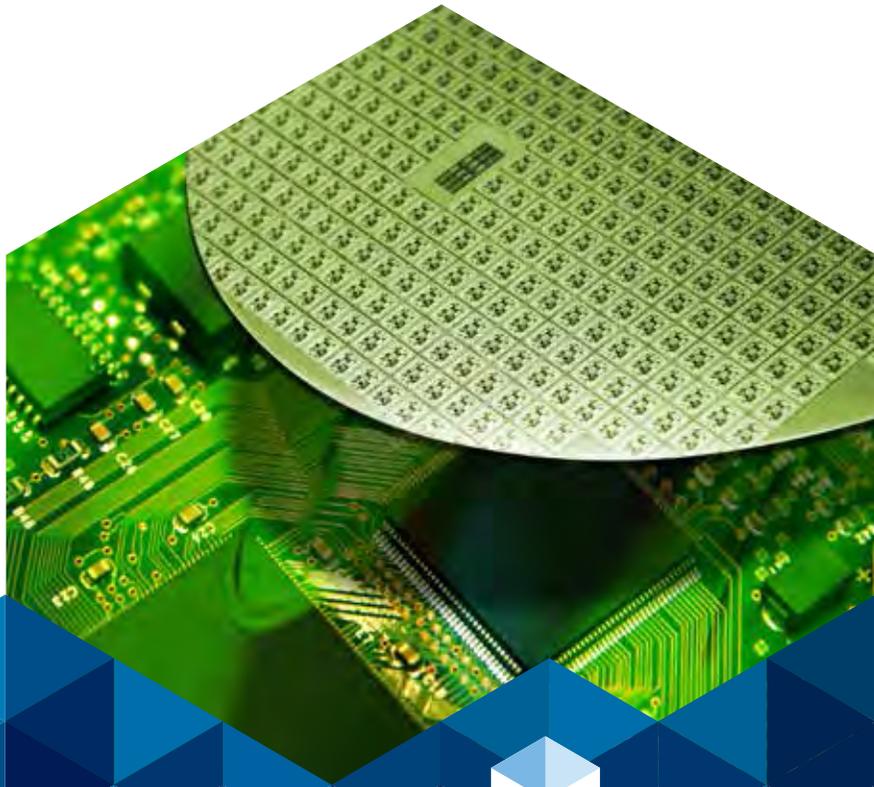
Joe ...

John ...

Nicola J
Mark Arkin
Mark Kander
W. J. Indielmo
Randy
Hoff
Quice Savino
Saurina Webster
Eve Van de wael
Moro De Condo
Willi Cato
Peter Baileon

Randy Vauhogner.
R. Parsons
Paco F. Aranda
Ben A. Carlson
J. J. B.
Mary Malcom McCarthy
J. V. McCarty
A. R. F. II
Tom Nelson
Todd Nutter
Nate Nutter

John J. Light
Randall J. Edwards
Patrick J. Becker
The Sun
Randolph
De Sic



NEW YORK
STATE OF
OPPORTUNITY.

**Mohawk Valley
Regional Economic
Development Council**

207 Genesee Street
Utica, NY 13501
315.793.2366
www.nyworks.ny.gov
nys-mohawkval@esd.ny.gov