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Finger Lakes
Regional
Economic
Development
Council



Accelerating Our Transformation

Strategic Plan

November 14, 2011

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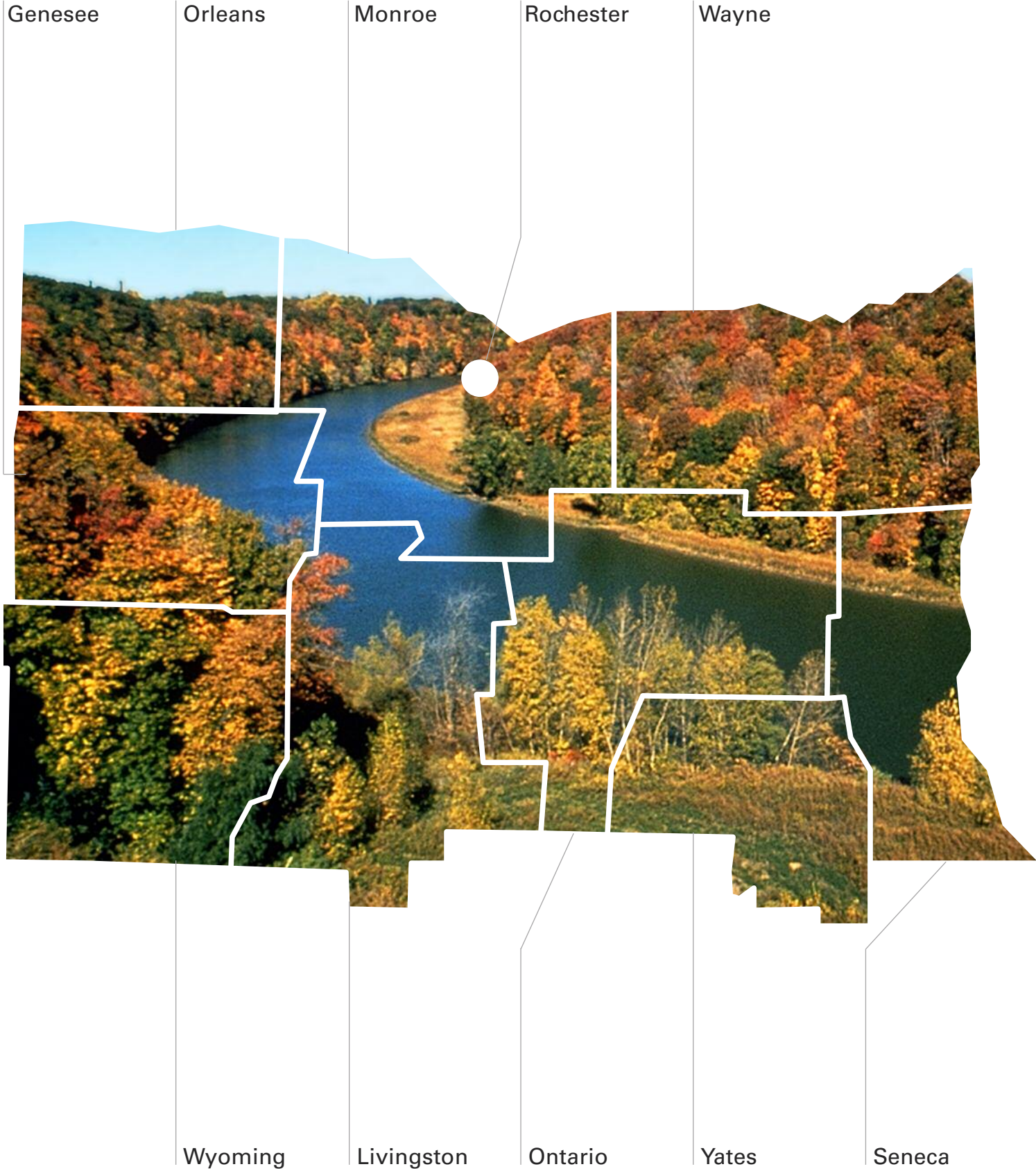
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Finger Lakes

Regional Economic Development Council



Message

from the co-chairs



Our vision is clear. As the Finger Lakes Regional Economic Council vision statement makes plain:

The Finger Lakes region will accelerate its transformation to a diverse, knowledge-based economy by building on strengths that include renewable natural resources, a talented and highly educated workforce, a historic commitment to innovation and philanthropy, leadership as the state's top agricultural region, international recognition as a center for optics and photonics, and national leadership in per capita intellectual property and degrees in higher education. We will expand a successful history of collaboration between public and private institutions to optimize our region's performance in advanced manufacturing, the arts, tourism, and basic and applied research in medicine, science, engineering, and technology. Through these efforts, we seek to become a national leader in innovation and commercialization with the long-term goals of increasing job creation at a rate that exceeds national levels and enhancing the region's quality of life to attract and retain business and our citizens.

The most difficult part of our transformation has already occurred. We have changed from an economy based on a small number of leading and outstanding manufacturing firms to an increasingly successful and diverse knowledge-based economy.

Our strategic plan seeks to accelerate our progress.

The process of creating our regional strategic plan itself has had significant positive consequences. Our nine counties have worked together in ways that would have been

unimaginable without the inspiration of this planning process. We have gotten to know each other and have begun devising new ways to work effectively as a region. This not only will strengthen our region, but will benefit New York State by galvanizing job creation and improving our quality of life, a critical key to retention and attraction of new jobs in our region. Governor Andrew Cuomo and Lieutenant Governor Robert Duffy deserve enormous credit for the extent to which they have inspired us to help organize new leverage of private funds to build on our state's economic development budget. This simply would not have occurred without their leadership.

As co-chairs of the Finger Lakes Regional Economic Council, we want to express our particular gratitude to our council; its eleven work groups; the hundreds of public participants who met in six public sessions; Robert McNary, Executive Director of the Finger Lakes Regional Economic Development Council; Irene Baker, Executive Vice President and Director of the Regional Development Councils; David Seeley, Finger Lakes Regional Representative for Governor Cuomo; Joe Hamm, Deputy Director of the Finger Lakes Regional Economic Development Council; and most of all to our indefatigable Lieutenant Governor, Robert Duffy. We also want to thank Mark Michaud who invaluablely aided this council by helping prepare this document. In addition, we want to express our gratitude to the many others, particularly Joshua Farrelman, who worked so hard on this project.

Danny Wegman
CEO, Wegmans Food Markets

Joel Seligman
President, University of Rochester

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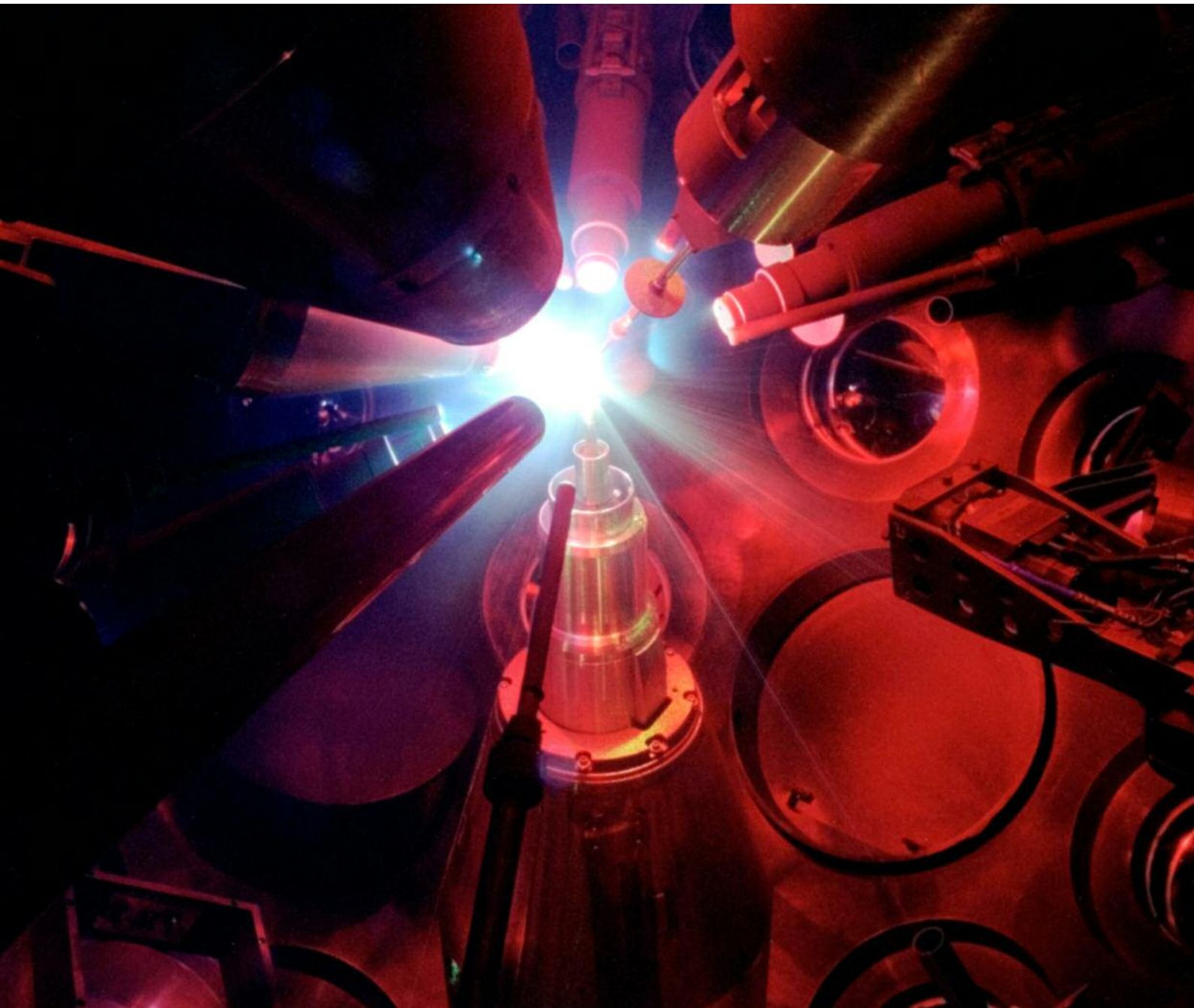
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Executive Summary





The Finger Lakes region of New York State has 18 universities and colleges and ranks at or near the top in the nation in per capita degrees in the sciences, engineering, and mathematics;

is home to Wegmans, one of the nation's leading grocery chains, and Constellation Brands, the world's largest premium wine company; has a talented and highly educated workforce; is the state's leading producer of agriculture products; is an international center for optics, photonics, and imaging; has the nation's leading school of music and leading museum dedicated to the history and preservation of photography and film; has housing costs 30 percent lower than the national average; has the highest per capita level of exports in the state and is among the top in the nation; has 10 high schools ranked among the best in the nation; is home to one of the top 10 universities in the nation in sponsored research when normalized for faculty size; is ranked fifth in the nation for patents per capita; and has one of the highest quality and lowest cost health systems in the country.

These achievements are strong evidence of the region's resiliency, broad economic foundation, high quality of life, and ability to harness innovation to reinvent itself.

Finger Lakes Region top 10 private sector employers

	1980	2010
1	Kodak	University of Rochester
2	Xerox	Wegmans Food Markets
3	University of Rochester	Kodak
4	General Motors	Rochester General Health System
5	Rochester General Health System	Xerox
6	Gleason Corporation	Unity Health
7	Bausch + Lomb	Lifetime Healthcare
8	Sybron (Nalge Nunc)	Paychex
9	Wegmans Food Markets	Rochester Institute of Technology
10	RG&E	Harris RF Communications

To reach this point, however, the Finger Lakes region has undergone a fundamental transformation that radically altered the economic landscape within the space of a generation. For much of the 20th century, the region's economy was dominated by four large manufacturing-based companies. In recent years, these companies have lost tens of thousands of jobs. In 1982, Kodak alone had 60,400 employees in the region. Today it has 7,000. Thirty years ago, the majority of the region's top employers were large industrial-based companies. Today, five out of the top ten private sector employers in the Finger Lakes are institutions of higher education and healthcare, and the University of Rochester ranks as the state's sixth largest employer.

While this transformation has been painful for many, the region has successfully remade itself into a more dynamic, diverse, and stable economy based on multiple sectors that have tremendous potential for future growth. Since 1980, total employment in the Finger Lakes has increased by 21 percent during a period of relatively flat population growth.

The Finger Lakes economy is driven by technological innovation and the region was just named one of 35 national "Innovation Hubs" by *The Atlantic*. Many of the companies in the fields of advanced manufacturing, optics, imaging, photonics, fuel cells, and computer technology emerged from the research and development labs of Kodak, Xerox, and Bausch + Lomb and were founded by executives, engineers, and technicians who were trained at these firms. The birthplace of popular

photography, xerography, the HPV vaccine, and the soft contact lens also spawned firms that thrive in intensely competitive markets such as food retailing and payroll processing.

These sectors have been further strengthened by a close partnership with the region's universities and colleges, which have provided industry with a steady supply of innovative technologies and highly skilled workers. University-based research also has helped propel the growth of new sectors, including life sciences and alternative energy. Such cross-fertilization extends beyond technology-driven sectors. For example, the region's expanding agriculture industry – specifically the rising international reputation of Finger Lakes wines – has in turn propelled growth in tourism.

The Finger Lakes region has led New York State in job growth over the past three years and currently has the state's lowest unemployment rate. In 2011, the Brookings Institute listed the region's economy as one of the "Top 20 Strongest-Performing Metro Areas" in the country. Rochester is one of only nine metropolitan areas that have ranked in Brookings' Top 20 in the last three years.

Despite these achievements, the region faces significant challenges, including an aging infrastructure, urban and rural poverty, poorly performing schools, lack of capital to create and grow business, and a business climate hindered by taxation and regulation that deter investment.

The Finger Lakes region's strategic plan is based on three core concepts.

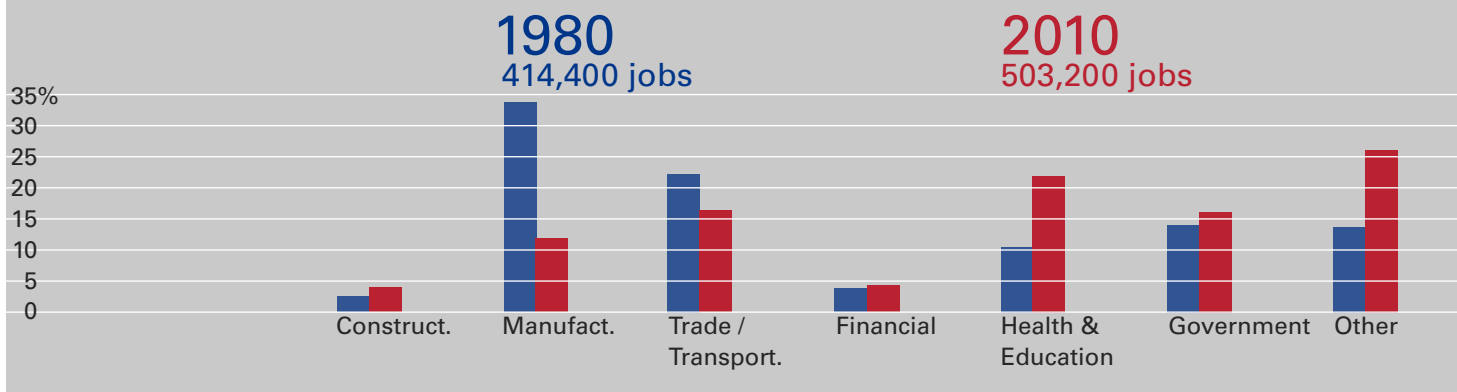
First, the Finger Lakes Regional

Economic Development Council recognizes the importance of improving regional connections, achieving greater efficiencies, and lowering costs among Finger Lakes governments, towns, and villages. The council plans to work with local elected officials to parallel statewide efforts currently being explored by the Cuomo administration to achieve these goals. The Finger Lakes region has already benefitted from regional planning efforts through entities such as the Genesee Transportation Council, the Genesee/Finger Lakes Regional Planning Council, and cooperative agreements between Monroe County and other municipalities that have resulted in shared services. While much has been done, the region is committed to identifying additional efficiencies and reducing cost through efforts such as joint purchasing and streamlining service delivery.

Second, this strategic plan seeks to accelerate job creation and reinforce the region's quality of life by implementing a five-year plan to strengthen key innovation hubs in our diverse economy, including higher education, food processing, targeted fields of advanced manufacturing, business services and telecommunications, energy innovation, tourism, and the arts. The projects identified by the council will leverage significant private investment and address critical economic development needs throughout the region's nine-county area.

Third, the Finger Lakes Regional Economic Development Council specifically recommends the following transformative projects as priorities in our five-year plan:

Employment: Rochester MSA



- The region's top priority is to maintain and expand Eastman Business Park in Rochester as a pivotal regional economic development resource. In this plan, the council has identified two potential ways to do this. One will create a cluster of cleantech businesses at Eastman Business Park led by U.S. Renewables Group. In five years, this project is projected to create 1,200 jobs directly and an equal number indirectly. The centerpiece of this initiative is a new \$300 million state-of-the-art bio-fuel generating plant.

- A second project will create an advanced energy storage commercialization center at Eastman Business Park. The NY-BEST Commercialization Center will involve more than 80 companies from across New York State and provide critical testing and manufacturing facilities necessary to develop the next generation of fuel cells. If located in the Finger Lakes region, this initiative is expected to create 223 direct jobs in the state during the first five years of operation.

- The Finger Lakes Business Accelerator Cooperative will create an interconnected "hub and node" network that consolidates and streamlines support and incubation resources across all nine counties. The cooperative will support the creation of early stage companies, spurring employment growth of more than 1,000 direct jobs in the first five years of operation.

- The Golisano Institute for Sustainability at the Rochester Institute of Technology (RIT) will be expanded.

The institute – which will make RIT an international leader in programs that embody the principles of sustainability in product development – will create an estimated 1,075 direct jobs. The Center for Governmental Research estimates that the institute could catalyze the creation and expansion of related firms in the region that could account for thousands of additional jobs over the next five years.

- The University of Rochester's Health Sciences Center for Computational Innovation (URHSCCI) – a partnership with IBM to create the most powerful computer system dedicated to health research in the world – will be expanded. The center will enable the university to grow its research funding by more than \$134 million and accelerate the development of the region's life sciences sector. The Center for Governmental Research estimates that this initiative will create 800 direct and indirect jobs.

- The Finger Lakes Internal Harvesting and Economic Gardening initiative will provide an innovative, region-wide business retention and expansion program that will connect and coordinate all of the region's economic development organizations and agencies. The initiative – which will target growth-oriented companies and help them expand – will create 500 new jobs over the next five years.

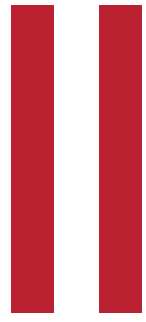
- The Seneca AgBio Green Energy Park will expand to enable three companies to locate their manufacturing operations at the site. This project will focus on the conversion of agricultural byproducts

and waste into biofuels and biomaterials and will accelerate plans to redevelop the former Army depot in Seneca County and create 60 new direct jobs in this rural community.

- A signature destination museum will be created to catalyze growth in regional tourism and promote conservation. The Finger Lakes Museum will have a central campus in Keuka Lake State Park and satellite programs throughout the region. Once completed, the museum is projected to draw 130,000 visitors, reinforcing the appeal of existing tourism assets, including the region's many state parks and the Finger Lakes wine trails.

- The nationally recognized Finger Lakes Health Collaborative will be expanded. The collaborative is led by the Rochester Business Alliance and the Finger Lakes Health Systems Agency and involves more than 100 local organizations. The current project of the collaborative consists of a community-based effort to reduce the incidence of high blood pressure and related conditions. The project will have both an immediate benefit and is part of a long-term strategy to reduce health care costs in the region by \$8.5 million per year.

- The City of Rochester plans to accelerate the redevelopment of the Midtown site through the adaptive reuse of the former Midtown Tower into a mixed commercial, office, and residential space. This \$73 million tower project is central to plans to redevelop the 8.2 acre Midtown site and will create and retain 690 direct jobs.



Regional Assessment

of existing conditions &
economic opportunities





Thirty years ago, major industrial companies dominated the Finger Lakes economy, employing thousands of production workers, managers, scientists, and technicians. Kodak, Xerox, Bausch + Lomb, and General Motors employed nearly one fifth of the local workforce and indirectly had an impact on half of the region's economy.

More than two fifths of the region's jobs were in firms of 1,000 employees or more.

By 2010, these four firms had eliminated tens of thousands of jobs when entire product lines disappeared as global markets became more competitive. Despite this disruptive transformation and relatively flat population growth, employment in the Finger Lakes region continues to expand. Over the last 30 years, the region has added 90,000 new jobs. Since 2008, the Rochester Metropolitan Statistical Area (MSA) has had the best job creation record of all the state's large MSAs and has been one of the top performing metropolitan areas in the nation.

Small business has flourished. As a *New York Times* headline declared, the community was transformed from "a company town to a town of tiny companies." Four fifths of the workforce now draws a paycheck from a small or medium-sized firm.

The region's remarkable resilience has been made possible by a rich array of colleges and universities, supporting both personal reinvention and the creation of new businesses. Collectively, 18 universities and colleges place the region at or near the top in the nation in graduates in the key "new economy" disciplines of sciences, engineering, and mathematics.

Nor has the region lost the art and science of manufacturing. The Finger Lakes region remains one of the most successful manufacturing hubs in New York State and is well equipped to continue the state's long manufacturing tradition.

The region is the state's leading producer of agricultural products and has applied its manufacturing expertise to food processing. It is no accident that the region is home

to the world's largest premium wine producer, one of the nation's leading grocers, and leads the state – and much of the nation – in exports.

Healthcare has played an essential role in the region's transformation. Few regions in the nation have higher quality at lower cost, reinforcing the region's appeal to new firms. A long history of planning and coordination among the region's health providers has created a system recognized as a national model of efficiency and cost control. Deeply entwined in its clinical excellence is a robust emphasis on health research and development, supporting a growing cluster of pharmaceutical, biotech, and medical device firms.

Quality of life assets have also been essential to the region's revitalization. The Finger Lakes is home to leading cultural institutions and a wine region that attracts more acclaim, and more visitors, every year.

Two key elements have played a central role in the region's recent economic success. Innovation – which has always been at the heart of the region's economy – is now being harnessed by a new generation of entrepreneurs and companies to create new products. And the region's highly skilled workforce has enabled companies to assemble the managerial, technical, and scientific teams necessary to compete in the global economy.

KEY FINGER LAKES ECONOMIC CLUSTERS

Higher Education

Higher education in the Finger Lakes region plays a three-fold role in the regional economy. It serves as economic driver through its role as a major employer, a resource for research and innovation, and it anchors the region's quality of life, an increasingly important aspect of economic development. The total economic impact of the higher education sector on the region is estimated to be close to \$5 billion annually.

The 18 colleges and universities in the Finger Lakes region collectively employ approximately 33,000 with a combined payroll of \$2.2 billion. Adding in the impact of jobs indirectly generated by these institutions, the higher education sector contributes to a total of 46,400 jobs throughout the region. These institutions generate an additional \$1.9 billion in economic activity in the region through other institutional purchases, including construction. Two of the area colleges and universities are among the region's top ten employers. With more than 20,000 employees, the University of Rochester is the area's largest employer and the sixth largest private sector employer in the state. Rochester Institute of Technology (RIT) – with more than 3,200 employees – is the ninth largest regional employer.

Approximately 85,000 students today are enrolled at these institutions, including a significant percentage coming from outside the region and the state. Spending by students at these institutions and the visitors who can be attributed to them adds \$513 million to the economy each year.

The region is one of the most productive in the nation as measured by degrees awarded in fields that are central to economic competitiveness. The Rochester MSA, 51st in population among the nation's metropolitan areas, ranks fourth in the nation in number of total degrees per capita and is at or near the top in those conferred in several key fields:

- First in degrees in the physical sciences and mathematics;
- First in degrees in the visual and performing arts;
- Second in the biological and life sciences fields;
- Third in engineering and engineering-related fields;
- Fifth in computing and information sciences; and
- Ninth in technical occupation fields.

Finger Lakes higher education institutions are significantly strengthened by the region's long and proud history of philanthropy. Organizations such as the Wegmans Family Charitable Foundation, the Golisano Foundation, the Greater Rochester Health Foundation, and others have played an essential role supporting the growth in higher education.

The region's colleges and universities attract significant research funding from agencies such as the National Institutes of Health, the National Science Foundation, the Department of Defense, Department of Energy and other federal agencies, the New York State Energy Research and Development Authority and other state entities, plus private firms, particularly the pharmaceutical industry. These dollars support thousands of highly skilled jobs. The region's universities also play a critical role in private sector research and development (R&D) through research partnerships that help address specific industry product development goals and by providing access to unique, university-based scientific resources.

For the past two years, the University of Rochester has received more than \$400 million in annual research funding. When federal research awards are normalized for faculty size,

the university currently ranks eighth in the nation in productivity. In 2011, RIT received \$52.5 million in new research awards, including grants and contracts for research, instruction, outreach, and construction.

A by-product of academic research is intellectual property that can in turn be harnessed for private sector growth. For eight of the last nine years, the University of Rochester has been among the top 10 institutions in the nation in royalty revenue received from its licensed technologies. Notable examples include vaccine technologies that led to the creation of two universal pediatric vaccines and two vaccines that block the infection that causes cervical cancer. Since 1996, 51 start-up companies were created by University of Rochester and 14 by RIT.

Venture capital, focused on early stage technology companies, has supported this growth. Excell Partners – a pre-seed/seed stage venture fund founded in 2005 – has made 21 investments to date. The Rochester Angel Network, also started in 2005, has made 18 investments into 14 local companies. The Trillium Group and other upstate venture capital firms have managed several early-stage funds that have also invested locally.

The region has a well-established support infrastructure for early-stage companies, including High Tech Rochester and its Lennox Tech Enterprise Center, the BioVenture Center, and Excell Partners. RIT's Venture Creations and the Upstate MedTech Center in Batavia also provide incubation and acceleration support for early-stage technology companies.

The rapid pace of technological change, increasing global competitiveness, and growing industry demands for career-ready employees make a robust workforce training infrastructure an essential component of economic growth. The region's community colleges and community-based adult education programs play an essential role in preparing individuals for "middle skill" occupations – the sector of the labor market that requires more than a high school diploma but less than a four-year college degree. These jobs make up the largest percentage of the state's workforce, and regional demand for these employees is particularly acute in fields like advanced manufacturing, optics, and healthcare.

The Finger Lakes higher education institutions have been highly effective in growing the workforce pipeline and have demonstrated the ability to partner with both the region's K-12 schools and industry to offer highly responsive academic programs. Many attribute the region's capacity to absorb recent job losses to the ability to re-train workers across a vast array of new careers.

Advanced Healthcare

The region's growing healthcare sector is a cogent example of the Finger Lakes' emergence as a knowledge-based economy. The sector employs 57,000 physicians, nurses, other health care professionals, and supporting employees.

The Finger Lakes region enjoys national recognition for high-quality, low-cost healthcare. Both Medicare and commercial insurers' costs are 20 to 25 percent lower than the national average, a critical factor in the region's ability to attract companies to remain and expand or relocate to the region. The Robert Wood Johnson Foundation and the University of Wisconsin have recently recognized the high quality of our health system, highlighting the low rate of uninsured adults, higher-than-average supply of primary care providers, ability to prevent unnecessary hospitalizations, high preventative screening rates, and appropriate use of hospice.

The region has achieved these results by efficiently working

together. A decades-long planning collaboration has effectively minimized duplication of services, achieved sustainable quality gains and cost savings, and integrated delivery systems. The region also benefits from one of the nation's most successful regional health information organizations (RHIO), with more than 500,000 individuals subscribing to a system that enables providers instantly to access critical health information.

The region is home to several health systems, including the University of Rochester Medical Center (URMC), Rochester General Health System, Unity Health, Thompson Health, Finger Lakes Health, Lakeside Hospital, Orleans Community Health, Monroe Community Hospital, United Memorial Medical Center of Batavia, Wyoming County Community Health System, Nicholas H. Noyes Memorial Hospital, Clifton Springs Hospital and Clinic, and Soldiers and Sailors Memorial Hospital. Finger Lakes hospitals provide nearly 42,000 jobs and generate \$4.9 billion in economic activity, making the healthcare sector the region's third-largest employer.

The region's higher education institutions are well aligned with the healthcare sector, and the Finger Lakes is unique

collaboration in the field of medicine, including health systems partnerships with Bausch + Lomb, CareStream, Pfizer, and other local and national pharmaceutical, biotech, and medical device companies.

Optics, Photonics and Imaging

Building on its imaging history, the Finger Lakes region is now an internationally recognized center for optics and photonics innovation. Rochester is home to more than 50 leading businesses focused on optics and imaging, forming a critical mass of companies employing 31,000 and generating \$2.8 billion in payroll.

The region's optics industry includes remote-sensing companies such as ITT Geospatial Systems, sophisticated supply chain firms such as Corning Tropel, JML Optical, Rochester Precision Optics, and CVI-Melles-Griot, and smaller start-up ventures such as Lumetrics, Sydor Optics, and ASE Optics.

The cluster is supported by significant and leading research programs at the University of Rochester's Institute of Optics –

The region's growing healthcare sector is a cogent example of the Finger Lakes' emergence as a knowledge-based economy. The sector employs 57,000 physicians, nurses, other health care professionals, and supporting employees.

for a community its size for its breadth and quality of academic medicine. Its colleges and universities offer an array of degree programs ranging from licensed practical nursing or medical technology certificate programs at community colleges through nursing, medical, and graduate degrees from the University of Rochester's Schools of Medicine & Dentistry and Nursing. The University of Rochester's Hajim School of Engineering and Applied Sciences, RIT's Center for Bioscience Education and Technology and its alliance with Rochester General Hospital, Monroe, Genesee, and Finger Lakes community colleges all offer biotechnology degree programs that supply the region's growing number of life science companies.

Life Sciences

There are a growing number of life sciences companies in the Finger Lakes region, ranging from large established firms – such as Bausch + Lomb, CooperVision, Carestream Health, and Ortho Clinical Diagnostics – to smaller companies such as Vaccinex, SimPore, Oyagen, VirtualScopics, and iCardiac Technologies. These companies employ nearly 6,500 individuals with earnings of \$619 million.

The region boasts a strong foundation of university-based medical research that forms the basis for intellectual property creation. URMC has received \$1.4 billion in biomedical research funding over the last five years and files an average of 47 patent applications per year on its medical discoveries. Both the University of Rochester and RIT have strong research and technology commercialization programs in related fields such as engineering and computer science. The region has a history of successful and productive academic and industry

the nation's first optics research program and source of half of the nation's optics Ph.D.s – and RIT's Chester F. Carlson Center for Imaging Science and Microsystems Engineering programs.

The merger of the region's Infotonics Center, now called the Smart System Technology & Commercialization Center, has strengthened ties to SUNY Albany's College of Nanoscale Science and Engineering. This connection to the booming semiconductor industry in the Capital District provides a critical conduit through which the Finger Lakes region's vast capabilities in imaging and photonics, advanced manufacturing, and semiconductor design may be brought to bear on the semiconductor industry. Other key institutions include the Rochester Regional Photonics Cluster – an organization of 60 optics, imaging and photonics companies that collaborate on projects for the aerospace, automotive, biomedical, defense, manufacturing, microelectronics, printing, remote sensing, semiconductor, and telecommunications industries – and the Center for Emerging and Innovative Sciences – a NYSTAR-sponsored Center for Advanced Technology that supports academic-industry partnerships.

Energy Innovation

Energy innovation – wind, solar, fuel cell, biofuel, and other technologies – has long been the subject of academic and corporate research and development in the Finger Lakes region. About 8,400 jobs are associated with 66 firms and institutions involved in emerging energy technology, with payroll of \$600 million.

This relatively new sector benefits from the region's historic strength in material and precision manufacturing expertise,

which has produced a skilled workforce adept at managing complex electro-mechanical and chemical products. At the same time, university research has been focused on developing smarter energy solutions.

The Finger Lakes region's strong portfolio of companies and academic research programs in several critical energy fields paves the way for sustainable growth. The region's productive agriculture sector helps fuel ethanol and biodiesel manufacturing, including Western New York Energy, New York State's first state-of-the-art dry mill ethanol plant located in Orleans County. The Finger Lakes is a world leader in fuel cell research and development – conducted at General Motors and Delphi's Fuel Cell Activity Centers – and in roll-to-roll film manufacturing, a key enabler for next-generation solar applications. The region is a leader in the development of battery and energy storage technology for heavy-duty transportation, electric grid, and other applications and supply chain resources in wind energy. Six wind farms consisting of more than 330 turbines generating 517 megawatts of electricity operate in the region.

In academic research, the Laboratory for Laser Energetics at the University of Rochester receives \$60 to \$70 million a year from the U.S. Department of Energy for its role in a national network of federally funded research centers investigating the use of nuclear fusion as a source of energy. RIT's research activity – anchored by the Golisano Institute of Sustainability and the Nanopower Research Laboratory – includes programs in wind energy, solar power, biomass, and fuel cells. The New York State Agricultural Experiment Station in Geneva, a national leader in agricultural R&D, is conducting research in the field of biofuels production with a focus on developing the next generation cellulosic ethanol.

Advanced Manufacturing

Successful manufacturers apply both product and process innovation to the marketplace. The region's two engineering schools – the Kate Gleason College of Engineering at RIT and the Hajim School of Engineering & Applied Sciences at University of Rochester – help Finger Lakes firms turn innovation into job creation. The Center for Integrated Manufacturing Studies at RIT supports technology transfer and explores ways that domestic firms can continue to be successful in global markets.

The Finger Lakes' manufacturing expertise supports several clusters, often anchoring a business concentration that includes firms in manufacturing, service, even retail.

For example:

- Gleason Corporation, the world's dominant supplier of computer-controlled bevel gear cutting equipment to the automotive sector, supports energy innovation by selling its precision machines to wind turbine manufacturers like General Electric. MKS Instruments provides RF, DC and pulsed DC power supplies, measurement, and control devices and software services to the solar power industry.
- Kodak's roll-to-roll high speed coating process is now being applied to new solar energy products. Optimax, America's largest optics manufacturer, provides prototype optics for aerospace, display technologies and solar applications, and OEM produces optics for the semiconductor, military, and medical instrument sectors.
- Ortho-Clinical Diagnostics, a division of Johnson & Johnson, supports medical research and clinical laboratories with testing devices and software. Bausch + Lomb and CooperVision compete to deliver

innovative technology to eye care.

- In the food processing cluster, technology empowers 140 workers at Barilla America, Inc. in Avon to produce 81,000 tons of pasta each year, and LiDestri Foods' Fairport manufacturing facility can produce one million jars of pasta sauce every day with a roster of 400 workers.

Business Services / Software / Telecommunications

The Finger Lakes region is home to one of the strongest concentrations of business services, software, and telecommunications expertise in the country. These firms are primarily the result of the spin-off of noncore "intellectual infrastructure" and workers trained at Xerox, Rochester Telephone, and Kodak. This cluster employs more than 47,000 with a payroll of just under \$3 billion.

Leading business service firms such as Paychex and Sutherland Global Services, software developers such as Mindex Technologies and InfoDirections, and telecommunications firms such as Fibertech Networks and 5LINX Enterprises contribute to the region's prosperity and, through technological convergence, often share expertise and staff.

The increasing irrelevance of geography to the delivery of technology and related services offers low-cost, high-intellect regions like the Finger Lakes an opportunity to excel. The Finger Lakes region is well positioned to compete at a global level in this field. The region boasts a series of critical, strategic assets that have fueled the cluster's growth and can be further leveraged to sustain its expansion. This includes a deep knowledge base and availability of talent with specific expertise in software and telecommunications, a critical mass of telecom enterprises, strong higher education infrastructure capable of feeding growing workforce demand, and low operating costs.

Agriculture and Food Processing

Finger Lakes agriculture has long exported to the rest of the nation. Regional entrepreneurs, who long ago realized that they could add value to their produce by processing crops and animal products before shipping, created cheese factories, wineries, frozen food factories, and many other food processing enterprises. Today, the agricultural and food processing cluster represents a crucial part of the region's economy, employing nearly 19,000 with a payroll of \$700 million.

The Finger Lakes region leads New York State in sales of milk, fruit and nut, corn, and organic products. The region leads the state in sales of all crops, harvesting one-third of the state total by value, and in sales of all animal products, producing one-quarter. In 2007, half of the land in the region was dedicated farmland, the highest percentage of any region in the state.

The renowned Finger Lakes grape and wine industry produces 41,403 tons of grapes annually. The region's 90 wineries and 9,124 acres of vineyards account for 85 percent of the state's wine production. A strong framework supports the grape growing and wine industries, including Uncork New York, the New York Wine and Culinary Center, and the Cornell Cooperative Extension (CCE) Finger Lakes Grape Program. These programs help winemakers through research and connect them to merchants and tourists.

The Finger Lakes region is an important producer of fruits and vegetables. In addition to grapes, the region is a leading grower of apples, helping to make New York State second

in the nation in apple production. Other leading crops include soybeans, cabbage, sweet corn, and onions, though the list of all crops grown in the region is much longer. As a leading producer of organic products, the region enjoys a booming network of farmers' markets, farm markets, and Community Supported Agriculture programs.

The Finger Lakes region leads the state in dairy production, producing more than 3.1 billion pounds of milk each year and making New York State the third largest dairy state in the nation. Dairy products are exported to markets and used locally by cheese, yogurt, and other food and beverage manufacturers.

Farmers receive support from a variety of programs that offer education and training as well as agricultural research and advice. Each of the region's counties has a local CCE association that supports programs such as the North Western New York Dairy, Livestock and Field Crops Team, the Lake Ontario Fruit Program, and the Cornell Vegetable Program.

Cornell University's New York State Agricultural Experiment Station serves agricultural producers, food businesses, and consumers throughout the state. The station works to prevent

The region lures visitors with fine dining, wine tasting, antique shopping, festivals, and opportunities to hike, bike, kayak, sail, ski, hunt, or fish along the Erie Canal, Genesee River, the region's picturesque lakes, and numerous parks. The region has also been named one of the top 10 areas in the country for golf by *Golf Magazine* and it is home to many world class golf courses, including Oak Hill Country Club, Country Club of Rochester, and Locust Hill Country Club, which have hosted 16 major PGA and LPGA tournaments.

Expenditures for lodging, meals, and shopping purchases contribute significantly to the region's economy. Cluster employment – estimated based on proportions of accommodations, culture, recreation and amusements, food service, passenger transportation, and travel retail – consists of more than 25,000 jobs, contributes \$500 million to the region's economy, and is a vital source of jobs and economic activity in the region's rural areas.

The Finger Lakes have long received acclaim and recognition for their natural beauty, recreation, and attractions. The eleven lakes, aptly named for their shape, attract many visitors. The region ranks among the top lake vacation destinations,

The Finger Lakes and the recreational communities along Lake Ontario contribute immeasurably to the region's appeal and quality of life. These are powerful assets that help attract both new businesses and today's highly mobile workforce.

food-borne pathogens, fight invasive pests and diseases that threaten crops, develop new markets, and cultivate new fruit and vegetable varieties. Additional regional resources include the Agriculture & FoodTech Park in Geneva, Finger Lakes Culinary Bounty, Finger Lakes Sustainable Farming Center, the New York Farm Bureau, and the Wine & Grape Foundation.

Constellation Brands, founded and based in the region, is the world's largest premium wine producer. Other significant local processors include Wegmans, LiDestri Foods, Seneca Foods, and High Falls Brewing. Global firms Kraft Foods, Motts, and Barilla also have major processing facilities in the region.

The region offers food processors two critical competitive advantages: abundant fresh water and easy access to major North American markets. More than one third of the combined population of the U.S. and Canada live within 500 miles of the region, reducing the cost and the time needed to get products to markets.

The region's manufacturers also benefit from RIT's Center for Integrated Manufacturing Studies' Finger Lakes Food Processing Cluster Initiative, which focuses on implementing sustainable manufacturing process technologies to reduce operating costs, minimize environmental impacts, and open market opportunities.

Tourism and the Arts

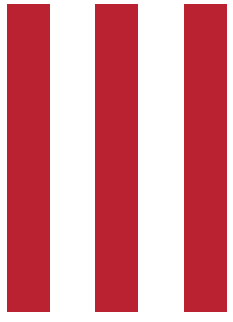
The Finger Lakes and the recreational communities along Lake Ontario contribute immeasurably to the region's appeal and quality of life. These are powerful assets that help attract both new businesses and today's highly mobile workforce. Scenic beauty and recreational and cultural attractions also draw visitors to the region, with Finger Lakes' wine country rapidly becoming an international destination.

ahead of places such as the Lake District in England, and Lake Superior and Lake Tahoe in North America. It has been named one of the most beautiful wine regions, along with Napa Valley and the Loire Valley in France.

The region maintains a number of state parks for residents and visitors to enjoy, including Chimney Bluffs, Keuka Lake, Darien Lakes, and Letchworth, which celebrates a remarkable chasm that has been called the "Grand Canyon of the East."

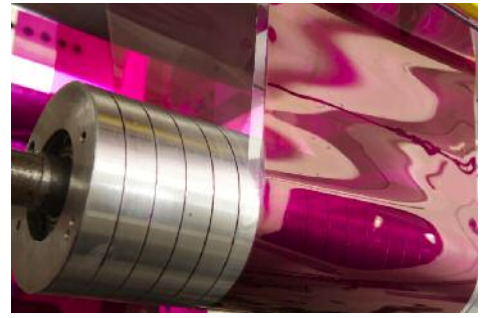
Rich with history, the region has played a major role in the nation's industrial development and transportation, the Underground Railroad, and the Women's Rights movement. That history is displayed in numerous museums and historical sites, including the Genesee Country Village and Museum, the Susan B. Anthony House, and Women's Rights National Historic Park.

The region offers a rich variety of cultural attractions, including the George Eastman House, the nation's leading photography museum, the National Museum of Play at Strong, the Memorial Art Gallery, the Rochester Museum and Science Center & Strasenburgh Planetarium, GEVA Theatre, the Rochester City Ballet, and the Hochstein School of Music, all in Rochester. Beyond Rochester, attractions include the New York Wine and Culinary Center, Ganondagan State Historic Site, CMAC Performing Arts Center, Nazareth College Arts Center, and the Sonnenberg Gardens and Mansion State Historic Park in Canandaigua. The annual Corn Hill Arts, Xerox International Jazz, and Lilac festivals draw visitors from across the nation.



Economic Development Vision





VISION STATEMENT

The Finger Lakes region will accelerate its transformation to a diverse, knowledge-based economy by building on strengths that include renewable natural resources, a talented and highly educated workforce, a historic commitment to innovation and philanthropy, leadership as the state's top agricultural region, international recognition as a center for optics and photonics, and national leadership in per capita intellectual property and degrees in higher education. We will expand a successful history of collaboration between public and private institutions to optimize our region's performance in advanced manufacturing, the arts, tourism, and basic and applied research in medicine, science, engineering, and technology. Through these efforts, we seek to become a national leader in innovation and commercialization with the long-term goals of increasing job creation at a rate that exceeds national levels and enhancing the region's quality of life to attract and retain business and our citizens.

SPECIFIC GOALS

Accelerate Job Creation

The region will emphasize strategic investments that support job retention and creation. This entails establishing an environment that is conducive to the creation, retention, attraction, and growth of business. At the same time, it requires the alignment of the region's exceptional educational and training institutions and resources with industry needs to develop a workforce with the skills required to compete in today's globally competitive, technology-driven marketplace.

The region's specific goals are to outperform the nation in the following categories:

- Job growth and retention;
- Creation of new companies;
- Formation of minority- and women-owned businesses.

Strengthen Region's Quality of Life

The Finger Lakes region offers an exceptional quality of life. Access to cultural amenities, recreational activities, a low cost of living, nationally ranked schools, short commute times, and high quality healthcare combine to make the region an excellent place to work, live, and raise a family. Three areas are addressed by this plan:

- Enhance quality of jobs created in the region;
- Continue to improve access to high quality, low-cost healthcare, improve leading public health indicators, and make the region one of the healthiest in the nation;
- Increase attendance and revenue from recreational and cultural activities.

CRITICAL ISSUES

To promote economic growth, community and business leaders will work with state and local elected officials to address six critical issues: a business climate that is hindered by excessive taxation and regulation; pockets of urban and rural poverty; an aging infrastructure; insufficient access to capital; community development and housing; and K-12 education and workforce development.

Business Climate

Economic growth in the Finger Lakes region has been limited by a business tax climate that the Tax Foundation ranks 50th in the country. New Yorkers pay some of the highest combined state and local taxes in the nation, a problem magnified in upstate where the ratio of taxes paid to home value are the highest in the United States. The tax and regulatory climate limits the ability of those who remain to reinvest in the community, make capital improvements, and create jobs.

Urban and Rural Poverty

Urban and rural poverty remains a significant barrier to opportunity for many of the region's residents. The poverty rate in Rochester is significantly higher than the state average, and the region's other cities and rural areas are marked by pockets of poverty. Educational barriers, a tight job market, and a shortage of affordable housing in some communities have created a cycle of poverty for too many of the region's families.

Infrastructure

Infrastructure and transportation are significant regional assets that enhance the competitiveness of the region's industries in national and global markets. However, the Finger Lakes region's infrastructure is aging and in need of repair. In Monroe County alone, 252 of the 608 bridges inspected by the state Department of Transportation are currently categorized as "structurally deficient" or "functionally obsolete." In booming Ontario County, 26 percent of the inspected bridges are on this list. While the region's transportation infrastructure is generally considered sufficient in terms of overall capacity, there are several key points in the network that are bottlenecks and pose a significant barrier to growth, safety, and our ability to capitalize on opportunities in emerging industries unless remedied. Investments are also needed across the region to upgrade and repair water and sewer lines and to improve broadband Internet access, especially in some rural areas.

Access to Capital

One of most persistent obstacles to growth of early-stage technology companies is the lack of access to seed and venture capital. While New York State has made strides to address the shortfall, it remains a significant regional challenge. Upstate New York received only 3.3 percent of total state venture funding support in 2011, a disparity that is even more glaring when taking into consideration the fact that the \$4.2 billion in annual statewide university R&D expenditures are roughly split between upstate and downstate. Without adequate access to venture capital, the region cannot fully capitalize on one of its core strengths: harnessing new technological innovation for economic growth.

Community Development and Housing

Both quality of life and economic vitality rely on communities in the form of villages, towns, and cities that provide a sense of place and a range of supportive services. Successful community development relies on a built environment that helps to reinforce the character of the area and an effective use of infrastructure, including the region's many downtowns. Effective community planning leads to the preservation of neighborhoods, increases home ownership, and provides housing opportunities for the disadvantaged.

Access to affordable and quality housing also increases community well-being. The involvement of public and private agencies in the development and maintenance of a sufficient quantity of affordable housing, appropriately dispersed throughout the region, is critical.

K-12 Education and Workforce Development

The 21st century economy demands a high level of literacy and numeracy, even for modest jobs at the bottom of the income scale. The fast pace of technological change can also render certain job skills obsolete. Too many of the region's schools are plagued with high dropout rates. This creates a barrier to the job market and traps many individuals and families in poverty.

PUBLIC STAKEHOLDER ENGAGEMENT

Public Forums

The Finger Lakes Regional Economic Development Council held six public forums throughout the course of the strategic planning process to gather public and stakeholder input.

The first series of community workshops gathered input on the region's economy. The sessions were held in Batavia on August 29th, Brighton on August 30th, and Geneva on August 31st. Participants at each session were divided into small groups for a facilitated discussion during which they were asked to identify the top three strengths, critical issues, opportunities, and roadblocks to regional economic growth. Nearly 500 local residents participated in the three workshops and more than 1,500 ideas were generated. These ideas were shared with the council at its meeting on September 6th.

The second set of public forums gathered stakeholder and public input on the council's draft strategic plan. These sessions were held in Batavia on October 25th, Geneva on October 26th, and Brighton on October 27th. Approximately 350 people participated in the three meetings. An "open house" format was used for these events. Following a presentation of the draft strategic plan, which was available on the council's website before the meetings, participants were asked to visit stations throughout the room that corresponded to elements of the strategic plan. Staff were available at each station to answer questions and process comments on laptop computers and paper forms. The more than 200 ideas generated by these events were submitted to the council.

Work Groups

The council assembled 11 work groups of stakeholders to highlight key regional assets, articulate promising opportunities, and identify and prioritize strategies and projects. The 160 individuals who participated in the work groups came from business, labor, academic, non-profit, and other organizations throughout the Finger Lakes region. The reports produced by these groups formed the basis for the Regional Assessment of Existing Conditions and Economic Opportunities and Regional Implementation Agenda sections of the plan.

The work groups were based on eight key industry clusters and three important cross-cutting issues identified by the council: agriculture and food processing; tourism and the arts; advanced manufacturing; optics, photonics and imaging; higher education; advanced healthcare and life sciences; energy innovation; business services, software, and telecommunications; community development; infrastructure and transportation; and entrepreneurship and innovation.

Regional Council Website

The council's website was the primary public source of information on council activity. In addition to data on the region, information related to the Consolidated Funding Application (CFA) process, and the time and location of council meetings and public forums, the council also posted two versions of its strategic plan for public review – on September 26th and November 2nd.

Outreach

Staff and council members met with area chambers of commerce, workforce investment boards, industry associations, individuals from the labor and business communities, elected officials, and non-profit groups to discuss the plan and solicit opinion. Staff and council members also held "office hours" in early October at the Livingston County Chamber of Commerce to clarify the CFA process, discuss individual projects, and answer general questions about the regional council strategic plan process.

Throughout the process, council staff collected emails and created a database of individuals who were interested in council activity. As key events and milestones occurred, the council emailed these individuals. In addition, the council took advantage of extensive email lists from partners in the community to alert the public to key events. In mid-October, the council created a newsletter – sent via email – to inform the public and stakeholders about recent council actions, announce the next set of public forums, discuss the consolidated funding application process, and alert the public to the next council meetings.

Council Meetings

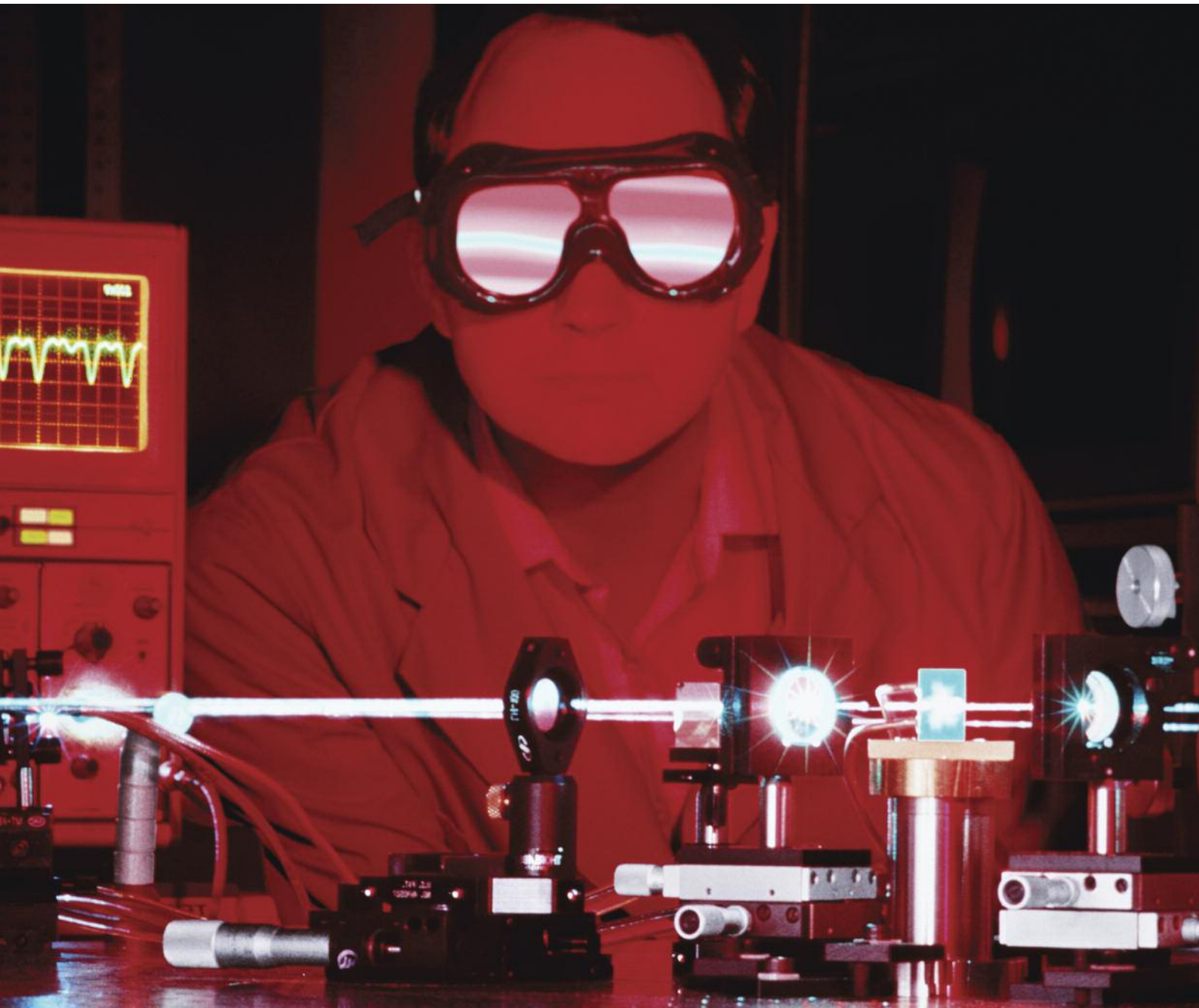
Stakeholders and members of the public were invited to attend all regional council meetings. During the public portions of the meetings, vice chairs and council members reported council actions and reviewed significant developments. Following the council meetings, council members met informally with members of the public and stakeholders in attendance.

Media

All of the council's meetings and public forums were covered extensively by local media. Council leaders also formally briefed reporters following each meeting. In late August, the council co-chairs wrote an opinion piece for the *Rochester Democrat & Chronicle* that described the work of the council and announced the first set of public forums. Council members also wrote pieces for the *Rochester Business Journal* and appeared on local radio and TV news to discuss progress and invite public comment. In addition to its regular coverage of council activity, the *Democrat & Chronicle* ran an eight-week series on the front page of its Sunday Business Section during September and October in which it profiled each of the key regional economic sectors being examined by the council.

IV

Economic Development Strategy & Components





Over the next five years, the Finger Lakes will leverage its strategic advantages in academic research, workforce talent, and high quality of life to become a nationally recognized leader and innovator in next-generation technologies in energy innovation, medicine, optics and imaging, business services, telecommunication, and food processing. It will also strive to harness its natural resources, cultural institutions, and vineyards to become one of the state's leading tourist destinations.

REGIONAL STRATEGIES

Optimize Business Creation, Retention, and Expansion

Entrepreneurship is what built the Finger Lakes economy. The region's leading companies – such as Xerox, Bausch + Lomb, Wegmans, Frontier, Paychex, Kodak, RF Communications, Constellation Brands, and Seneca Foods – all started here. Today the region is home to a host of companies that are poised to move beyond the start-up and into the expansion phase of their growth. The region will foster the development of new companies while at the same time accelerating the expansion of existing growth-oriented companies. Strategies include:

- Addressing local and statewide barriers to growth and competitiveness, including exploring ways to reduce the cost of doing business by strengthening regional planning efforts, developing cooperative agreements, and streamlining services;
- Strengthening and expanding (both in terms of capacity and geographic reach) the region's network of incubation and acceleration facilities and business support and networking services;
- Expanding access to seed, early-stage, venture, and other public/private capital;
- Growing the number of entrepreneurs through education/training programs and recruitment, particularly of those with domain experience in key sectors;
- Developing systems that monitor and identify firms and sectors with high growth potential and proactively engaging with these companies to connect them with the resources that will accelerate product development, access to new markets, and scale business models.

Priority projects

Finger Lakes Business Accelerator Cooperative, Regional Internal Harvesting and Economic Gardening Initiative

Strengthen Academic and Industry Partnerships

Higher education will play a central role in the region's economic future through its capacity to catalyze innovation and maintain one of the Finger Lakes' critical competitive advantages – a highly educated workforce. The sector will take steps to achieve greater academic collaboration and strengthen its capacity to generate new ideas that fuel growth in the region's emerging high technology sectors. To ensure future growth, the region will continue to strengthen and encourage these partnerships with the following strategies:

- Streamline and accelerate the maturation, transfer, and commercialization of university-based intellectual property;
- Develop programs and shared resources that allow closer collaboration between academic and industry scientists;
- Build a regional ecosystem that more effectively harnesses university-based innovation, with a particular focus on fostering the creation and growth of early-stage companies.

Priority projects

Golisano Institute for Sustainability at RIT, University of Rochester Health Sciences Center for Computational Innovation, Finger Lakes Business Accelerator Cooperative

Five-year projects

Optics/Photonics/Imaging Hybrid Research and Commercialization Center, Nano-Photonics Initiative, Finger Lakes Workforce Development Center, Finger Lakes Community College Viticulture and Wine Technology Facility, Finger Lakes Veterans Institute

Align Workforce Development Efforts with Sector Needs

The Finger Lakes region's robust foundation of educational institutions sustains a highly skilled regional workforce. To meet current and future needs, retrain displaced employees, and prepare for emerging fields, the region will pursue the following strategies:

- Expand opportunities for the region's employees and spur the creation of high-skill, high-wage jobs;
- Strengthen and develop education and training programs needed to provide employees with the skill sets for key growth industries;
- Address regional workforce shortages in healthcare, agriculture, information technology, manufacturing, and other key fields.

Five-year projects

Finger Lakes Workforce Development Center, Finger Lakes Community College Viticulture and Wine Technology Facility, and the Finger Lakes Veterans Institute, Finger Lakes Academic Common Market

Invest in Community and Industrial Development and Infrastructure

In order to continue to improve and strengthen its communities, create economic opportunity for diverse populations, and grow and retain the region's workforce and firms, the Finger Lakes region will implement community development, infrastructure, and transportation strategies that:

- Reinforce the identity, sense of place, and character of the area through downtown redevelopment, adaptive reuse of existing buildings and infrastructure, and historic preservation;
- Foster the development of the region's industrial complexes and business parks for commercial or industrial use;
- Invest in key projects that will address transportation bottlenecks that are barriers to growth;
- Enrich living environments by increasing access to affordable housing and mixed-income units, and promoting energy efficiency;
- Strengthen transportation infrastructure through preservation and maintenance of the existing system;
- Seek to invest in water resource-related projects that enhance water access, retain water quality, and increase water safety;
- Improve access to credit and capital for revitalization and reinvestment.

Priority projects

Midtown Redevelopment and Tower; Eastman Business Park Revitalization

Five-year projects

Kendrick Road Exchange – I-390 Southern Corridor Project, Inner Loop East Transformation Project, Mt. Hope College Town, Canandaigua Waterfront Redevelopment, the Port of Rochester Public Marina and Mixed Use Development, Portageville Freight Rail Bridge; Mill Seat Power Plant, Science Technology Advanced Manufacturing Park, Lake Ontario Waterfront Access, Penn Yan Waterfront Development, Lyons to Port Byron Canalway Trail



Advanced Healthcare & Life Sciences

The Finger Lakes region is a national hub for biomedical research and commercialization and a leader in innovative healthcare delivery. Over the next five years the region will pursue the following strategies:

- Invest in academic/private R&D projects that optimize external research funding and attract new companies and investment;
- Accelerate the translation of scientific discoveries into new commercial opportunities by increasing the region's capacity to support and fund new start-up companies;
- Leverage history of collaboration to implement community-wide initiatives that strengthen the region's high quality, low-cost health system.

Priority projects

URHSCCI, Finger Lakes Health Collaborative, Finger Lakes Business Accelerator Cooperative

Five-year projects

Comparative Effectiveness Database

Optics, Photonics and Imaging

The optics, photonics and imaging industry is a core strength of the Finger Lakes region, and its firms are globally competitive. The academic, industry, and workforce infrastructure to support this sector has evolved over several decades. Despite this head start, over the next five years the region will take steps to accelerate its leadership in the face of growing competition by pursuing the following strategies:

- Ensure that the region's education and workforce training programs continue to provide optics/photonics/imaging companies with technical, scientific, and managerial talent;
- Strengthen the linkage of industry, government, and academia to encourage closer collaboration.

Five-year projects

Optics/Photonics/Imaging Hybrid Research and Commercialization Center, Nano-Photonics Initiative

Energy Innovation

The Finger Lakes is poised to become the state's leading center of research and manufacturing for the next generation of energy storage and generation technologies. The region has a significant competitive advantage in this field with a strong foundation of innovative academic research and leading private sector R&D and manufacturing across a wide range of energy technologies – including fuel cell, solar, wind, biofuel, and nuclear fusion. Over the next five years, the region will continue to leverage these resources for growth. Specifically, it will:

- Encourage energy companies to expand and relocate to the region through the development of shovel-ready sites and other incentives;
- Create the resources and infrastructure that will accelerate R&D and commercialization of new energy technologies.

Priority projects

U.S. Renewables Group/Empire State Accelerated Innovation Fund, Seneca AgBio Green Energy Park, NY-BEST Commercialization Center

Advanced Manufacturing

Manufacturing remains a significant source of employment in the Finger Lakes and is a major contributor to the region's strength as an exporter. The region's expertise in advanced manufacturing will play a critical role in the future success of other established and emerging sectors, including food processing, life sciences, energy innovation, optics, photonics and imaging. In order to preserve and grow the sector, the region will continue to foster innovation that focuses on both product and process improvement. Specific strategies include:

- Leverage the collective strength of region's small and medium-sized companies through collaboration;
- Foster public/academic/industry collaboration to meet the R&D, process improvement, workforce, and management needs of manufacturers.

Five-year projects

Upstate New York Contract Manufacturing Alliance, Finger Lakes Manufacturing Collaborative

Business Services, Software, and Telecommunications

The Finger Lakes region enjoys one of the strongest concentrations of business services, software, and telecommunications expertise in the country. Regional strengths position the sector for substantial growth over the next five years. These included a high quality and experienced workforce, low operation costs, and critical mass of companies combined with the accelerating national trend of outsourcing and technological innovation in communication and data storage. To catalyze this growth, the region will:

- Create a regional data storage infrastructure and marketing strategy that will enable companies to more effectively compete for "back office" services;
- Foster closer cooperation between the region's companies and institutions of higher education to accelerate technology transfer and align workforce training programs with the skill sets required by the sector.

Five-year project

Finger Lakes Workforce Development Center

SECTOR STRATEGIES

Agriculture and Food Processing

The Finger Lakes region is the breadbasket of New York State. The region will build upon leadership in this sector over the next five years by continuing to leverage its competitive advantages and proximity to major markets to:

- Increase the value, diversity of agricultural products, and exports;
- Support the creation and expansion of food processing companies in the region through incentives and academic-private partnerships to gain manufacturing efficiencies and access to new markets;
- Invest in projects that create synergy between the region's agriculture and energy sectors, particularly in the area of biofuels.

Priority projects

Seneca AgBio Green Energy Park, Golisano Institute for Sustainability at RIT

Five year project

Finger Lakes Community College Viticulture and Wine Technology Facility

Tourism and the Arts

Finger Lakes tourism and arts make vital contributions to the region's economic vitality by stimulating commerce and strengthening the region's high quality of life, which has consequence in the attraction and retention of business. The region will continue to leverage its substantial recreational, cultural, culinary, and historic assets with a particular focus on making the Finger Lakes an international destination for wine connoisseurs. Key strategies over the next five years that will increase the number of visitors and revenue in the sector include:

- Invest in the development, promotion, and preservation of cultural, artistic, and historic assets;
- Develop, network, and promote the region's growing wine, culinary, agricultural, and food micro-enterprises;
- Strengthen and support the development of the Finger Lakes' diverse water resources and recreational tourism opportunities, allowing greater access and promoting year-round use.

Priority project

Finger Lakes Museum

Five-year projects

Seneca Art and Cultural Center at Ganondagan, Finger Lakes Boating Museum, Bristol Mountain Resort Redevelopment, Canandaigua Lakefront Development, Temple Building Sanctuary Renovation, Finger Lakes Community College Viticulture and Wine Technology Facility, Antique Wireless Museum and Research Campus, Canandaigua Lake Water Trail, New York Wine and Culinary Center Improvements

CRITERIA USED TO SELECT CATALYTIC PRIORITY PROJECTS AND ACTIONS

Job Creation and Retention

(20 percent)

Total number of net direct jobs created and/or retained per state funding investment. Does the project build on key industry clusters and emerging industry? Does it support small business development and foster entrepreneurial activity and innovation?

Leveraging Capital

(20 percent)

The ratio of total investment (public and private dollars) to the requested state funding should ideally be 5:1 or better. The amount/percent of private investment committed to ensure project sustainability and a declining requirement for public support. Financial commitments must be firm.

Alignment

(15 percent)

Projects consistent with and in alignment with the region's strategic goals and objectives as expressed in the strategic plan.



Immediacy of Impact

(15 percent)

Length of time to job creation and positive economic benefit. Is the project ready to go?

Job Quality

(15 percent)

Compensation level of the jobs created and influence over the creation of additional jobs and economic growth in the region (multiplier effect) and permanent jobs versus those which are temporary in nature.

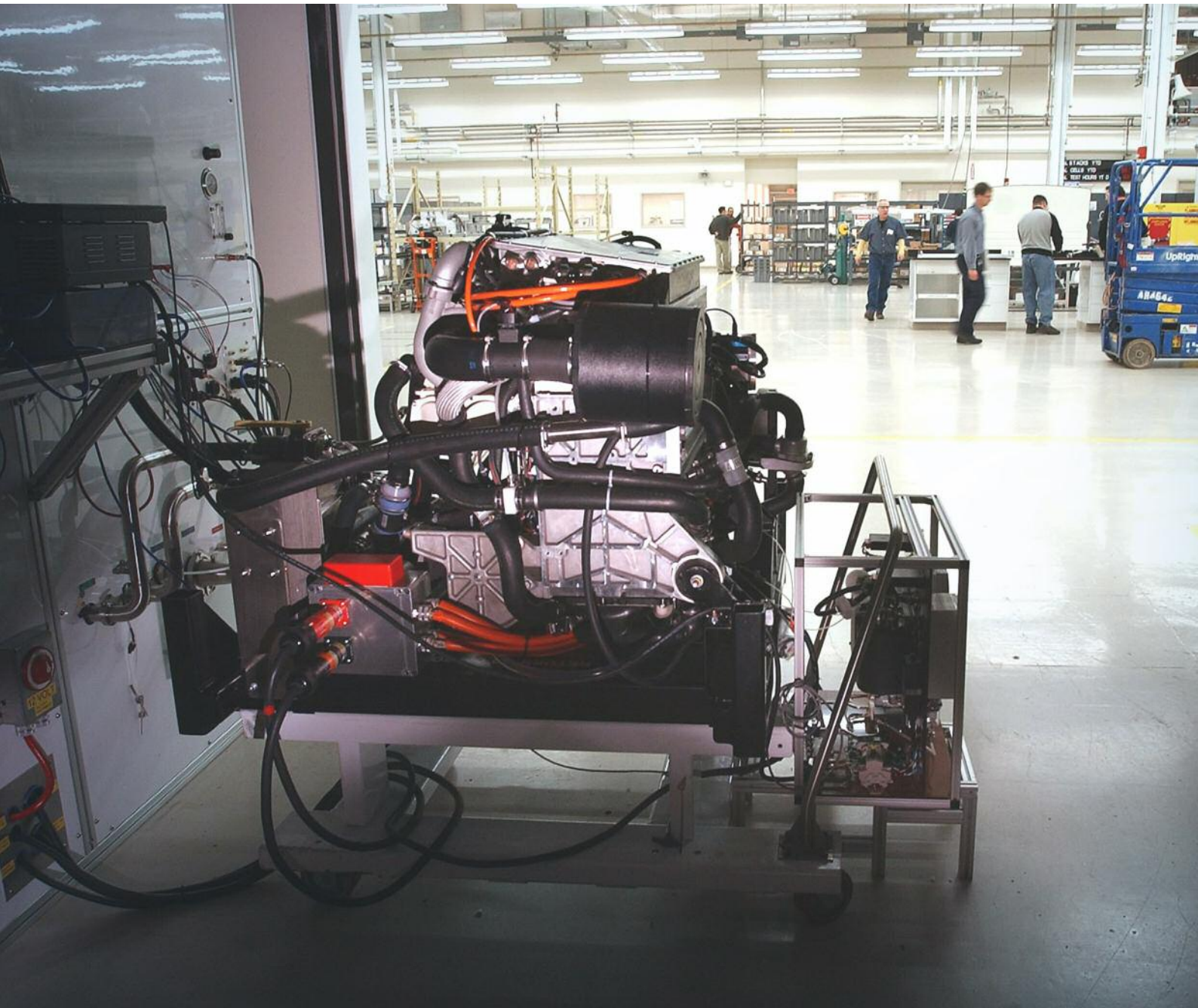
Access to Opportunity

(15 percent)

The alignment of job opportunities, including both those being created and retained, with community skill sets. Project contributes to improving access to economic self sufficiency through retraining of skills for impoverished individuals and struggling communities. Project supports advancement of minority and women-owned businesses.



Regional Implementation Agenda



Priority Projects and Actions



The Finger Lakes Regional Economic Development Council has identified 10 priority projects that it recommends for immediate state support. Each of these priority projects would be catalyzed by initial investments from the state from this year’s budget. Future state and private support will be required for full implementation. If fully implemented, these priority projects and additional applications for Excelsior Tax Credits would add \$1 billion to the Finger Lakes regional economy.

The council measures leverage on state funds as total non-state funds invested in the project (capital plus revenue stimulated by the project over the five-year period), divided by state funds received for the project.

Eastman Business Park Revitalization	Regional Internal Harvesting and Economic Gardening	Seneca AgBio Green Energy Park
US Renewables Group / Empire State Accelerated Innovation Fund	The Golisano Institute for Sustainability at RIT	Finger Lakes Museum
NY-BEST Commercialization Center	University of Rochester Health Sciences Center for Computational Innovation	Finger Lakes Health Collaborative
Finger Lakes Business Accelerator Cooperative		Midtown Redevelopment and Tower
		Excelsior Tax Credits

Eastman Business Park Revitalization

Eastman Business Park is one of the Finger Lakes region's most important industrial development sites. Originally built to house the R&D, manufacturing, and logistical operations of Kodak, the park encompasses 1,200 acres with over 100 buildings and has more than 2.5 million square feet of available office, manufacturing, laboratory, clean room, and warehouse space, and 100 acres of land suitable for development. The park also has dedicated industrial infrastructure – including water processing and wastewater treatment plants, a 120-megawatt power plant providing electricity, steam, and chilled water, and 17 miles of railroad track – and 24-hour fire and safety services, conference facilities, and other business services.

Eastman Business Park is now home to more than 30 companies, including several new companies which would not have relocated to the region if it were not for the park's

unique facilities and capabilities. Between 2003 and 2007, Kodak invested more than \$200 million to prepare the site for new business relocation.

The Finger Lakes Regional Economic Development Council considers the maintenance and expansion of Eastman Business Park its top regional priority. The council has identified two priority projects – US Renewables Group/Empire State Accelerated Innovation Fund and the NY-BEST Commercialization Center – that hold the potential to strengthen and preserve this critical regional economic development asset and foster the creation and attraction of a new generation of innovative companies at the site. These two projects represent a potential combined investment of more than \$579 million.

US Renewables Group / Empire State Accelerated Innovation Fund

Cleantech – the process of harnessing renewable materials and energy sources – represents one of the fastest growing industries in the world today. US Renewables Group (USRG) – an investment firm with more than \$1.5 billion of assets under management to invest in renewable energy – has proposed two projects that would serve as the cornerstones for a cleantech cluster at Eastman Business Park in Rochester. Both projects will attract and grow business and create a significant number of high-paying jobs.

Fulcrum BioEnergy, Inc., a California-based company and majority-owned USRG portfolio company, is planning to construct a \$300 million state-of-the-art biofuels generating plant in the Eastman Business Park. The biofuels facility, which will be one of the most advanced waste-to-energy plants in the world, will have the capacity to convert 250,000 tons per year of municipal solid waste into 30 million gallons of transportation-grade ethanol. The company views Eastman Business Park as an ideal location for the plant because of existing infrastructure and proximity to New York City and other major east coast ethanol blending facilities. Locating the facility at the park would immediately boost the region's reputation as a cleantech hub and lay the foundation for the recruitment of additional cleantech companies to the cluster.

As part of USRG's integrated plan to help the Finger Lakes region become a regional cleantech center, USRG has created and is in the process of closing investment commitments for the USRG/Empire State Accelerated Innovation Fund (ESAIF). As of November 3, 2011, ESAIF has \$11.3 million in firm commitments from a consortium of unions, local universities, and high net worth individuals. ESAIF's goal is to identify, fund, and grow more than a dozen new innovative clean companies and locate them in Eastman Business Park.

USRG is in discussions with several state, national, and international limited partners to augment the capital commitments ESAIF has closed to date.

In backing this project, New York State will directly address the chronic shortage of start-up capital, revitalize existing infrastructure, create high paying sustainable jobs, and help translate the tremendous innovation capacity of upstate New York State's research universities into new cleantech companies.

This project requires \$5 million for design, site preparation, and funding support for the Fulcrum BioEnergy plant and three new companies that will relocate to the park. The project will rapidly create approximately 100 full-time, high-wage positions and 1,200 jobs in the first five years, including employees of USRG, Fulcrum BioEnergy, other identified companies that will be relocated to Eastman Business Park, and additional new companies that will be supported by ESAIF. Substantially more jobs are anticipated to be created in following years.

The Finger Lakes Regional Economic Development Council recommends that the USRG/Empire State Accelerated Innovation Fund project receive \$5 million in Excelsior Tax Credits. The council may seek additional funding for this project in the future. This initiative supports the region's Energy Innovation strategy.



Direct Job Creation	1,200 and 500 construction																						
Spillover/ Catalytic Impact	ESAIF's goal to locate more than a dozen new innovative cleantech companies at Eastman Business Park will spur the creation of a cluster of cleantech innovation, reinforce and expand the region and state's leading position in this emerging sector, and generate spill over impact in many other sectors of the region's economy.																						
Total Cost	ESAIF: \$242.6 million Fulcrum BioEnergy: \$300 million																						
1st Year Council Recommendation	\$5 million in Excelsior Tax Credits																						
Lead Organization	USRG																						
Status/Commitments	As of November 3, 2011, ESAIF has firm commitments totalling \$11.3 million from a consortium of unions, local universities, and high net worth individuals.																						
Funding	<p>Fulcrum BioEnergy will be a primary tenant and intends to invest \$300 million in a biofuels facility. In addition to capital raised to date, USRG is working closely with several state, national, and international limited partners to augment the capital commitments ESAIF has closed to date.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$242.6</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$232.6</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$412.7</td> </tr> <tr> <td>Total non-state funds</td> <td>\$645.3</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$0.0</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$5.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$5.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$10.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>65:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$242.6	Project cost less New York State funds received & requested	\$232.6	Total five-year estimated revenue	\$412.7	Total non-state funds	\$645.3	Council grant recommendation	\$0.0	Council tax credit recommendation	\$5.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$5.0	New York State funds received and requested	\$10.0	Leverage on New York State funds	65:1
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Project Timeline	Fulcrum BioEnergy has conducted site visits and has retained Bergmann Associates to begin site design and planning and intends to begin construction in 2013. USRG has created and is in the process of closing investment commitments for the ESAIF.																						

NY-BEST Commercialization Center

New York State led the nation in battery jobs in 2010 and, through significant investment by the New York State Energy Research and Development Authority (NYSERDA), has established leading university R&D programs in the field. However, large investments in commercialization, particularly by the State of Michigan and several Asian countries, threaten the state's ongoing leadership in this high growth sector.

The New York Battery and Energy Storage Technology Consortium (NY-BEST) has proposed the creation of a commercialization facility that will accelerate manufacturing and job growth. NY-BEST consists of more than 80 members, including industry leaders such as General Electric, BAE Systems, and General Motors, numerous start-ups from across New York State, as well as the state's leading research universities.

The NY-BEST Commercialization Center will address a critical gap in the state's current R&D infrastructure – access to the suite of test, validation, prototyping, and pilot manufacturing capabilities necessary to deploy the next generation of energy storage technologies. These capabilities are difficult for individual companies to procure at

a reasonable cost. Consolidating these resources into one location will help existing New York State companies compete globally and send a powerful signal to industry that the state intends to be an international leader in the development and manufacturing of advanced energy storage solutions.

NY-BEST may locate the center at Eastman Business Park in Rochester. It has also identified an alternative location in the region. The Eastman Business Park location is ideal and will provide the center with access to the park's 120-megawatt power plant, which will be essential for testing the energy storage capacity of large, industrial scale batteries.

Access to the commercialization center will accelerate the substantial planned investments by NY-BEST partner companies and will increase the likelihood that these investments will lead to industry expansion in New York State. The center will also place the state in a strong position to compete for funding from federal programs, including the Advanced Manufacturing Partnership, an initiative recently announced by the Obama administration aimed at strengthening university-industry partnerships in leading edge manufacturing technologies.

The Finger Lakes Regional Economic Development Council recommends \$3.5 million in funding support for the NY-BEST Commercialization Center. This initiative supports the region's Energy Innovation strategy.



Direct Job Creation	223																						
Spillover/ Catalytic Impact	NY-BEST Commercialization Center partners are investing \$200 million in private capital to advance the energy storage industry in New York State. The center will help these organizations – which collectively employ about 2,300 – to maintain and enhance their competitive position in energy storage.																						
Total Cost	\$20.5 million																						
1st Year Council Recommendation	\$3.5 million																						
Lead Organization	NY-BEST																						
Status/Commitments	NY-BEST's members have indicated strong support for the Eastman Business Park site and have signaled their intention to make use of the facility when it becomes operational. Letters of support have been received from 31 of the organization's members. NY-BEST is also supported by NYSERDA and has received \$25 million in funding from the authority.																						
Funding	<p>Phase I of the NY-BEST Commercialization Center will cost \$20.5 million, with \$9 million coming from NY-BEST and its partner companies for operating support. The Eastman Business Park will also make available an additional \$10 million in capital equipment on a fee basis for center users. NY-BEST is exploring a \$17 million Phase II expansion to be supported by a grant from the U.S. Department of Energy, although a formal application has not yet been submitted.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$20.5</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$6.5</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$70.3</td> </tr> <tr> <td>Total non-state funds</td> <td>\$76.8</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$3.5</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$3.5</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$14.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>5:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$20.5	Project cost less New York State funds received & requested	\$6.5	Total five-year estimated revenue	\$70.3	Total non-state funds	\$76.8	Council grant recommendation	\$3.5	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$3.5	New York State funds received and requested	\$14.0	Leverage on New York State funds	5:1
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Project Timeline	<p>Phase I will begin immediately after the grant award and will entail purchasing and installing required testing equipment. On site employment of six administrative and technical staff in year one will expand to 38 in year two as the center becomes available to member firms. Employment will continue to expand through year five, reaching 223 at the site.</p> <p>Phase II will approximately double the scale and scope of the center's module and system testing capabilities. Additionally mobile testing and monitoring capabilities will be added. A large format calorimeter, currently only available at the National Renewable Energy Laboratory in Colorado, will be created to test efficiency and thermal properties of battery systems. Other advanced diagnostics will be added in conjunction with partner universities and laboratories.</p>																						

Finger Lakes Business Accelerator Cooperative

The Finger Lakes region proposes the creation of the Finger Lakes Business Accelerator Cooperative – an interconnected “hub and node” system to support entrepreneurship and innovation and drive regional economic growth across all industry sectors. The cooperative will bring streamlined programs and services to entrepreneurs and small businesses throughout the region, with outreach to underrepresented groups, such as minority and woman-owned businesses and young entrepreneurs. The proposal could also serve as a model for other regions of the state.

The hub facility will be centrally located close to the Greater Rochester International Airport – with satellite nodes established in each county of the Finger Lakes region where local entrepreneurs can gather and connect via video conference technology with the system’s overall set of coordinated services – including access to capital, mentoring,

and low-cost business services.

The Finger Lakes Business Accelerator Cooperative will serve a broad range of businesses from small service enterprises to technology-based start-ups across all industry clusters with the goal of accelerating the growth of local small businesses by moving clients through the formation, incubation, and accelerated phase of growth. It will leverage the solid infrastructure and programs that have been developed by High Tech Rochester, Venture Creations, the Small Business Development Centers, and the Industrial Development Agencies throughout the region.

Funding for the central hub and the regional nodes will be raised from the sale of the existing High Tech Rochester facility, private sector contributions, and state and federal grants. It is estimated that this initiative will create more than 1,000 new jobs in the first five years of operation.

The Finger Lakes Regional Economic Development Council recommends \$3 million in funding support and \$5 million in Excelsior Tax Credits for the Finger Lakes Business Accelerator Cooperative project. This initiative supports the region’s strategy to Foster Entrepreneurship, Innovation, and Business Retention and Expansion.



Direct Job Creation	1,000																						
Spillover/ Catalytic Impact	The Finger Lakes Business Accelerator Cooperative will serve as the hub for services supporting innovation throughout the nine-county region. Business formation and region-wide services to entrepreneurs will spur employment in supporting and related sectors. The cooperative's impact on job creation will also be enhanced through a close collaboration with the Internal Harvesting and Economic Gardening initiative.																						
Total Cost	\$35 million																						
1st Year Council Recommendation	\$3 million and \$5 million in Excelsior Tax Credits																						
Lead Organization	HighTech Rochester will lead the cooperative and will engage several partners, including the University of Rochester, RIT, other regional colleges and universities, city and county economic development agencies, IDAs, the Center for Emerging and Innovative Sciences, the Smart Systems Technology and Commercialization Center, Excell Partners, the Rochester Angel Network, GRE, the Rochester Business Alliance, Digital Rochester, cluster organizations in photonics and tooling and machining, workforce investment boards, and The Tech Farm and Cornell Agricultural Experiment Station, New York State Small Business Development Centers, and SCORE.																						
Status/Commitments	This project has received more than two dozen letters of support. The work group that developed the initiative represents most of the large entities that are expected to participate.																						
Funding	<p>HighTech Rochester has pledged \$3 million through a combination of the sale of its existing facility and fund balance. Additional private contributions are anticipated, although amounts have yet to be confirmed. Federal support through the Economic Development Agency is also anticipated.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$35.0</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$25.0</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$302.0</td> </tr> <tr> <td>Total non-state funds</td> <td>\$327.0</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$3.0</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$5.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$7.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$15.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>22:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$35.0	Project cost less New York State funds received & requested	\$25.0	Total five-year estimated revenue	\$302.0	Total non-state funds	\$327.0	Council grant recommendation	\$3.0	Council tax credit recommendation	\$5.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$7.0	New York State funds received and requested	\$15.0	Leverage on New York State funds	22:1
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Project Timeline	<p>Video conferencing technology will be installed at HighTech Rochester's current facility (temporary until new hub is built) and at four other node locations in year one and in remaining node sites in year two.</p> <p>Architect/engineer design, final site selection, and fundraising for the hub facility will be completed in year one. Permitting and/or environmental studies and groundbreaking will occur in year two, and construction will be completed and operations will commence in year three.</p> <p>Business accelerator services, including creation of the Finger Lakes Entrepreneurship Advisory Council and establishment of a "routing" system and mentorship program, and the expansion of entrepreneurs-in-residence program and entrepreneurial training program will be completed in year one. An integrated technology commercialization infrastructure will be launched in year two.</p>																						

Regional Internal Harvesting and Economic Gardening

Up to 80 percent of New York State's future business growth will come from the expansion of existing businesses. The Finger Lakes region has proposed the creation of an innovative approach to business retention and expansion (BR&E) that focuses on "harvesting" information and data on existing companies and economic conditions and "gardening" – or working with existing growth-oriented companies to help them expand. This approach is based on similar, highly successful BR&E programs that have been implemented in other states.

Greater Rochester Enterprise (GRE) – with the support of the Edward Lowe Foundation and in partnership with the Finger Lakes region's industrial development agencies (IDA) and Monroe Community College (MCC) – is proposing the creation of a systematic, software-driven approach to collecting and analyzing strategic business data to identify opportunities and mitigate obstacles to growth. A key component of this internal harvesting strategy is a BR&E software platform that will enable the creation of a region-wide database consisting of profiles of individual companies, and metrics to monitor their performance. The platform will also provide the ability to track and manage outreach and referrals and develop a more comprehensive understanding of business climate and perceptions.

GRE and MCC will use this software to establish an "industry desk" that monitors data in real time to identify threats and opportunities, focusing on key industry clusters.

The Empire State Development regional office, SUNY institutions, local Workforce Investment Boards, IDAs, and other economic development organizations will all be connected via this common software platform.

The second element of the Fingers Lakes BR&E initiative is economic gardening. This entrepreneurship-centered economic growth strategy focuses on phase two companies (10-99 employees) and helps them become larger. The basic elements of an economic gardening approach include: providing critical information needed by businesses to survive and thrive; developing and cultivating regional assets beyond basic infrastructure, such as quality of life and access to intellectual resources and qualified and talented employees; and developing connections between businesses and the people and organizations that can help them take their business to the next level.

This initiative will serve as a pilot project that could be replicated by other regions of the state and potentially connect all of New York State's economic development organizations under a single BR&E database.

The Finger Lakes Regional Economic Development Council recommends \$500,000 in funding support for the Regional Internal Harvesting and Economic Gardening project. This initiative supports the region's strategy to Foster Entrepreneurship, Innovation, and Business Retention and Expansion.



Direct Job Creation	500																						
Total Cost	\$2 million																						
1st Year Council Recommendation	\$500,000																						
Lead Organization	GRE																						
Status/Commitments	All nine county IDAs have expressed interest in participating.																						
Funding	<p>All partners will use existing assets to leverage the project, including providing in-kind services and office space and equipment. State funding will be used for personnel costs associated with the execution of the program and for the consulting contract with the Edward Lowe Foundation for software, database development, application screening, and program execution. GRE will provide staffing and match making services.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$2.0</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$1.5</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$300.5</td> </tr> <tr> <td>Total non-state funds</td> <td>\$302.0</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$0.5</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$0.5</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>604:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$2.0	Project cost less New York State funds received & requested	\$1.5	Total five-year estimated revenue	\$300.5	Total non-state funds	\$302.0	Council grant recommendation	\$0.5	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$0.0	New York State funds received and requested	\$0.5	Leverage on New York State funds	604:1
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Project Timeline	<p>Planning and design will begin in the 1st quarter of 2012 with the first companies selected in the 2nd quarter of 2012. By the end of 2012 the project will have engaged at least 40 companies and seeks to create 200 new jobs by mid-2013. Assuming continued funding in year two, the project will continue by engaging an additional 60 companies by the end of 2013, producing an additional 300 jobs by the end of 2014.</p>																						

The Golisano Institute for Sustainability at RIT

The Golisano Institute for Sustainability (GIS) at RIT was established to serve as a platform for universities, corporations, and governments around the globe to collaborate in the creation of innovative education and technology development systems related to sustainable design, life-cycle engineering, remanufacturing, and pollution prevention. RIT intends to become the first technological university to provide a full spectrum of career-focused, integrated, and interdisciplinary programs that embody the principles of sustainability in product development.

The total cost of the GIS project is \$107 million. The university was recently awarded a \$13.1 million federal grant and has received \$10 million in state funding to build the facility to house the institute, which is currently under construction. It has also received nearly \$18 million in commitments from the private sector, including corporations, individuals, and private foundations. RIT has raised 40 percent of the total project cost and has committed \$24 million in institutional funds to GIS.

RIT is requesting an additional \$10 million in state funding for GIS to equip a set of specialized labs and test beds in technology areas such as smart buildings, micro-grid and eco-IT, fuel cells, electrical propulsion, sustainable building materials, and systems modeling and simulation. The labs and test beds enable corporations to tap into the expertise of faculty and students to accelerate the development and commercialization of new products

and demonstrate new and emerging technologies. New state funding will leverage additional support from corporate partners, several of whom have already made funding commitments to support the institute's programmatic activities. RIT has a strong track record of success with this model. RIT's Center for Integrated Manufacturing Studies (CIMS) – GIS's precursor – works with small and medium-sized companies to develop prototype products and devices. This approach fits well with the types and size of companies that are at the forefront of the green economy.

The initiative will yield a sustainable and long-term return in jobs and economic growth. The most significant impacts will be off-site and catalytic. GIS will create 75 direct, on-site jobs, plus additional direct jobs offsite. Based on results from 2002 to 2010, direct off-site job creation will be nearly 1,000. Job retention through GIS activity will be nearly 1,200. Continued innovation and outreach by GIS faculty and staff could spur the creation of thousands of additional jobs, maintaining and enhancing the region and state as leaders in sustainable business practice.

The Finger Lakes Regional Economic Development Council recommends \$6 million in funding support for the Golisano Sustainability Institute at RIT project. This initiative supports the region's Energy Innovation and Advanced Manufacturing strategies.



Direct Job Creation	75 on-site, 1,000 off-site, and 160 construction																						
Spillover/ Catalytic Impact	GIS is designed to work closely with business firms throughout New York State. Green technology firms already rely on the innovation and support of CIMS, the precursor of GIS. The size of the cluster providing services supporting sustainable practices and firms manufacturing sustainable products is sizable and will continue to grow. GIS will reinforce and accelerate the growth of this cluster, potentially expanding New York State employment of these firms by several thousands of jobs. GIS is also capable of stimulating the creation of a much larger cleantech and remanufacturing industry in the Finger Lakes and New York State.																						
Total Cost	\$107 million																						
1st Year Council Recommendation	\$6 million																						
Lead Organization	RIT																						
Status/Commitments	GIS has received \$13.1 million from the National Institute of Standards and Technology, \$10 million from New York State's Capital Assistance Program and Economic Development Assistance Program, \$16.9 million in private sector commitments from corporations, and individuals, and \$1 million from foundations.																						
Funding	RIT has raised 40 percent of the project's total cost from other public and private funding sources and has committed \$24 million in institutional funds toward GIS. An additional \$25 million is needed to proceed with Phase II construction and equipment acquisition for the facility. Additional funds are being sought from the New York State Department of Transportation.																						
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Project Timeline	Phase I construction of GIS is underway and will be ready for occupancy by Fall 2012.																						

University of Rochester Health Sciences Center for Computational Innovation

The University of Rochester and IBM have agreed to partner to create a \$100 million Health Sciences Center for Computational Innovation (HSCCI) dedicated to applying high performance computing solutions to the nation's health challenges. This partnership between two of the largest employers in the state will enhance Rochester's position as an international center for biomedical research and a magnet for research funding, scientific talent, industry and academic collaboration, and private sector job growth.

This partnership will create the most powerful computer system dedicated to health research in the world and will bring together two institutions with long histories of innovation, national stature in the fields of medicine and high performance computing, and track records of leveraging strategic public investments into substantial economic activity. The project will also give IBM a significant R&D presence in the region.

The centerpiece of HSCCI will be an array of Blue Gene/Q supercomputers that will be housed at the University of Rochester's new state-of-the-art Data Center. This system, and its capacity to analyze large amounts of information quickly, holds the key to 21st century medicine. High performance computing will enable scientists to perform data-intensive tasks such as creating complex genetic and proteomic profiles of individuals and diseases, forecasting health trends for entire populations, and interpreting data from advanced imaging systems or devices monitoring health in real time.

In 2008, IBM gifted a single Blue Gene/P to the University of Rochester through its Shared University Research (SUR) award program. Since that time, this single supercomputer has helped attract more than \$34 million in new research funding, including a \$12 million grant from the National Institutes of Health (NIH) to create a Center for Biodefense

Immune Modeling that will use computer modeling to find ways of boosting human immune responses to lethal viruses. The University has also applied for a \$37 million NIH grant that involves HSCCI. The NIH has indicated that the university is a finalist for this award, which is anticipated to be announced in the coming months. The project is conservatively estimated to attract at least \$134 million in new research growth at the university over 10 years.

Given the experience of other similar IBM-university partnerships, including those with other institutions in New York State, it is anticipated that the HSCCI will stimulate regional economic activity in the life sciences by generating innovative technologies that can be spun off into commercial ventures and make the region attractive for relocation of existing companies. It will also strengthen and potentially expand existing research partnerships the university has with industry leaders such as CareStream, Bausch + Lomb, Siemens, Samsung, Intel, Johnson & Johnson, Pfizer, and many others.

The Finger Lakes Regional Economic Development Council recommends \$6 million in funding support for the Health Sciences Center for Computational Innovation. This initiative supports the region's Advanced Health Care and Strengthen Academic and Industry Partnerships strategies.



Direct Job Creation	420																						
Spillover/ Catalytic Impact	The University of Rochester’s proven ability to create intellectual property with commercial application will spur the formation of new firms. While the expected ripple effect from increased activity would stimulate an additional 400 jobs, the catalytic potential of the HSCCI is much greater.																						
Total Cost	\$100 million																						
1st Year Council Recommendation	\$6 million																						
Lead Organization	University of Rochester																						
Status/Commitments	The University of Rochester and IBM have a signed Memorandum of Understanding and have made firm commitments to provide \$66 million in funding support.																						
Funding	<p>This initiative has already helped attract more than \$34 million in new research funding and it is anticipated that the research funding at the university will grow by \$134 million over the next 10 years. The University of Rochester and IBM have each committed \$66 million toward this initiative and are requesting \$33 million from New York State to acquire hardware, make necessary capital improvements, and hire additional research faculty and computational support staff.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$100.0</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$67.0</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$101.1</td> </tr> <tr> <td>Total non-state funds</td> <td>\$168.1</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$6.0</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$27.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$33.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>5:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$100.0	Project cost less New York State funds received & requested	\$67.0	Total five-year estimated revenue	\$101.1	Total non-state funds	\$168.1	Council grant recommendation	\$6.0	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$27.0	New York State funds received and requested	\$33.0	Leverage on New York State funds	5:1
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Project Timeline	The Blue Gene/Q array will be located in the University of Rochester’s new state-of-the-art Data Center. Required capital renovations will begin as soon as financing is complete. The university will continue to recruit new bio-computational faculty who will join the approximately 350 researchers who have already been involved in high performance computing activity under the existing SUR grant. IBM has also committed additional researchers, computer scientists, and wide access to additional resources to support this initiative.																						

Seneca AgBio Green Energy Park

With an abundant supply of agricultural byproducts and leadership in sustainable agricultural technologies and energy research from institutions such as RIT, the University of Rochester, and Cornell University, the Finger Lakes region is well positioned to develop industries that produce bio-fuels and other biomaterials.

The Seneca AgBio Green Energy Park seeks to attract three complementary businesses to the manufacturing facility located at the former Seneca Army Depot in Romulus. Seneca BioEnergy, located at the park for two years, has developed an innovative program for agricultural processing and renewable energy production. It recently completed an 18-month project to upgrade infrastructure, create a 400,000 square foot manufacturing facility, and install equipment necessary to produce grape seed oils and extracts (a byproduct of the region's grape and wine industries), process soy beans, and produce biodiesel for use in transportation and home heating.

The Seneca AgBio Green Energy Park has requested \$1 million in funding toward a total project budget of \$16 million. The expansion of the facility would enable the three companies listed below to expand and establish manufacturing operations at the park. The companies are investing \$8 million for redevelopment of site infrastructure, equipment purchases, pilot scale technology development, agricultural contracts fulfillment, and commercial operations of their green energy and environmental technologies for biodiesel and biomaterials production and biomass processing. Specifically, the project would enable these companies to do the following:

- Seneca BioEnergy will increase its existing biodiesel

production capacity at the park from 500,000 to 5 million gallons per year and add 35 jobs within three years;

- Terrenew will expand production to one million pounds per month of its oil absorbent derived from dairy cow manures and used for spill cleanup. The company will add 15 jobs immediately;
- Southern Tier Biomass will supply and process regional agricultural feedstock and cattle manures for use in the facility's biomass combustion and heating plant to produce manufacturing and building heat for tenants.

By locating their individual operations within the Seneca AgBio Green Energy Park, the three businesses will take advantage of synergistic opportunities for shared resources and infrastructure and common supply and product contracts. The project will provide jobs and economic activity to this rural area while at the same time sustaining a positive impact on regional water and air quality by recycling waste oils and processing agricultural byproducts.

The Finger Lakes Regional Economic Development Council recommends \$1 million in funding support for the Seneca AgBio Green Energy Park project. This initiative supports the region's Advanced Energy, and Agriculture and Food Processing strategies.



Direct Job Creation	60																						
Spillover/ Catalytic Impact	The Seneca Army Depot holds significant potential for the Finger Lakes and Central New York regions. The creation of a business park will support both the local agricultural sector and expanded use of depot properties.																						
Total Cost	\$16 million																						
1st Year Council Recommendation	\$1 million																						
Lead Organization	Seneca BioEnergy																						
Status/Commitments	Upon authorization of project funding, Seneca BioEnergy will execute subcontract agreements with Terrenew and Southern Tier Biomass. These agreements include corporate commitments for private matching funds to be raised by each of the team companies in this project.																						
Funding	<p>The total budget for the three companies in this grant application is \$16 million. The current dedicated assets and equipment contributed by the companies is \$8 million. These include existing infrastructure and production equipment to be purchased and dedicated to the project by Seneca BioEnergy, Terrenew, and Southern Tier Biomass.</p> <p>New equity and financing for the project’s capital costs and operating expenses total \$7 million, including \$5.5 million to be raised by Seneca BioEnergy for biodiesel equipment and operations and \$1.5 million to be raised by Terrenew for production equipment and operations.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$16.0</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$15.0</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$56.5</td> </tr> <tr> <td>Total non-state funds</td> <td>\$71.5</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$1.0</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$1.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>72:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$16.0	Project cost less New York State funds received & requested	\$15.0	Total five-year estimated revenue	\$56.5	Total non-state funds	\$71.5	Council grant recommendation	\$1.0	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$0.0	New York State funds received and requested	\$1.0	Leverage on New York State funds	72:1
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Project Timeline	<p>The Seneca AgBio Green Energy Park facility is shovel-ready and the planned job creation will be implemented as follows:</p> <ul style="list-style-type: none"> • Upon availability of funds, the companies will purchase biomass combustion equipment and commence construction on new production space. Total timeframe to production is four months. Upon completion, the expansion in manufacturing operations will create 20 new jobs by the end of the first year of operations. • Over the next 12 months, the biomass combustion system will become operational, Terrenew operations will commence, and biodiesel expansion equipment will be installed and operational. Expansion to accommodate the three companies will be completed and the full job creation of 60 positions will be implemented within 24 months of grant funding. 																						

Finger Lakes Museum

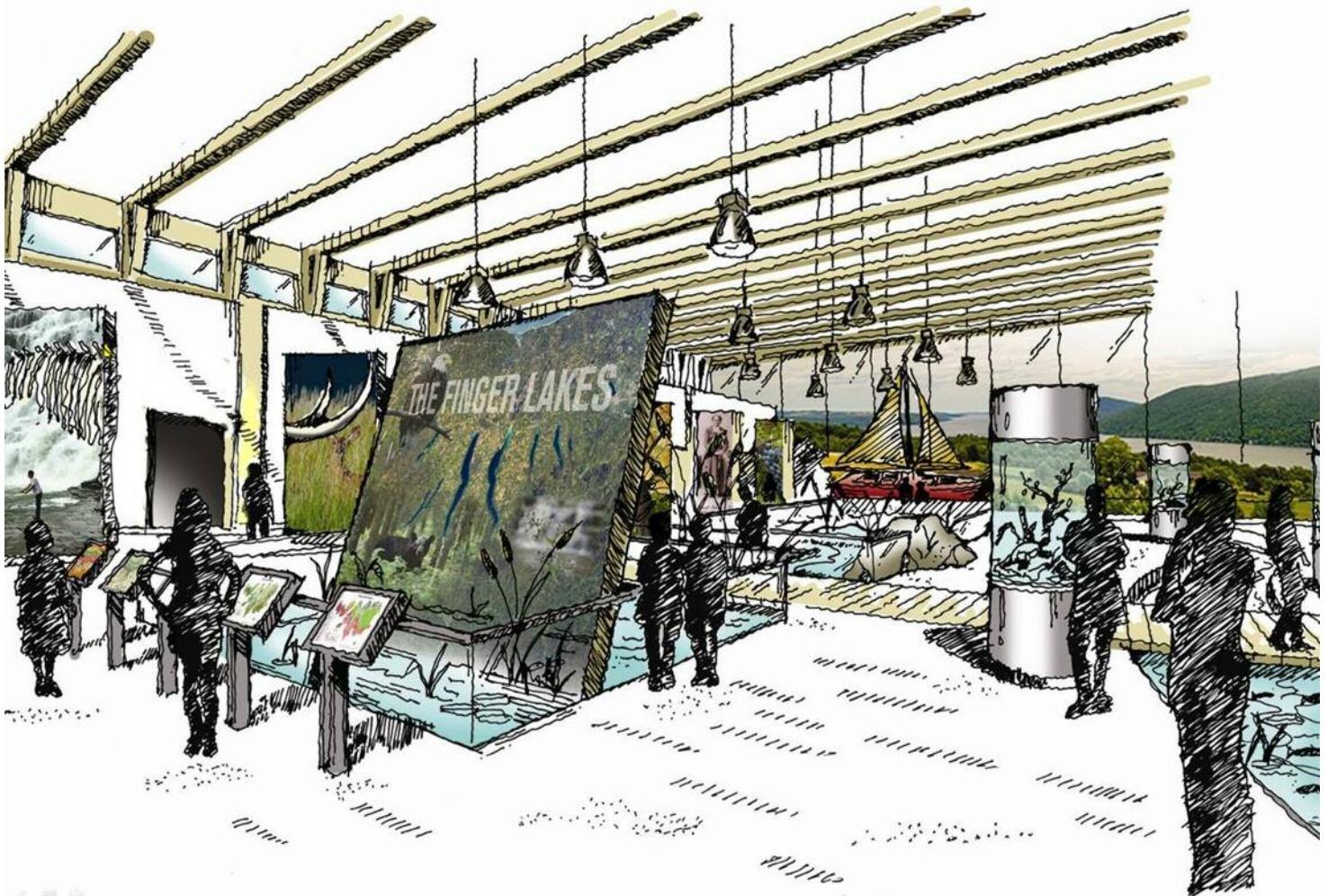
While the Finger Lakes region possesses a rich abundance of attractions for visitors, it lacks a “destination” education institution that tells the environmental and cultural story of the region and inspires conservation for future generations. The proposed Finger Lakes Museum will bring together the story of the region and advance the Finger Lakes “brand” as a destination for visitors. The museum will have a central campus located on Keuka Lake and satellite programs throughout the region. Once completed, the museum will consist of a 43,000 square foot museum building, 150,000 gallon aquarium, 20,000 square foot research and education center, exterior exhibit space, a 10-acre event area, and recreational and interpretive resources.

The museum is in the process of launching Phase I of this project, which entails the redevelopment of the Branchport Elementary School into a Research and Education

Center and site improvements at the Keuka Lake State Park campus. Total cost for Phase I is estimated to be \$6.8 million. Future phases include construction of the primary museum, aquarium facilities, additional site improvements, and the development of educational and recreational programs and visitor amenities at the Keuka Lake Campus and satellite locations. Total capital costs for the project are estimated to be \$58.3 million.

Once completed, it is projected that the Finger Lakes Museum will attract an average of 129,000 visitors per year. Construction of the campus is estimated to create 330 jobs. The museum will employ 37 full time employees and it is estimated that the region could experience a sustained economic benefit of \$10 million per year and add more than 63 jobs in the tourism, education, service, retail, and hospitality sectors.

The Finger Lakes Regional Economic Development Council recommends \$2.5 million in funding support for the Finger Lakes Museum project. This initiative supports the region's Tourism and Arts strategy.



Direct Job Creation	37																						
Spillover/ Catalytic Impact	The Finger Lakes Museum will enhance the region’s ability to attract visitors from outside the region and extend stays for those who already visit the Finger Lakes. The growth in visitation stimulated by the museum will increase sales and employment at service providers – restaurants, lodging facilities, transportation service providers, and retailers. To the extent that the museum can bring new visibility to the region and encourage additional visitation to other destination attractions – particularly the region’s wineries – ultimate job growth could be substantial.																						
Total Cost	\$58.3 million																						
1st Year Council Recommendation	\$2.5 million																						
Lead Organization	The Finger Lakes Cultural and Natural History Museum, chartered by the New York State Board of Regents, is a 501(c)(3) not-for-profit.																						
Status/Commitments	A Letter of Intent has been signed with New York State Office of Parks, Recreation, and Historic Preservation to locate the museum within Keuka Lake State Park. Market research and economic impact studies have been completed. Facility programming and schematic design for Phase 1 of the project is under way. Capital improvements have been made to the Branchport Campus property and an inaugural education program was successfully launched during the Summer of 2011.																						
Funding	<p>More than \$560,000 in private contributions has been received from over 600 individuals and groups. Private lenders have provided \$200,000 for property acquisition, and \$40,000 was loaned for initial facility improvements. More than \$250,000 in additional pledges has been committed.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$58.3</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$51.3</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$9.0</td> </tr> <tr> <td>Total non-state funds</td> <td>\$60.3</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$2.5</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$4.5</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$7.0</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>9:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$58.3	Project cost less New York State funds received & requested	\$51.3	Total five-year estimated revenue	\$9.0	Total non-state funds	\$60.3	Council grant recommendation	\$2.5	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$4.5	New York State funds received and requested	\$7.0	Leverage on New York State funds	9:1
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Project Timeline	The former Branchport Elementary School serves as a Research and Education Center for the museum with a goal of offering educational programming by the Fall of 2012. Construction is planned to start in the Spring of 2012.																						

Finger Lakes Health Collaborative

The Rochester Business Alliance (RBA) and the Finger Lakes Health Systems Agency (FLHSA) have brought together healthcare leaders, independent providers, physicians, insurers, community-based organizations, organized labor, representatives of local, state, and federal government, and business and community leaders to form the Finger Lakes Health Collaborative. This partnership will collaborate on region-wide initiatives that address public health issues on a community level and implement innovative strategies that will result in sustainable improvement in key health indicators. The collaborative – which currently consists of more than 100 leaders from 50 different organizations – aspires to make the Finger Lakes region the healthiest region in America by 2020.

The Finger Lakes Health Collaborative has identified and implemented several critical initiatives that focus on reducing healthcare costs and improving health status. Early successes include: a generic drugs initiative, which has increased generic fill rates by 20 percentage points and saved more than \$490 million over five years; and the Rochester Regional Health Information Organization (RHIO), a secure electronic health information exchange that gives authorized medical providers access to information such as test results, lab reports, radiology results, medication history, and insurance eligibility. To date, more than 500,000 individuals have consented to have their medical information included in the system, which has been characterized by the Commissioner of the New York State Department of Health as the state's most advanced RHIO.

To build on these successes, the collaborative now intends to begin a series of public health initiatives. The first focuses on hypertension. An estimated 37 percent of the region's

population has high blood pressure. The goal of this initiative is to reduce the number of people with hypertension to 25 percent in five years, thereby decreasing rates of strokes, heart attacks, and kidney and heart disease, and potentially saving the Finger Lakes region an estimated \$8.5 million annually.

This initiative represents an opportunity for the community to test innovative approaches to impact critical healthcare indicators. For example, the project has already begun working with a number of urban churches to create a health advocate model that shows great promise in breaking down traditional barriers to healthcare access. This approach will be readily applicable toward future projects of the collaborative, such as adult obesity and diabetes.

The work of the Finger Lakes Health Collaborative will not only reduce costs and improve quality of life for residents in the region, but will also create a new approach to delivering primary care in a truly integrated community-based setting that can be replicated in other communities across the state and the nation.

The Finger Lakes Regional Economic Development Council recommends \$500,000 in funding support for the Finger Lakes Health Collaborative project. This initiative supports the region's Advanced Healthcare strategy.



Direct Job Creation	16																						
Spillover/ Catalytic Impact	A longstanding history of collaboration between business and healthcare in the Finger Lakes is key to the region’s demonstrated advantage in low healthcare costs, which improves the climate for business retention, expansion, and recruitment.																						
Total Cost	\$3 million																						
1st Year Council Recommendation	\$500,000																						
Lead Organization	The RBA and FLHSA will lead the Finger Lakes Health Collaborative, a consortium of providers, insurers, and business and community leaders.																						
Status/Commitments	The high blood pressure initiative has firm funding commitments from the Wegman Family Charitable Foundation, FLHSA, and the Greater Rochester Health Foundation.																						
Funding	<p>The Wegman Family Charitable Foundation has provided \$1.4 million. The FLHSA and the Greater Rochester Health Foundation have committed an additional \$1.1 million. Local insurers have pledged additional financial support and the collaborative currently has a grant proposal pending with the federal Centers for Medicare and Medicaid Services.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$3.0</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$2.5</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$0.0</td> </tr> <tr> <td>Total non-state funds</td> <td>\$2.5</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$0.5</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$0.0</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$0.5</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>5:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$3.0	Project cost less New York State funds received & requested	\$2.5	Total five-year estimated revenue	\$0.0	Total non-state funds	\$2.5	Council grant recommendation	\$0.5	Council tax credit recommendation	\$0.0	New York State funds received previously	\$0.0	Future New York State requests (known at this time)	\$0.0	New York State funds received and requested	\$0.5	Leverage on New York State funds	5:1
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Project Timeline	Upon receipt of state funding, the collaborative will hire 16 health advocates – trained medical professionals who work with at-risk individuals – and purchase 10 blood pressure kiosks. It is estimated that the health advocates will manage an annual caseload of 800 individuals with high blood pressure.																						

Midtown Redevelopment and Tower

The redevelopment of the former Midtown Plaza is a transformative project not only for downtown Rochester but for the entire region. To date, New York State has committed nearly \$56 million to prepare the Midtown site for development. The City of Rochester has provided \$50 million for acquisition of the site, infrastructure, and incentives for future development.

The Midtown project has a ten-year development plan that will break the site down into seven parcels by re-establishing an urban street grid. Once completed, the site will accommodate about one million square feet of office,

residential, hotel and retail space. The project is key to downtown Rochester's revitalization and will position the city for future growth.































The Midtown Tower is a signature component of the planned Midtown revitalization. The project involves the adaptive reuse of the former Midtown Tower into a focal point of commercial, office, and residential space. The project will help transform the site into a mixed-use area designed to attract a critical mass of residents, commercial activity, and amenities that will contribute to a vibrant work-live environment.

The Finger Lakes Regional Economic Development Council recommends \$2 million in funding support for the Midtown Development and Tower project. This initiative supports the region's Community Development and Infrastructure strategy.



Direct Job Creation	690 (new and retained) and 330 construction																						
Spillover/ Catalytic Impact	The Midtown property is critical to the revitalization of downtown Rochester and the project will catalyze additional renovation and construction. Preserving the vitality of the city's core will also stabilize and promote the larger regional economy.																						
Total Cost	\$73.5 million																						
1st Year Council Recommendation	\$2 million																						
Lead Organization	The City of Rochester owns the site and is directing redevelopment. The sale of the Midtown Tower has been approved by the Rochester City Council to a partnership between Christa Construction and Morgan Management.																						
Status/Commitments	The City of Rochester has committed \$6.7 million, New York State has awarded \$1.2 million, and \$5.4 million developer equity has been committed for the Midtown Tower project.																						
Funding	<p>The Midtown Tower is part of a \$101 million investment in the acquisition, demolition and redevelopment of the Midtown site. Remaining funding is budgeted in the city's capital improvement program for 2012–13 and 2013–14. To help finance private development at the Midtown site, the City of Rochester is pursuing: \$13.5 million of New Market Tax Credits through the U.S. Treasury and a \$16.5 million federal Housing and Urban Development Agency section 108 loan (approval pending). Bond financing of \$19 million through New York State Housing Finance Agency and a \$24 million mortgage are being discussed for the Midtown Tower, although formal applications have not been filed.</p> <table border="1"> <thead> <tr> <th>Leverage Calculation</th> <th>\$ millions</th> </tr> </thead> <tbody> <tr> <td>Total Project Cost (ESAIF only)</td> <td>\$73.5</td> </tr> <tr> <td>Project cost less New York State funds received & requested</td> <td>\$64.6</td> </tr> <tr> <td>Total five-year estimated revenue</td> <td>\$373.5</td> </tr> <tr> <td>Total non-state funds</td> <td>\$438.0</td> </tr> <tr> <td>Council grant recommendation</td> <td>\$2.0</td> </tr> <tr> <td>Council tax credit recommendation</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received previously</td> <td>\$6.9</td> </tr> <tr> <td>Future New York State requests (known at this time)</td> <td>\$0.0</td> </tr> <tr> <td>New York State funds received and requested</td> <td>\$8.9</td> </tr> <tr> <td>Leverage on New York State funds</td> <td>49:1</td> </tr> </tbody> </table>	Leverage Calculation	\$ millions	Total Project Cost (ESAIF only)	\$73.5	Project cost less New York State funds received & requested	\$64.6	Total five-year estimated revenue	\$373.5	Total non-state funds	\$438.0	Council grant recommendation	\$2.0	Council tax credit recommendation	\$0.0	New York State funds received previously	\$6.9	Future New York State requests (known at this time)	\$0.0	New York State funds received and requested	\$8.9	Leverage on New York State funds	49:1
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Project Timeline	The city has selected a lead developer for Midtown Tower, a consortium of Christa Development and Morgan Management. Predevelopment is underway and construction is projected to start in September 2012 with a target completion of September 2014.																						

Priority Project Implementation Matrix

Project	Lead Organization	Task	Year 1	Year 2	Year 3	Year 4	Year 5
USRG / ESAIF	USRG	Identify and relocate six cleantech companies to Eastman Business Park.					
NY-BEST Commercialization Center	NY-BEST	Complete renovations and purchase/install testing equipment.					
Finger Lakes Business Accelerator Cooperative	High Tech Rochester	Complete design, site selection, and construction of hub facility. Install video conference system at hub and satellite locations.					
Regional Internal Harvesting and Economic Gardening	GRE	Acquire BR&E software and build regional database.					
Golisano Institute of Sustainability at RIT	RIT	Finalize construction of GIS facility and install new equipment.					
University of Rochester Health Sciences Center for Computational Innovation	University of Rochester	Acquire hardware and make necessary capital improvements to data center.					
Seneca AgBio Green Energy Park	Seneca BioEnergy	Purchase equipment and expand facility to accommodate new companies.					
Finger Lakes Museum	Finger Lakes Museum	Complete conversion of former Branchport Elementary School into Research and Education Center.					
Finger Lakes Health Collaborative	FLHSA	Hire 16 health advocates to work with at-risk patients.					
Midtown Redevelopment and Tower	City of Rochester	Complete planning, design, permitting, and renovation of Midtown Tower.					

Excelsior Tax Credits

The Finger Lakes Regional Economic Development Council recognizes that tax credits are an important economic development tool, providing companies with the financial leverage needed to expand and hire new employees. The council proposes to optimize the New York State Excelsior Jobs Program in three important ways to accelerate job growth throughout the region.

First

The council recommends that tax credits be utilized by specific companies that have filed Consolidated Funding Applications. These companies are geographically dispersed and will generate an estimated 926 new jobs and \$41 million in new investments throughout the region. The council recommends \$5 million in Excelsior Tax Credits to support these companies, which include:

Sutherland Global Services (Monroe County)

400 new jobs, \$2.6 million investment

Large back office life-cycle management operation to expand in Rochester Technology Park. Project expenditures will include furniture and fixtures, training costs, and working capital.

Document Reprocessors of New York (Yates County)

200 new jobs, \$1.5 million investment

Document restoration and printing company to expand in Penn Yan. Project expenditures will include the purchase and renovation of an existing building, as well as the acquisition of equipment.

Confidential Building Products Company (Ontario County)

177 new jobs, \$24 million investment

Building products manufacturer that has been also considering other out-of-state locations. The project will include building and equipment costs.

Qualitrol Corp. (Monroe County)

63 new jobs, \$2.3 million investment

Electrical metering device manufacturing will expand existing building to accommodate new production operations.

Mabrouka Properties (Yates County)

44 new jobs, \$6 million investment

Company will manufacture and package various food products. Project expenditures will include building acquisition, renovations, and machinery and equipment purchases.

Kreher's Sunrise Farms (Genesee County)

12 new jobs, \$4.9 million new investment

Organic egg farm will construct a new poultry building.

AJL Manufacturing Co. (Monroe County)

30 new jobs, \$2 million new investment

Manufacturing company produces precision sheet metal fabrication and electromechanical assemblies for various high-tech industries. Project expenditures will include new production equipment and training costs.

Second

The USRG/ESAIF project will transform Eastman Business Park into a regional location for early-stage alternative energy and cleantech companies. Available space, affordable utilities, a trained and educated workforce, and proximity to world-class research facilities make this site a natural location to incubate these firms. These resources, coupled with the project's establishment of an aggressive innovation start-up capital fund, will initially produce six R&D firms and manufacturing companies eligible to utilize the Excelsior Tax Credits. The council projects that \$5 million in Excelsior Tax Credits will be required to support these companies.

Third

The Finger Lakes Business Accelerator Cooperative will create a region-wide "hub and node" system to offer services that will foster entrepreneurship and innovation. The council projects that this initiative will stimulate growth in at least 10 companies in such sectors as manufacturing, R&D, and software development. The council estimates that \$5 million in Excelsior Tax Credits will be required to support these companies.

Five-year Projects and Actions

The Finger Lakes Regional Economic Development Council has identified other priority projects and actions consistent with our strategic goals. The council will, when appropriate, pursue and develop these and other projects over the next five years. The council also recognizes that in the coming years other important opportunities will likely emerge and the region's strategic plan may need to be amended to include these projects.

Workforce Development

Finger Lakes Regional Workforce Development Center

An initiative led by the region's community colleges and involving other colleges and universities, K-12 school districts, state agencies, and the private sector to focus on middle-skills training.

Finger Lakes Academic Common Market

An initiative to improve the region's capacity to compete for the best students by capitalizing on the collective academic assets of the region's higher education institutions. Initiative will enable students to move more readily between and across institutions and grow programs through shared facilities.

Finger Lakes Veterans Institute

A collaborative effort among the region's colleges and universities to attract veterans and ensure that they have access to education, training, and rehabilitative support services.

Finger Lakes Community College Viticulture and Wine Facility

A proposal to create a dedicated education facility – which will include a working vineyard – to enable this highly successful program to expand and meet the urgent and growing demands for skilled workers by the region's vineyards.

Healthcare

Regional Comparative Effectiveness Database

A project that will leverage the region's highly successful regional health information organization – which has one of the highest participation rates in the nation – to design and evaluate new community-wide methods to improve health and reduce cost.

Academic-Industry Collaboration

Optics/Photonics/Imaging Hybrid Research and Commercialization Center

A proposal to create a center based on a hybrid of the German Fraunhofer Institutes and the Deshpande Center for Technological Innovation at Massachusetts Institute of Technology that would foster closer academic-industry collaboration, with a focus on applied research.

Nano-Photonics Initiative

A consortium of the world's leading semiconductor manufacturers is exploring a partnership with the region's companies and universities to build out infrastructure and supply chain resources across the state to support the semiconductor industry. These partnerships will enable the industry to tap into the region's R&D and manufacturing strengths in optics, imaging, photonics, nano scale technology, and semiconductor design to develop the next generation of integrated circuits.



Industrial Development and Infrastructure

Kendrick Road Interchange – I-390 Southern Corridor Project

This is a multi-phase project that will make improvements to key interchanges that will ease congestion, improve safety, and enable several new private developments and planned expansions at the University of Rochester, RIT, and Monroe Community College to go forward.

Science Technology Advanced Manufacturing Park (STAMP)

This project seeks to develop a 1,340-acre mega-site in Genesee County – with access to industrial-scale energy transmission and within the Niagara Hydropower low-cost energy zone – that could serve to attract the next generation of nano-technology companies to New York State.

Portageville Freight Rail Bridge

This is a project to rebuild the rail bridge at Portageville over the Genesee River to accommodate greater rail car weights and speeds. The current bridge represents a bottleneck in the state's freight rail transportation network.

Mill Seat Power Plant

The project consists of a proposed expansion of the methane-fueled power plant located at a landfill in the Town of Riga in Monroe County and new infrastructure to connect the plant to 130 acres of county-owned land suitable for commercial development. The project will provide companies that locate there with low-cost heating and air conditioning.

Community Development

Inner Loop East Transformation Project

This is a \$22 million project that will eliminate a 2/3-mile segment of the Inner Loop between Monroe Avenue and Charlotte Street in Rochester and replace it with a proper city street. The project will increase traffic safety, reconnect thriving east side neighborhoods, and create nine acres of land for mixed-use redevelopment.

Canandaigua Waterfront Redevelopment

This project will develop 33.5 acres of land adjacent to Kershaw Park on the north end of Canandaigua Lake for mixed use.

Mt. Hope College Town

This project will redevelop a 16-acre parcel of University of Rochester property immediately adjacent to its medical center and create 500,000 square feet of commercial office, retail, and residential space. The project – which will also include a hotel/conference center, fitness center, and parking/transit facility – is projected to create 486 jobs.

Port of Rochester Public Marina and Mixed Use Development

This is a two-phase \$30 million marina project to redevelop the Port of Rochester area in order to enhance public waterfront recreational facilities and encourage and support private development.

Small Business Rural Value-Added Strategy

This is a three year, \$1 million project that will enable PathStone – a regional Community Development Financial Institution – to lend to value-added agriculture and natural-resource-related businesses and fund additional support staff to provide outreach, small business training, and technical assistance.

Lake Ontario Waterfront Access

Several communities along Lake Ontario shore will require dredging operations in the next few years. This is necessary to support access to the lakes and related waterways which, in turn, supports the service industries for recreational boating and fishing.



Penn Yan Waterfront Development

This project includes a mixed-use Brownfield redevelopment consisting of roughly 170,000 square feet of retail, office, restaurant, hotel, and residential space on a 14.7 acre site located at the north end of Keuka Lake and immediately adjacent to historic downtown Penn Yan.

Lyons to Port Byron Canalway Trail

This project will extend the Erie Canalway Trail along a 30-mile segment between the towns of Lyons and Port Byron. The gap – which passes through the Montezuma National Wildlife Refuge – is the longest existing break in the trail and the project will improve continuity of the system and enhance the visibility of and stimulate use of services in the communities along this stretch of the canal.

Tourism and the Arts

Seneca Art and Cultural Center at Ganondagan

This project proposes a new facility at the Ganondagan State Historic Site that will consist of education, exhibit, archival, and guest services space, allow year-round visitation, and enable the site to accommodate larger groups.

Finger Lakes Boating Museum

This project is a proposed new museum and visitors' center on the north end of Seneca Lake that will house the museum's extensive collection of boats, artifacts, and archival material related to Finger Lakes boating history.

Bristol Mountain Resort Base Area Redevelopment

This project will continue the redevelopment of the ski facilities at the resort – one of the region's premier recreational destinations – through the expansion of the base lodge and other guest facilities.

Temple Building Sanctuary Redevelopment

This is a project to renovate the neo-gothic Temple Building in Rochester to create a mid-sized theater of 1,200 to 1,500 seats that will serve as a venue for events – such as the Xerox International Jazz Festival – and be a permanent performance space for the Empire State Lyric Theatre, Rochester's only professional opera company.

Antique Wireless Museum and Research Campus

This project entails the construction of a 10,000 square foot museum in East Bloomfield to preserve and display the Antique Wireless Association's 10,000 piece collection of radio history. The facility, which is anticipated to be completed in 2013, will also include a 60 seat theatre for school and adult education.

Canandaigua Lake Water Trail

This project – sponsored by the Finger Lakes Land Trust, Canandaigua Lake Watershed Alliance, City of Canandaigua, and Finger Lakes Visitors Connection – will consist of a recreation trail that highlights the natural resources of Canandaigua Lake. The trail will include boat launches and pull outs, interpretive signage, and provide waterway connections to resources at the south and north end of Canandaigua Lake.

New York Wine and Culinary Center Improvements

This project will upgrade the center's hands-on-kitchen facilities to commercial grade food preparation and processing. The new facilities will train culinary students in partnership with Finger Lakes Community College and RIT. The upgraded facility will also provide needed space and contemporary facilities for preparation and promotion of New York State's agricultural and food processing industries.



Advanced Manufacturing

Upstate New York Contract Manufacturing Alliance

Led by RIT's Center for Integrated Manufacturing Studies (CIMS) and the Rochester Tooling and Machining Association, this project will leverage the existing manufacturing capabilities and capacity of the region's small and medium-sized companies in a collaborative effort to capture large contracts.

Finger Lakes Manufacturing Collaborative

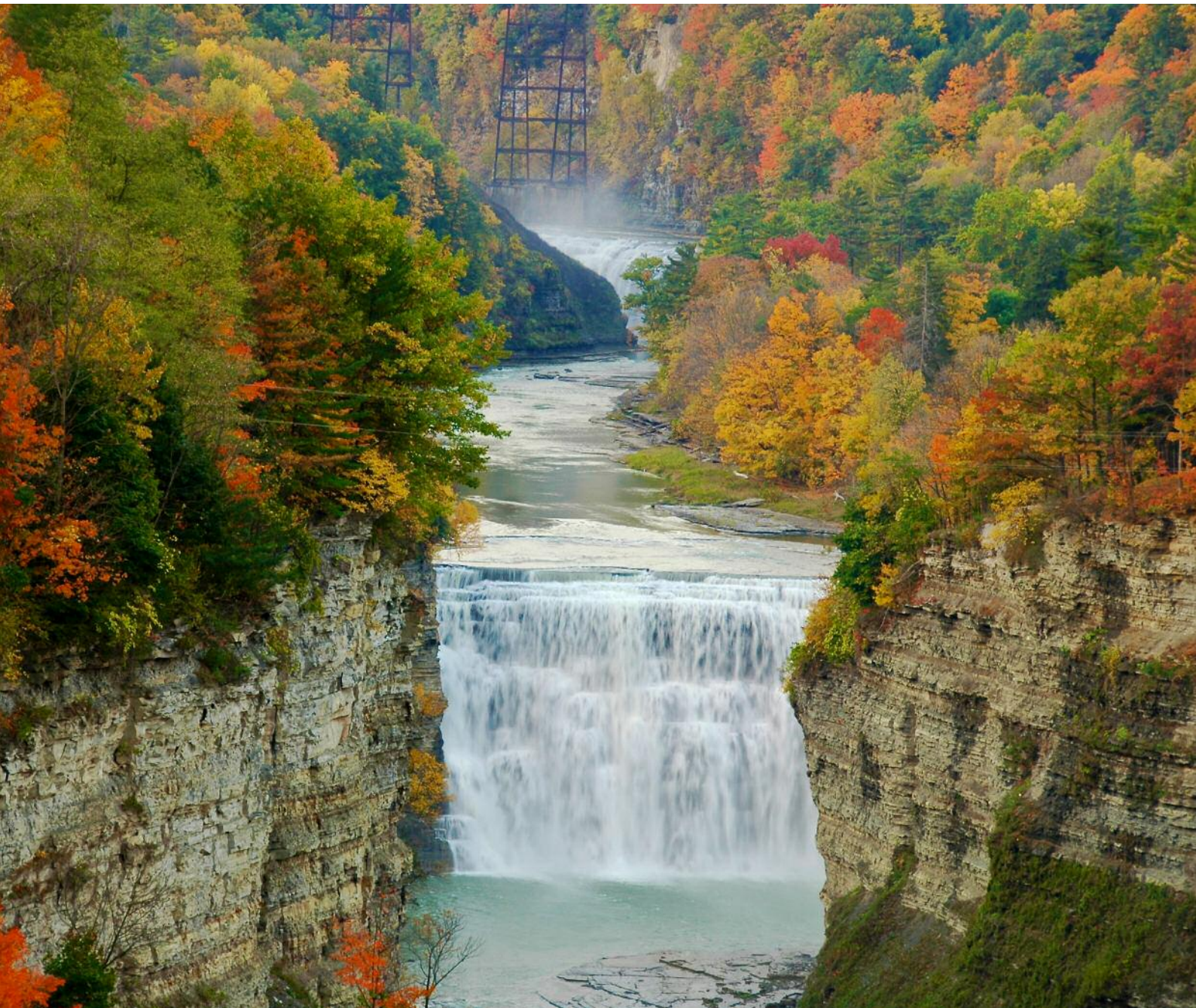
Led by RIT CIMS, this project will stimulate innovation, provide competitive knowledge, and promote cleantech business development.

ONGOING PUBLIC ENGAGEMENT

The Finger Lakes Regional Economic Development Council anticipates that over the next five years it will need to meet at regular intervals to re-evaluate and potentially revise this strategic plan and review the performance measures detailed below. The council will ensure that a portion of these meetings is open to the public and the media. The council will also continue to coordinate on an ongoing basis with stakeholders and regional planning organizations to align the council's recommended actions with other regional economic initiatives. Any changes to this document will be made available for public review and comment and public forums will be held as warranted.



Performance Measures





The strength and vitality of the Finger Lakes economy rests in its diversity and its capacity to provide a livelihood for current and future residents. Job creation is central to this goal. Quality of life issues are also critical, not only for their impact on the daily lives of residents but also in support of business development and retention.

The Finger Lakes Regional Economic Development Council will issue a public “State of the Finger Lakes Economy” report each year that summarizes key trends, particularly progress on the performance measures described below.

Accelerate Job Creation

By implementing the strategies developed by the council, the region seeks to outperform the national economy in three respects:

- Total year-over-year net employment growth as measured and reported by Economic Modeling Specialists Inc. (EMSI)
- New establishments as a share of established firms as measured and reported by EMSI
- Formation and expansion of minority- and women-owned business establishments (W/MBE) as reported in the National Establishment Time-Series (NETS) database.

Strengthen Region's Quality of Life

A key characteristic of the Finger Lakes region is its high quality of life. Although quality of life is perhaps most strongly influenced by access to job opportunities, a range of issues contribute, particularly access to healthcare.

- In 2009, 7.9 percent of the Rochester MSA's population was not covered by health insurance compared to 11.4 percent statewide (U.S. Bureau of the Census). By implementing the strategies in this report, the council believes the Finger Lakes region will retain its relative advantage over New York State in this regard.
- Quality of life is influenced by the quantity and quality of jobs created in the region. In 1980, the Rochester MSA's earnings per job were 112 percent of the national average and nearly equal to the New York State average (98 percent). By 2010, earnings had fallen to 93 percent of the national average and 72 percent of the New York State average. This trend is a direct result of the changing size and structure of regional manufacturing. Based on recent trends and the initiatives articulated in this plan, the council is optimistic that this trend can be stopped and that Finger Lakes earnings per job can be kept at a constant or increasing proportion of U.S. earnings per job (measured by the EMSI data set).
- Participation in the region's many cultural and recreational opportunities is one indicator of access and opportunity. The council believes that the region will maintain or increase total visitation as reported by the Rochester Business Journal (RBJ). For 25 of the largest cultural attractions in the region the RBJ reported 4.2 million participants in 2010.
- Maintain Rochester's health care cost advantage as reported by the Dartmouth Atlas for Health Care and the Milliman Inc. report to the Institute for Healthcare Improvement.
- One method to measure community appeal or satisfaction is to ask individuals how likely they are to recommend it to someone else. This measure, which is called a "net advocate" score, was derived from a survey conducted on behalf of Wegmans Food Markets in which individuals were asked: "how likely would you be to recommend your community to friends, family or co-workers?" The survey uses a 10 point scale. The net advocate score subtracts the share of detractors from promoters. In the most recent survey, Finger Lakes residents scored 55 – the highest of any region in New York State.

Accelerate Job Creation

Indicator	Finger Lakes: Status Quo	Comparison	Goal	Monitor
Annual growth in total employment	-0.2% (09–10)	-1.9% U.S.	Outperform	RBA & GRE
Annual growth in establishments	0.7% (09–10)	0.0% U.S.	Outperform	RBA & GRE
Annual growth in W/MBE establishments and employment (use NETS data—acquisition of NETS database is part of Economic Gardening proposal)	n/a	n/a	Outperform	RBA & GRE

Strengthen Region’s Quality of Life

Indicator	Finger Lakes: Status Quo	Comparison	Goal	Monitor
“Net Advocate” score, as measured by Wegmans	55	n/a	Increase	FLREDC
Share lacking health insurance coverage (7.9% in FL compares to 11.4% in all NYS)	69% of NYS	Statewide average	Maintain advantage	FLHSA
Earnings per job (average fell below national as high wage jobs replaced with lower wage jobs—goal is to increase relative position)	93% of U.S.	National average	Maintain advantage	RBA & GRE
Participation in culture/recreation	4.2 million participants	n/a	Increase	Finger Lakes Tourism
Age-Sex-Race Adjusted Medicare Spending Per Beneficiary	78%	National average	Maintain advantage	FLHSA
Commercial Insurance: Per member per month outpatient cost	75%	National average	Maintain advantage	FLHSA

Priority Project Evaluation

The Finger Lakes Regional Economic Development Council will annually review progress on the priority projects articulated in this strategic plan. These reports will include the status of each project and milestones achieved, the number of jobs created or retained, and spill-over impact (if feasible). The council will also evaluate the degree to which these projects advance the specific regional and sector strategies set forth in this plan and use this information to make modifications to the plan if necessary. This information will also be released in conjunction with the State of the Finger Lakes's Economy report. In addition to this data, the council will also measure the progress of each priority project at year five on the following specific key performance goals:

Indicator	Five-Year Goal	Monitor
Eastman Business Park (ESAIF, NY-BEST)	1,400 jobs	GRE
Finger Lakes Accelerator Cooperative	125 new firms 1,000 jobs	High Tech Rochester
Regional Internal Harvesting and Economic Gardening	500 jobs	GRE
Golisano Institute for Sustainability at RIT	Sponsored research (new and retained over 5 years): \$70 million	RIT
University of Rochester Health Sciences Center for Computational Innovation (URHSCCI)	Sponsored research (new and retained over 5 years): \$100 million	University of Rochester
Finger Lakes Health Collaborative	Reduce incidence of hypertension from 71.7% to 68%	FLHSA
Seneca AgBio Green Energy Park	60 jobs	Seneca County IDA
Finger Lakes Museum	130,000 visitors	Finger Lakes Tourism
Midtown Redevelopment and Tower	80% of leasable space under lease	City of Rochester

Sector Performance Measures

The Finger Lakes Regional Economic Development Council will also evaluate progress over the next five years in key clusters. The council will ask the work groups associated with each cluster to monitor and report the following goals annually.

Indicator	Five-Year Goal	Monitor
Higher Education	Maintain market share of New York State enrollment Increase sponsored research	Higher Education Work Group
Healthcare	Maintain cost and quality advantage	Advanced Healthcare Work Group
Agriculture & Food Processing	Increase number and employment of food processors	Agriculture and Food Processing Work Group
Tourism and the Arts	Increase visitation	Tourism and the Arts Workgroup
Advanced Manufacturing	Increase market share of advanced manufacturing employment in New York State	Advanced Manufacturing Workgroup
Optics, Photonics and Imaging	Increase market share of sector employment in New York State	Optics, Photonics, and Imaging Workgroup
Energy Innovation	Increase number of establishments and employment	Energy Innovation Work Group
Infrastructure and Transportation	Complete phases 3 and 4 of I-390 interchange project	Infrastructure and Transportation Work Group
Community Development	To be developed	Community Development Work Group
Entrepreneurship and Innovation	Grow start-ups at faster rate than nation	Entrepreneurship and Innovation Work Group

Conclusion:

We have only just begun

The Fingers Lakes Regional Economic Council is grateful to Governor Cuomo and Lieutenant Governor Duffy for having begun the process of charting a fundamentally new approach to New York State's and our region's economic future. We are inspired by the opportunity to work with the state to accelerate what we believe is the revitalization of our region, a revitalization that is already well under way.

As a council, we have only just begun. We intend to meet during the next five years on an annual basis to review our progress under this strategic plan and to revise and improve the plan over time. Pivotal to these efforts will be an annual review by each work group of its economic cluster.

Early next year we will develop an approach for working with Finger Lakes governments, towns, and villages to achieve efficiencies and lower costs. We anticipate coordinating with the Cuomo administration on these efforts as the administration articulates its plans.

We benefitted immensely from grassroots participation in the development and review of our strategic plan. We intend to continue to publicly circulate council reports. The public, as always, will be invited to portions of all future council meetings.

Perhaps more than anything else, this strategic planning process highlighted to us the value of collaboration and partnership. By working together we strengthened bonds, were able to articulate a shared regional vision and plan, and galvanized potential investment in our region that we had not realized before was potentially achievable. For this, most of all, we are grateful.



