Regional Economic Development Council of the Southern Tier Greater Binghamton Innovation Ecosystem Initiative

The Greater Binghamton metropolitan area is the largest urban center in the Southern Tier, composed of three contiguous communities including City of Binghamton, Johnson City and Endicott. This area has a population of 200,000 and a shared workforce of more than 75,000. For more than a century it has functioned as an ever-evolving ecosystem sharing common waterways, transportation systems, county government, commerce, hospitals, social services, workforce and more. Once known as the Triple Cities, this area has a rich legacy of innovation with corporate giants such as IBM, Endicott-Johnson and Link. It was the birthplace of what we know today as "virtual reality." Over the past several decades, the area has survived an economic downturn resulting in job losses, vacant industrial and commercial space, pockets of poverty, aging housing stock, and blight along the main corridors.

Yet, the area is poised to become the new *Greater Binghamton Innovation Ecosystem* with the infusion of new public and private investment, the growing presence of a pre-eminent university, commitment by the communities to rebuild, and strong collaboration among the academic institutions and private industry to undertake research and development endeavors that will change the region, New York State, and the world. The Greater Binghamton Innovation Ecosystem ecosystem consists of three Innovation Districts (iDistricts), each anchored by a major Innovation Driver or Cultivator.

City of Binghamton iDistrict

Innovation Driver: The **Southern Tier High-Technology Incubator** under construction on Hawley Street in downtown Binghamton, is in a highly distressed area. Binghamton University, SUNY Broome and the regional economic development community are building the \$36M **Southern Tier High-Technology Incubator** to grow an entrepreneurial ecosystem that nurtures emerging companies. The incubator will provide the infrastructure needed for companies focusing on energy, electronics and health. Downtown anchor projects such as the Collier Street Commons project (mixed use), small-scale manufacturing and waterfront developments also are planned.

Endicott's Huron Campus and Urban Core iDistrict

Innovation Driver: A **Center for Advanced Manufacturing** will be established that builds on the existing Center for Advanced Microelectronics Manufacturing. The new center will create an infrastructure for advanced design, visualization, manufacturing for commercialization of new products for the region's transportation, medicine, energy, and glass and ceramics industries. The **Center** will include the EPIC 3D printing facility; a Center for Manufacturing of Functional Materials and Electronics on Flexible Substrates; a pilot plant for Microgrid Energy Generation, Storage and Conversion; and a Hybrid Powertrain Test Center. The iDistrict also includes the revitalization of the urban area along Washington Avenue, as well as enhancements in the highly distressed neighborhoods.

Johnson City Health and Cultural iDistrict

Innovation Driver: **The JC Health and Cultural** will incorporate the Wilson Memorial Regional Medical Center campus, the Binghamton University Health Science and Innovation Park, and cultural anchors, such as the Goodwill Theatre, now in Johnson City's blighted urban core. The Binghamton University Health Science and Technology Innovation Park will leverage construction of the \$60M School of Pharmacy and Pharmaceutical Sciences beginning in the fall of 2015. Through this initiative, a Healthcare and Training Initiative will be added, a Center for Regenerative Medicine will be created, a Biopharmaceutical Hub will be established, and the Binghamton Bio Foundry will be developed. The Health Science Park initiative will carry out fundamental and translational research into reversal of chronic conditions via regenerative techniques; accelerate research into new smart drugs; and conduct commercial development and pilot production of prosthetics, implants, tissues, and organs through advanced bio-manufacturing technologies. In addition the cultural venues will be enhanced and expanded, and investments will be made to upgrade the surrounding neighborhood and Main Street.

Partners and Investors

Anticipated local and regional private sector partners include i3 Electronics, GE, Lockheed Martin, Corning Incorporated, Raymond Corporation, GE, CAF, Alstom, BAE Systems, and Borg Warner. The scope of these partnerships range from paid usage of advanced equipment and laboratories to full collaborations to commercialize emerging technology. The Health Science Park, the Center for Advanced Manufacturing and the

Southern Tier High Technology Incubator will directly create jobs, together with jobs created by firms using their facilities. Negotiations are already underway with companies attracted by these iDistricts. One example is the proposal for Raymond Corporation to develop a demonstration facility in conjunction with the Hybrid Powertrain Test Center.

Transformative Outcomes

- Create 1,200 1,500 jobs
- Reverse urban outmigration
- Revitalize the Southern Tier's largest urban area through brownfield redevelopment, housing rehabilitation, façade and streetscape improvements and increased vibrancy though public art
- Become a national leader in an integrative approach to reversal of chronic conditions and regeneration
- Capitalize on the explosive job growth in 3D printing and additive manufacturing
- Become a magnet for investments in advanced energy technologies including energy storage, conversion and control technologies, and hybrid powertrains
- Through a consortium of academic and industrial partners, accelerate access to advanced manufacturing
 processes and equipment for firms needing low-cost, first-to-market competitive advantage; drive intense
 regional R&D into medical electronics, flexible imaging panels, RF/microwave components, flexible solar
 photovoltaics, super capacitors, and flexible battery technologies; construct green energy generation,
 storage, conversion and distribution space; and create a proving ground for testing performance, reliability,
 and durability of the energy generation and storage associated with hybrid powertrains
- Establish a cultural hub for the metropolitan area
- Create an enticing live-work-play environment to attract the brightest talent
- Advance New York's **Opportunity Agenda** by developing a responsive, highly qualified workforce that meets the evolving needs of area employers while addressing the needs of hard-to-place workers

Game-Changing Investments

- 1) Create a *Transform Greater Binghamton Fund* for site clearance, housing rehab, home ownership, and façade grants in mixed-use, in the highly distressed neighborhoods that surround the three iDistricts anchors. The tired factory homes from the Endicott Johnson era will be given new life as energy efficient, model 'Smart Homes' for a new wave or urban homesteaders.
- 2) Develop downtown and mainstreet anchor projects such as the Collier Street Commons project (mixed use) in downtown Binghamton, and revitalization of Washington Ave in Endicott and Main Street in Johnson City.
- 3) Create the *Health Science and Technology Innovation Park* and the *Center for Advanced Manufacturing*, and complete integration of the *Southern Tier High Technology Incubator* into the surrounding neighborhood.
- 4) Repurpose vacant commercial and industrial space for new business development, shared work spaces, and tech transfer offices.
- 5) Create cultural and recreational facilities that serve to bring attention to the districts and attract talent. Examples include the Greenway project that connects downtown Binghamton iDistrict with Binghamton University's main campus in Vestal via a bicycle-pedestrian path, waterfront tourism and recreational projects, and the Goodwill Theatre in Johnson City's Health and Cultural District.
- 6) Specialized jobs training programs such as one proposed by SUNY Broome for high-growth, high-wage "technician" sectors designed specifically to address the special needs and eliminate common barriers faced by hard-to-place workers and unemployed/underemployed adults.
- 7) Develop private sector market rate housing on abandoned Endicott Johnson factory sites and in empty commercial buildings in downtown Binghamton.
- 8) Aggressively recruitment pharmaceutical R&D and production companies, light manufacturing, and small-scale food processing.