



Economic Development Recommendations

Introduction

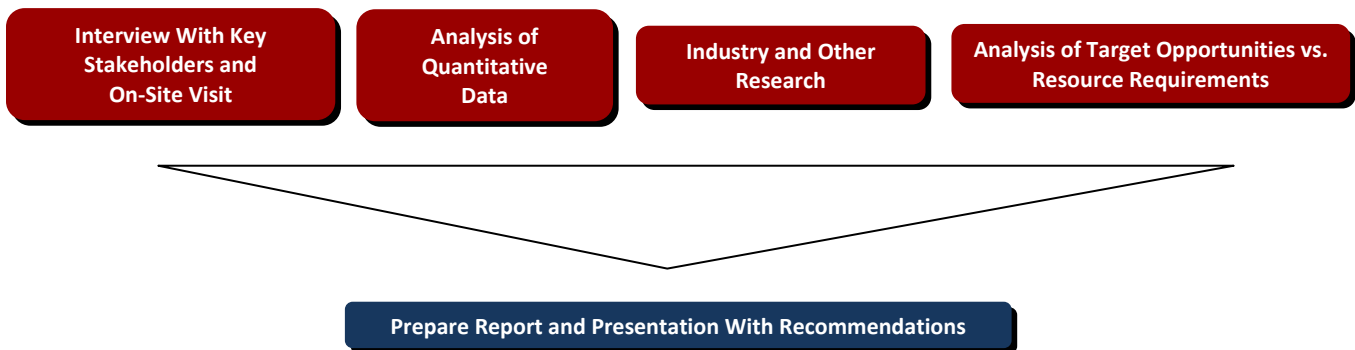
Broome County contracted with E.M. Pemrick and Company to prepare the Economic Analysis Component of the County’s Comprehensive Plan. The analysis is intended to update portions of a countywide economic development strategy, adopted in 2002, known as the BCPlan. Elements of the scope of work for the Economic Analysis included an economic profile of Broome County, a profile of the local workforce, a real estate assessment, a target industry analysis, and an incentive evaluation.

| Project Deliverables and Objectives | |
|-------------------------------------|---|
| Economic Profile | <ul style="list-style-type: none"> Assess current economic base, industry composition, and local/regional economic trends. Identify employment concentrations and growth industries. |
| Workforce Profile | <ul style="list-style-type: none"> Assess the existing and potential workforce. Analyze workforce commutation patterns and employment dynamics. Identify education and training resources. |
| Real Estate Assessment | <ul style="list-style-type: none"> Evaluate sites and buildings currently available for development or redevelopment. Identify gaps in Broome County's real estate portfolio. |
| Target Industry Analysis | <ul style="list-style-type: none"> Evaluate potential target industries for recruitment and expansion. Identify opportunities for economic growth and resources required by specific industries. |
| Incentive Evaluation | <ul style="list-style-type: none"> Review and assess local, regional, and state incentives to promote local economic growth. Evaluate the cost of doing business locally against peer locations. |

This introduction is intended to provide a brief summary of each of the five deliverables as background for the recommendations that follow. More detailed information can be found in the sections listed above.

Planning Process

The process used to prepare the Economic Analysis is summarized in the chart below.





The project team interviewed or consulted with business leaders, government officials, economic development and workforce development professionals, college and university representatives, and other stakeholders in Broome County. They included:

- Binghamton University
- Broome Community College
- Broome County Department of Planning and Economic Development
- Broome County Industrial Development Agency
- BAE Systems
- City of Binghamton
- Jeff Davis, Health Care Consultant
- Delta Engineers
- Empire State Development, Southern Tier Regional Office
- Endicott Interconnect Technologies
- Greater Binghamton Chamber of Commerce
- Hinman Howard and Kattel
- Huron Real Estate
- Johnson Outdoors
- Lockheed Martin
- Lourdes Hospital
- MATCO Electric Company
- NYS Department of Labor
- NYSEG
- Newman Development
- Security Mutual Insurance Company
- Town of Union

The project team compiled and assessed quantitative data from multiple sources; evaluated economic development resources including labor, real estate, education and training, utilities, and incentives; and conducted in-depth research to understand market trends impacting the future growth of potential target industries.

Perspective on the Local Economy

The historic development of the Broome County economy can be attributed in part to the success of a handful of talented entrepreneurs and inventors. Through the completion of the Chenango Canal connecting Binghamton with the Erie Canal in 1837 and the development of the railroad a few years later, businesses in the County took advantage of access to major markets, distributing such products as shoes and cigars, as well as a variety of agricultural products. As the local population grew, a hospital was established in the City of Binghamton and other services soon followed.

Broome County became a hotbed of innovation in the 20th century. The computer and electronics industry started with the Bundy Manufacturing Company, which became International Business Machines (IBM) in the 1920s. The company continued to expand in Endicott and eventually opened facilities around the world. The flight simulation industry was first developed in the County by Edwin Link with the introduction of the first flight trainer in 1929. Innovations were also introduced by such companies as General Electric and Lockheed Martin. The tradition of innovation in the area is reflected in the R&D activity at Binghamton University and in the patenting activity that continues today.

Currently, the largest employers in Broome County include local and state government, educational institutions, hospitals and other service providers, manufacturing and distribution companies, wholesalers, retailers, banks, and insurance businesses. Although Binghamton University has nearly 5,500 employees and

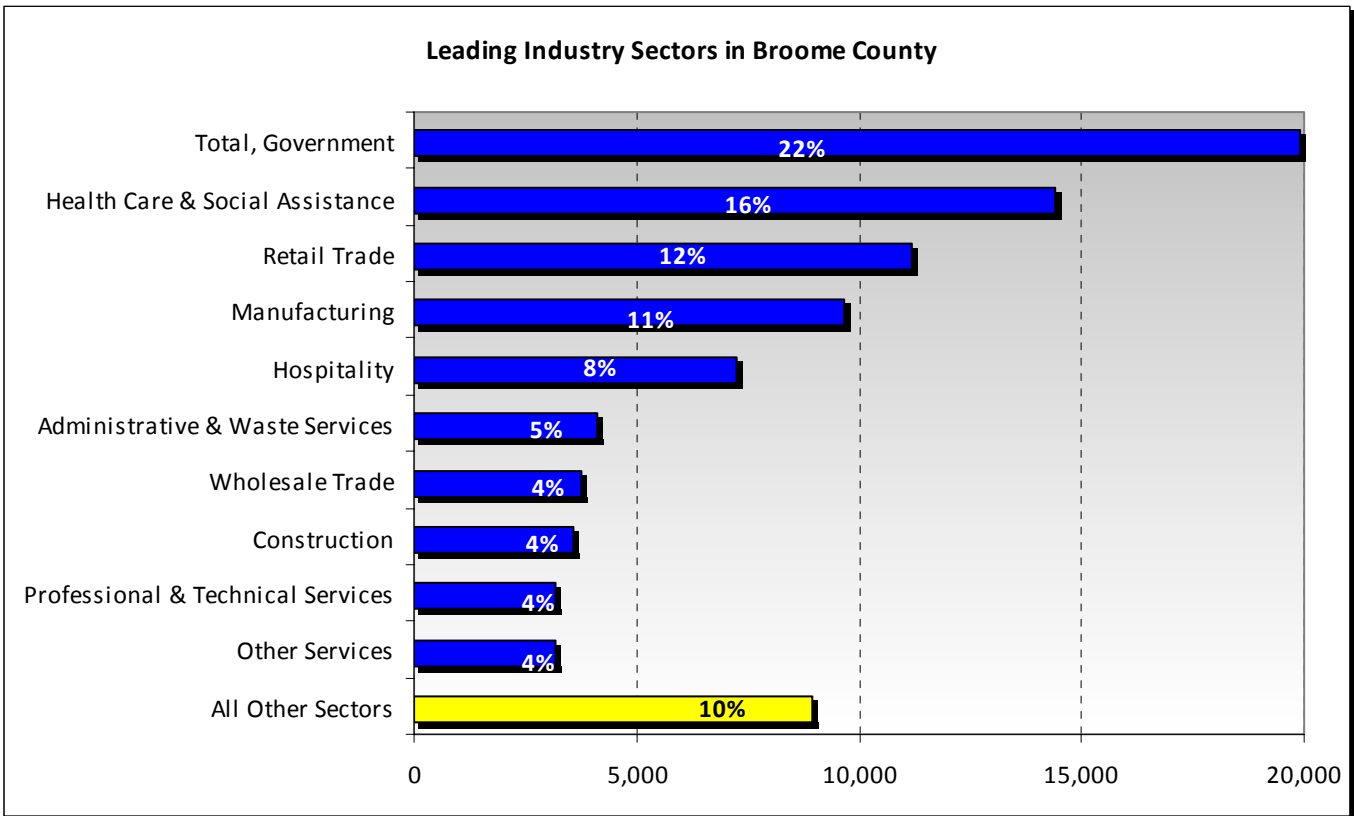


about a dozen companies have 1,000 or more employees, approximately 95% of the private establishments in the County have less than 50 employees.

Over the last two decades, employment levels in the Binghamton MSA have declined precipitously. Between 1990 and 2011, the region experienced a net loss of more than 10,000 jobs. Nowhere is this decline more apparent than with respect to the manufacturing sector: In 1990, 28.6% of the private sector employment in the Binghamton MSA was in manufacturing; by 2011, the share had declined to 12.6%.

In contrast, employment in the service sector increased by 7,300, or 12.4%. Education and health services led the net gain in Binghamton MSA employment, adding 3,700 jobs between 1990 and 2011. However, it was not nearly enough to make up for the losses in higher-paying manufacturing jobs.

After government, the largest industry sector in Broome County is health care and social assistance, with 16% of total employment. Retail is the next largest sector, followed by manufacturing, with 11%. Within the manufacturing sector, computer and electronics manufacturing accounts for the largest number of jobs. In fact, 7% of the state's nearly 62,000 computer and electronics manufacturing jobs are in Broome County, while 13% are in the Binghamton metro area.



A *location quotient* (LQ) is a simple tool used to measure industry specialization, using the U.S. as a benchmark. It is essentially a ratio that compares an industry's share of total employment in a region to the national share. A value of 1.00 demonstrates that the share of employment in a particular industry is roughly



the same both locally and nationally. An LQ *greater* than 1.00 indicates that the local area is more specialized in that industry relative to the U.S.; it suggests an export industry that brings income into the region. As a rule of thumb, location quotients of between 0.80 and 1.20 are not considered significantly different from 1.00.¹

The table at right presents location quotients for selected industries and industry sectors. As the table indicates, only two industry sectors in Broome County have LQs that exceed 1.20: manufacturing and health care. The County has high levels of employment concentration relative to the nation in the production of computers and electronic products, electrical equipment, and fabricated metal products. Local employment is also more concentrated than the nation with respect to hospitals, wholesale trade in nondurable goods (e.g., grocery products), and nursing and residential care facilities.

| Selected Location Quotients by Industry, Broome County | | | |
|--|-------------|---------------|-----------------|
| Description | LQ | Jobs | Avg. Wages |
| Manufacturing | 1.28 | 9,678 | \$58,789 |
| Food Mfg | 0.90 | 847 | \$44,178 |
| Fabricated Metal Product Mfg | 1.32 | 1,148 | \$39,351 |
| Machinery Mfg | 1.01 | 692 | \$66,426 |
| Computer and Electronic Product Mfg | 6.35 | 4,532 | \$75,569 |
| Electrical Equipment Mfg | 3.38 | 795 | \$37,381 |
| Wholesale Trade | 1.04 | 3,746 | \$45,027 |
| Merchant Wholesalers Nondurable Goods | 1.65 | 2,067 | \$45,934 |
| Health Care and Social Assistance | 1.40 | 14,389 | \$41,360 |
| Ambulatory Health Care Services | 0.93 | 3,687 | \$57,652 |
| Hospitals | 1.86 | 5,613 | \$45,560 |
| Nursing and Residential Care Facilities | 1.33 | 2,719 | \$27,071 |

Source: U.S. Bureau of Labor Statistics, QCEW, and E.M. Pemrick and Company.

Notably, some of these industries pay annual wages that are higher than the Broome County average of about \$37,000. Because they serve as a source of high-paying jobs, they contribute disproportionately to the County economy whether or not they are the largest employers. This highlights the importance of retaining manufacturing employers and other types of businesses that pay high wages.

Another industry that serves as a source of high-wage employment locally is professional, scientific, and technical services (average annual wages are \$47,104). Nationally, professional services is one of the fastest-growing segments of the economy. In Broome County, most of the jobs in this sector are in computer systems design, architectural and engineering services, legal services, and accounting and bookkeeping.

Perspective on the Workforce

Broome County is a net importer of labor: more people commute *into* the County than *leave* the county for employment. More than two-thirds of those who work in Broome County live within the Binghamton MSA. Many workers travel from other metropolitan areas in upstate New York, including Syracuse, Albany-Schenectady-Troy, Rochester, and Buffalo-Niagara Falls. Approximately 5% of the local labor force is drawn from Pennsylvania, mostly from Susquehanna County to the south.

¹ More information on location quotients, including their shortcomings, can be found in the Economic Profile.



The decennial census shows that Broome County had 200,600 residents in 2010, with little change from 2000. Most surrounding counties also experienced stagnant or declining population levels. In general, the population trends of the last decade are projected to continue through at least 2020.

The prime working age population is considered to be the 25-54 age group; this is when the likelihood of labor force participation is highest. Of those living in Broome County in 2010, nearly 38% were between the ages of 25 and 54. Compared to New York State and the U.S. as a whole, Broome County has a lower proportion of residents between the ages of 25 and 54, and higher proportions of residents ages 55-64 and 65 and over.

Over the next ten years, the aging of the population will continue to have a dramatic impact on the size and composition of the workforce. With limited growth expected in Broome County, the working-age population will begin to comprise a smaller share of the population, as people now in the 55-64 age cohort start to retire.

Educational attainment levels in Broome County reflect, in part, the presence of a large state university center and a community college. According to the Census Bureau, 89% of County residents age 25 and older have at least a high school diploma or its equivalent and 26% have a bachelor's degree or higher. Nearly 12% have a graduate or professional degree. Among Broome County residents between the ages of 25 and 34, the proportion of the population with a four-year, graduate, or professional degree is more than 30%, and among those ages 35 to 44, it is 27.9%.

Compared to the U.S. as a whole, the Southern Tier has a higher concentration of its workforce in education, training, and library occupations; architecture and engineering; community and social services; and health care practitioners and technicians. Although engineers are employed by a broad spectrum of industries, many of these occupations are associated with key sectors of the economy, such as education and health care.

A recent report by the NYS Department of Labor on science and engineering (S&E) jobs found that the share of the regional workforce engaged in S&E occupations is highest in the Southern Tier. The Southern Tier workforce also has the highest proportion of engineers, physical scientists, and mathematical scientists than any other region. As the report noted: "S&E workers... help increase our capacity for innovation in the form of new goods, services, or processes. Moreover, as our economies become more knowledge intensive, workers with the right S&E skills will be in even greater demand." These workers represent a tremendous asset for Broome County and the region.

Based on data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program, the majority of those employed by private establishments in Broome County are of prime working age, between the ages of 25 and 54. The aging of the Baby Boom generation has led to an increase in the proportion of workers age 55 years and older, however. In 2000, 12% of workers in private industry in Broome County were age 55 and over, while nearly 21% are in this age group today.



As shown in the table at right, 16% of workers in private industry in Broome County are 55-64 and 4% are age 65 and over. Industry sectors with higher than average percentages of older workers include manufacturing, finance and insurance, and transportation and warehousing. More than one in four workers employed in the production of computers and electronics, machinery, and fabricated metals is age 55 and over.

Industries with a high proportion of workers approaching retirement age may need to plan for increased recruiting efforts and training programs to address

the loss of older workers and minimize the loss of institutional knowledge. Some job openings may remain vacant, with responsibilities shifted to other employees. Others may need to be filled by workers from other industries who can be retrained. Employers may also look to technology to reduce their reliance on labor.

Perspective on Real Estate

When local companies and businesses looking to establish a facility in the area evaluate real estate, among the factors on which they base their decisions are the *size, physical attributes, and cost* of the building or site; the ability to *secure additional space* or expand; access to *transportation and parking*; and the *availability, reliability, and cost* of utilities, including power, water and sewer, and telecom.

The *readiness* of a site is also critical, as it impacts the time required to get an operation up and running (affecting profitability). A shovel-ready site – one that has undergone all required environmental assessments, archaeological and soils surveys, traffic impact studies, site plan and subdivision approvals, etc. and is pre-permitted – reduces the risks that companies face in completing construction on time and within budget.

The Shovel Ready Sites Program started in New York, and has since been replicated by states that want to attract industry. More than 30 sites across the state have been Shovel-Ready Certified by Empire State Development (and over 100 are under review for Shovel-Ready Certification), but not one of them is in Broome County. Pennsylvania also has numerous sites that are shovel-ready based on similar criteria. This

| The Aging Workforce in Broome County | | | |
|--|------------------------------|-------------|--------------|
| | Pre- and Post-Retirement Age | | Total, 55+ |
| | 55-64 | 65-99 | |
| Manufacturing | 24.2% | 3.1% | 27.3% |
| Computer & Electronic Product Mfg | 28.3% | 2.5% | 30.7% |
| Machinery Manufacturing | 26.6% | 1.5% | 28.1% |
| Fabricated Metal Product Mfg | 22.6% | 5.1% | 27.7% |
| Finance and Insurance | 20.6% | 5.6% | 26.2% |
| Insurance Carriers & Related Activities | 22.5% | 6.2% | 28.7% |
| Transportation and Warehousing | 18.8% | 6.5% | 25.3% |
| Truck Transportation | 18.6% | 4.8% | 23.4% |
| Health Care and Social Assistance | 19.4% | 4.7% | 24.1% |
| Ambulatory Health Care Services | 19.4% | 5.6% | 24.9% |
| Hospitals | 21.0% | 3.6% | 24.6% |
| Social Assistance | 18.8% | 6.6% | 25.4% |
| All Private Industry Sectors | 16.4% | 4.4% | 20.8% |

Source: U.S. Census Bureau, Local Employment Dynamics Program.
For more information and additional industries, see Workforce Profile.



impacts Broome County’s overall competitiveness. Shovel-ready status provides a critical market advantage, as it sends the message that the community wants business growth and is willing to do what it takes to meet the real estate needs of prospective customers.

Smaller companies and those seeking “general space” typically look for available buildings for lease with an option to buy. Larger companies and those with specialized real estate needs will seek to purchase a shovel-ready site to minimize the construction time. Certain types of industries and operations have specific real estate requirements, which are presented in the Real Estate Assessment.

Although Broome County has a good inventory of available industrial buildings to support manufacturing operations, all are over 20 years and less than 20 feet in height. As noted in Cushman & Wakefield’s recent quarterly real estate report: “Market growth [in the Binghamton area] is critically restricted by the lack of availability of newer, functional high bay space...” Few developers are willing to take a risk and construct industrial buildings “on spec”; however, without any newer and appropriately designed product on the market, the chances of attracting businesses that want to lease an industrial building are limited.

A significant amount of office space is available in Broome County, however, at reasonable prices. According to Cushman & Wakefield, the average asking price for office space is about \$12.24 per square foot, reflecting typical rates in a tertiary market. Offices are located both in urban and suburban locations, with access to amenities and the benefit of being near a major university with business, engineering, and other talent as well as part-time labor. This is advantageous in attracting providers of professional and technical services and back office operations.





Perspective on Target Industries

The identification of target industries for Broome County considered a number of factors, as summarized in the adjacent diagram. These included:

- The historic presence of any industries to indicate any residual competencies.
- Current employment levels in and location quotients for specific industries and economic segments in the County.
- Market trends impacting the growth of specific industries.
- Industry focus at the state and regional levels.
- The availability of resources (e.g., labor, transportation access, sites and buildings) to support industry needs.



A summary analysis of each target industry, including industry presence in Broome County, overall industry trends, and local potential, begins on the following page. Additional information can be found in the deliverable report, Target Industry Analysis.

Among the trends affecting potential opportunities in the manufacturing sector, in spite of the long-term decline in manufacturing jobs in upstate New York, is reshoring. *Reshoring* is defined as the return of components/parts production and final assembly operations to the U.S. to serve the North American market. Key factors driving these operations back to the U.S. are summarized below.

- The cost of fuel is nearly four times what it was in 1995.
- Labor, real estate, energy and other costs in China continue to escalate.
- Variation in quality... unpredictable, costly, and even dangerous (i.e., with food, children’s toys).
- Supply chain inventory and pre-pay requirements adding additional costs and cash flow issues.
- Reduced product life cycles... smaller runs.
- Increased use of technology... concern about protection of patent rights.
- More opportunities for automation.
- Companies bringing R&D, engineering and production operations closer together.
- New strategies to produce goods near markets served.



| Target Industry Analysis Summary | | | |
|--|---|---|--|
| | Historic/Current Presence | Industry Trends | Local Potential |
| Health Care Services | <ul style="list-style-type: none"> Significant expansion over last 100+ years with the growth of both private and Catholic-affiliated hospitals and networks. Area has become a regional health care hub. Also includes nursing homes and long-term care facilities, physicians' offices, medical labs, etc. | <ul style="list-style-type: none"> Impacted by demographics (i.e., aging population), technology, and implementation of the federal Affordable Care Act. Anticipate significant investments in information technology and the way care is offered in the future. | Moderate. |
| Education | <ul style="list-style-type: none"> Broome Community College founded 1946, Binghamton University started as Harpur College in 1947; both have continued to grow in enrollment, scope of programs and reputation. | <ul style="list-style-type: none"> Plans to continue to expand program offerings, student enrollment, and research activity at Binghamton University. Broome Community College to expand as market drives needs and opportunities. | Moderate to high. R&D may support growth in other segments of the economy. |
| Manufacturing Electronics (next generation) Fabricated Metal Machinery Food Products Electrical Equipment Plastics/Rubber | <ul style="list-style-type: none"> Strong base of the local economy from the earliest days of the Industrial Revolution due to access to labor, transportation, raw materials and individuals with innovative ideas. Diverse industry sector with multiple employers and industries. Downward trend in employment in most manufacturing segments over last 20+ years, but high wage jobs remain. | <ul style="list-style-type: none"> Impacted by reshoring of selected manufacturing operations, demand for new food products (e.g., yogurts, locally-grown), commercial aviation/ aerospace industry, energy industry activities, and R&D activities at BU and Cornell. | Low to moderate. |



| Target Industry Analysis Summary | | | |
|---|--|--|---|
| | Historic/Current Presence | Industry Trends | Local Potential |
| Professional & Business Svcs Computer Systems Design Architecture & Engineering Legal Services Accounting/Bookkeeping Management Consulting | <ul style="list-style-type: none"> Government, manufacturing, education, health care, and other sectors have been major sources of demand for services over last 60+ years. Some companies serve a relatively large region, going into PA. Tracks other business activity in the county and region. | <ul style="list-style-type: none"> Impacted by business growth and economic activity (including large construction projects) in the service area. High-tech business development derived from R&D and shale gas activity may be sources of growth for legal, engineering, other professional services. | Moderate, if the overall economy grows. |
| Back Office and Customer Service Operations | <ul style="list-style-type: none"> A limited number of stand-alone back-office and customer service operations; in the past, companies like IBM had back-office functions as part of their operations. NCI plans to add 300 new customer service jobs at its Vestal service center. Access to college students who want to work part-time plus the overall availability and cost of labor are key assets. | <ul style="list-style-type: none"> A lot of consolidation and fewer back offices being built due to national downturn in financial service sector, but may be opportunities for customer service and collections serving a range of industries (e.g., utilities, telecom). | Moderate. |
| Warehousing & Distribution Wholesale Trade Transportation & Warehousing | <ul style="list-style-type: none"> A distribution center since the early days of rail transportation. Broome County is in a strategic location to serve New York and New England markets (though, northeastern PA is a major competitor). Multiple companies that distribute food products, paper, plumbing supplies, commercial equipment, etc. | <ul style="list-style-type: none"> Impacted mainly by overall population and business growth in the U.S. and in the region to be served. If the state approves drilling of shale deposits for natural gas, it could increase this segment significantly. | Low to moderate. |



| Target Industry Analysis Summary | | | |
|----------------------------------|---|---|-----------------|
| | Historic/Current Presence | Industry Trends | Local Potential |
| Data Centers | <ul style="list-style-type: none"> IBM maintained data centers in the area years ago. Several data centers in the Huron Campus, which has the capacity for additional operations. Research on energy efficient data center systems at Binghamton University may be an attraction. | <ul style="list-style-type: none"> Demand for digital data generation, management and retention continues to expand, and processing speeds and storage capacities continue to be in need. Companies seek locations that minimize the cost of operations while enhancing security. | Moderate. |

Perspective on Incentives

An *incentive* can be defined as any factor (financial or non-financial) that provides a motive for a particular course of action, or counts as a reason for preferring one choice over alternatives. In economic development, incentives may be used to mitigate competitive disadvantages that impact a company’s profitability, such as high energy costs or local property taxes. Incentives may also be offered to enhance local resources – for example, training to prepare workers for specific types of jobs, or extending a sewer line to serve an industrial site. Incentives also include grants or loans designed to create, expand, and attract companies and leverage private investment.

In general, local, regional, and state incentives seem to be adequate for most types of businesses. Major employers in Broome County are taking advantage of them. Financial resources for the purchase of fixed assets, inventory, and working capital are offered by multiple agencies, typically at competitive rates. However, there may be a need for financial assistance that does not require significant collateral (e.g., land and buildings) for start-up companies. Another issue is that many grant and loan programs have job creation requirements that are reasonable, but that may be difficult for small companies to fulfill.

The extent to which incentives can attract companies from outside Broome County, however, may be limited. The Allentown (Lehigh Valley) and Scranton areas, for example, are strong competitors. These areas have large inventories of sites and buildings suitable for various industrial and commercial uses, and offer aggressive leasing packages.

On the plus side, Broome County does have advantages in terms of both land and labor costs; annual median wages in the Binghamton area are, in many cases, less than in the Capital Region, the Hudson Valley, or eastern Pennsylvania. Moreover, the quality of skilled labor resources and the responsiveness of college and university officials to business needs are considered very good.



Broome County is less competitive when it comes to energy costs and property taxes (absent incentives). This can be a problem in attracting businesses and recruiting talent to the area, especially from other technology centers in the southern United States. However, property taxes may not be an issue for a company that leases space. Similarly, businesses that do not consume large amounts of energy may not be concerned about utility rates. There are multiple options available to high energy users through the state's Recharge NY Power Program, and NYSEG, as well as the NYS Energy Research and Development Authority (NYSERDA), that can significantly reduce energy costs.

Strengths and Weaknesses

Based on the analysis as well as feedback received during stakeholder interviews, the project team identified Broome County's strengths and challenges with respect to economic development (in no particular order). Some of these may seem intuitive. However, understanding the County's strengths is a necessary first step in defining its competitive advantages, characteristics that can be used to develop talking points to market the area for economic development. Similarly, understanding the challenges that Broome County faces helps to identify issues that should be addressed if possible, as well as inherent disadvantages that affect how the County stacks up relative to competing communities.

Strengths

- Proximity to major markets in upstate New York, the NYC metropolitan area, and New England.
- Geographic access via air, rail, and interstate highways; at the crossroads of I-81 and I-88.
- Diverse manufacturing presence (food products, plastics, metal fabrication, machinery, computers and electronics, electrical equipment, etc.).
- Industrial heritage and technical knowledge... continuing with innovation and patenting activity.
- Binghamton University: emerging as one of the top public universities in the U.S., with strong programs in engineering, business, nursing, and liberal arts.
- University-applied research in electronics and renewable energy.
- University-industry collaboration... close relationships with major employers in the region.
- Broome Community College: strong health sciences and engineering programs; well-regarded and responsive to business needs.
- Competitive labor costs.
- Availability of skilled labor and a strong work ethic (generally).
- Affordable housing and commercial/industrial real estate.
- Excellent health care systems that serve the local and regional population.

Binghamton University and Broome Community College are critical community assets. Both continue to pursue opportunities for growth: BU with the development of high-tech research centers to stimulate innovation and spin-off job creation; BCC with the creation of new facilities to house students from outside the County and accommodate an expanding hospitality program. The two institutions are involved with efforts to construct a high technology incubator in downtown Binghamton and are eager to contribute to Broome County's economic development.



- Abundant water supply.
- Strong agricultural community, new regional farmers market, and land for farming.
- Cultural and recreational opportunities; a growing arts scene.
- Natural gas resources in the Marcellus Shale that underlies the region.

Challenges

- Perceptions and realities of the New York State business environment: high income and property taxes, high level of unionization (albeit driven by government and utility workers).
- High electric power rates, especially relative to the southern U.S., with exceptions in the Village of Endicott and on the Huron Campus, where power is purchased directly “off the grid” at lower rates.
- Low recognition of Broome County and the Southern Tier among businesses and the general public outside the state, making it difficult to attract companies and individuals to the area.
- Too much focus on the economic and industrial losses of the past (“people are so caught up in the past, they can’t see the future”).
- Local media perpetuate a negative view of the region, hurting efforts to promote Broome County as a location for business and a good place to raise a family.
- Aging workforce... relatively high proportion of workers in manufacturing approaching retirement age.
- Educated young people leaving the area.
- Difficulty recruiting workers, especially young professionals, from outside the area; the Greater Binghamton/Broome County region is relatively unknown.
- Issues with wastewater treatment capacity; in areas served by the Binghamton-Johnson City Joint Sewage Treatment Plant, new requirements for sewer connections to reduce infiltration/inflow.
- Lack of sites at a high level of readiness to support business attraction and expansion.
- A lack of industrial buildings under 20 years old with the ceiling heights and column spans that today’s industrial users require.
- Limited developable/accessible land within the County due to wetlands, flood plains, steep slopes, rock outcrops, etc.
- Large supply of former industrial sites or brownfields that require environmental assessment, remediation, and other actions to facilitate redevelopment.



Critical Issues

As a result of the extensive review and analysis of Broome County relative to economic development, the project team identified five (5) critical issues that should be addressed.



Internal and External Communications: Communicating regularly with local businesses on the resources available to expand their operations and soliciting feedback on their needs. Ongoing dialogue with the business community and the public about the progress of economic development activities and resource development. Establishing communications with prospective companies and site selectors regarding the opportunities to locate a business in Broome County. In particular, there is a need for a single, comprehensive economic development web site for the Binghamton area.

Contemporary Real Estate at a High Level of Readiness: Having an inventory of shovel-ready sites and buildings in accessible locations to meet the needs of local and prospective companies and support business attraction and expansion efforts. With limited developable land in Broome County, future growth will depend on maximizing the use of existing industrial sites and redeveloping brownfields. The County needs to work in partnership with the private sector to assure that appropriate sites and buildings are available.



Addressing Business Needs at Every Stage in Life Cycle: Maintaining a high level of awareness of the resources required at each stage in a company’s life cycle (see below). From start-up companies that need seed capital to mature companies looking for ways to cut costs, Broome County should be proactive

in supporting and retaining local businesses and facilitating their growth. Equally important is recognizing the dynamics of business life cycles and the need to maintain a diverse portfolio of companies at various life stages.

Cost of Doing Business: Being aware that the cost of doing business in New York State and/or Broome County is a significant barrier for certain types of companies and looking for innovative ways to address or mitigate some of these costs. For example, although real estate in the County is relatively affordable, unusually high electric rates can be an issue for companies that are high energy users. If electricity cost reductions are not available through NYSEG, the County can direct companies to the Huron Campus (which purchases power “off the grid”) or let them know about state incentive programs for help companies increase their energy efficiency.



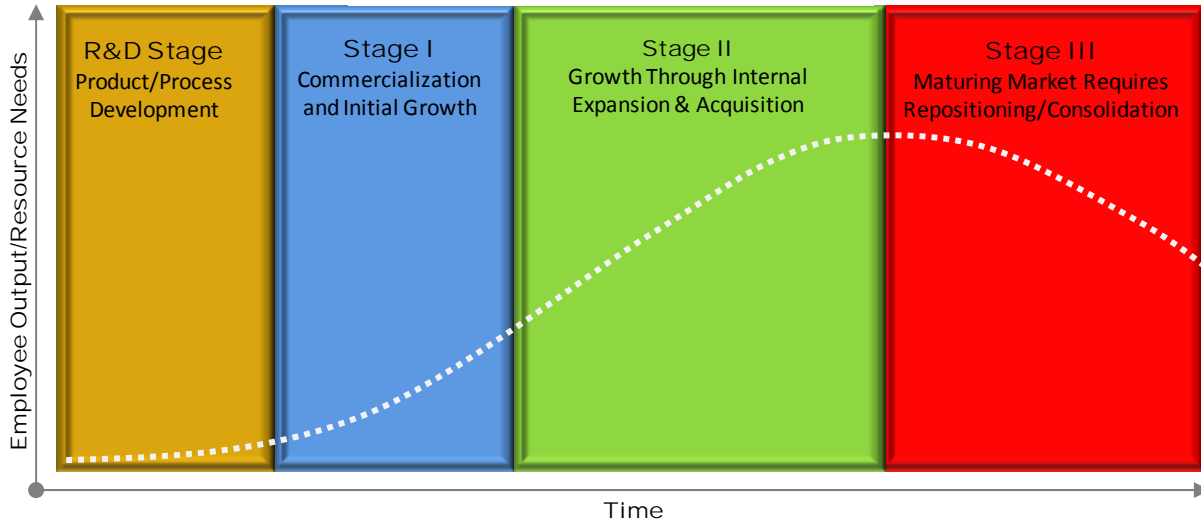
Aligning Residents With Job/Business Opportunities: Beginning with local middle and high school students, mechanisms should be put into place to communicate with residents of all ages about current and future career opportunities in the Binghamton area and their requirements. In addition, efforts are needed to engage college students in community activities and internships with local employers to increase the likelihood that they will stay in the region after graduation.



Business Life Cycles

Understanding the dynamics of business life cycles provides an insight into the needs and challenges that companies face over time. Business life cycles also explain why some companies show up in the area at one point and opt to leave later, and why many companies go out of business after a time.

LIFE STAGES OF ENTREPRENEURIAL COMPANIES



Assume, for example, that we are looking at a technology-based company. At the onset, the idea for a particular product is stimulated by a technological breakthrough and a small team struggles to roll out the new product and get it on the market. The product is a success and the business rapidly expands, either organically (internally) or through a merger with or acquisition by a complementary company. (If the business is acquired by a larger firm for strategic reasons, local business leaders lose control over certain decisions and the business may be relocated.)

The company continues to invest in R&D to enhance the product and sustain its competitiveness. After a time, the product matures due to competition or is overshadowed by a newer technology; at this point, the company may scramble to cut costs to stay in business.

The table below provides an overview of the initial R&D stage and each of the subsequent life cycle stages that a technology-based company typically goes through; note the change in activities and resources at each stage. The key question from an economic development perspective is how well Broome County, or any other community, can support a business at each stage in its growth.



| Factors Related to Each Life Stage of a Company | | | | |
|---|---|--|--|---|
| | R&D | Stage I | Stage II | Stage III |
| Key Activities | <ul style="list-style-type: none"> Develop a cutting-edge idea / technology Refine process techniques | <ul style="list-style-type: none"> Secure patents and licensing Clear government approvals Build initial market awareness and demand, distribution channels, and supply/sales contracts | <ul style="list-style-type: none"> Keep pace with market expansion Leverage technology to enhance productivity and improve product performance to sustain competitiveness Build strong brand image and customer loyalty | <ul style="list-style-type: none"> Gain market share Consolidate operations Look for low cost production locations Maximize productivity Reinvent new products or stay in harvest mode |
| Capital Needs | Grants, seed capital, angel capital | Loans and venture capital | Loans and other sources to fuel expansions without losing control | Loans to restructure operation (mostly internal financing) |
| Employment | 0 to a few employees | 1-9 employees | 10-99 employees | 100+ |
| Labor/Talent Needs | Technical/creative talent | Multi-task talent | Quantity and quality of labor available in strategic locations with market access | Low cost and productive |
| Real Estate Needs | Lab, office and pilot space within an R&D environment | Low cost product development, office and production space | Keep pace with business growth and need for strategic market access | Low cost |
| Leadership Style/Skills | Creative, innovative, perseverant, high-skilled | Flexible, high-energy, multi-skilled and multi-tasking | Transition to a span of control style with dispersed responsibilities | Optimization of shrinking operations |

Developing a more entrepreneurial culture that encourages innovation and promotes business creation requires a collective, sustained effort and includes:

- An environment that teaches critical thinking and supports taking reasonable risks. This starts in K-12 schools and transcends the entire community.
- Meeting places where entrepreneurs can go to share their ideas, projects and businesses on a daily basis. People talk about forward-thinking new ideas and business dynamics. There is a sense of intensity that goes beyond holding a job or running a “mom and pop” establishment.
- The celebration of new ideas through business plan competitions and shark tanks. Financial rewards are offered to develop plans into reality and get the business started.



- Ready access to mentors and low cost space and services to facilitate businesses moving forward.
- Business teams working together in a cross-functional manner to help multiple companies concurrently. This tends to occur once entrepreneurial activities have reached a tipping point.
- Awareness of the importance of entrepreneurs to the local economy by community leaders, economic development officials, and the public.
- Ongoing media coverage of entrepreneurial activity locally and regionally.
- A willingness to support promising business endeavors and make sure their success happens locally.



Recommendations: Business Attraction, Retention and Expansion

Some of the most critical functions of economic development include supporting the retention and expansion of existing businesses while providing support in the startup of new local businesses and engaging in the attraction of additional businesses to the area. The following recommendations are provided to facilitate these efforts.

1. Develop a business retention program to identify and address the needs of existing businesses in Broome County.

Business retention and expansion is one of the most important elements of a local economic development effort. To paraphrase an old adage, it is far easier (and less expensive) to retain an existing employer than to attract a new one. Existing businesses already have a stake in the community; it is in the County's best interest to retain them and help them succeed.

Currently, Broome County does not have a formal business retention program that regularly interfaces with employers. Actions needed to establish this program include:

- Developing and maintaining a database of Broome County employers with 10 or more employees, identified by industry. Because their needs are often overlooked, be sure to include small- to mid-sized and emerging businesses as well as major employers.
- Engaging in ongoing communications with employers, not only to inform them about potential resources to support their growth but also to learn about their specific needs. This can be accomplished through an electronic newsletter, posting information on a web site, regular face-to-face meetings with selected employers, roundtable discussions, and an annual web-based survey.
- Establishing a proactive team that can develop resources to support business growth and address issues. The team would be comprised of individuals from both the public and private sectors, including local and state economic development officials, workforce development staff, commercial brokers, bankers, representatives of funding agencies, and others.
- Establishing and strengthening relationships with senior officials of companies that are not headquartered in Broome County.

It has been mentioned that the existing revolving loan funds administered by the Broome County IDA are underutilized. The question is why: Are these programs being sufficiently marketed to local businesses? Is there some way to make them more appealing? Or are the revolving loan funds inadequate or inaccessible in some way (e.g., because of job creation requirements, or the significant collateral needed)? Economic development officials need to be regularly communicating with businesses in the area to find out about their specific needs and determine whether other programs or services are warranted.



2. Publicize economic development activities on a regular basis.

Internal communications are critical to a successful economic development effort. Until 2010, a quarterly Greater Binghamton Economic Development newsletter was produced and distributed by Broome County. The newsletter highlighted area economic development activities, including start-up and expansion projects, grants awarded, and program outcomes, and celebrated the success of local industries and employers.



This internal marketing effort should be revived to raise awareness of economic development in the County and combat the negativity of local media. The newsletter could be distributed directly to businesses and investors via e-mail and posted on the County website for the benefit of the general public.

3. Support the start-up of entrepreneurial businesses in Broome County.

Many of the great business success stories in the region began as small local start-ups such as Endicott-Johnson, IBM, and Link Simulation. The importance of supporting business start-ups is critical, but it should also be noted that start-ups can be divided into strategic categories that require different support approaches. For example:

| Type of Business | Method of Support |
|---|--|
| Consumer services: e.g., restaurants, retail, personal services | Typically, the business entrepreneur is directed to take a class in starting a business at the community college, develop a business plan, and work with a local bank to obtain an SBA-backed loan. |
| Business services for local and regional clients: e.g., legal, accounting, technical services | Made aware of available office space and offered networking opportunities through the chamber of commerce and other local/regional organizations. |
| Manufacturing and service businesses that bring cash flow into the community | <p>A business incubator (like the one being established in downtown Binghamton) is typically the vehicle to support these businesses, offering the following services and amenities:</p> <ul style="list-style-type: none"> ▪ Access to low-cost space that meets the functional needs of each business (office, lab, production, warehousing, etc.) and provides office services, accounting and legal support, marketing and IT support, and most importantly, access to grants, loans and investors. ▪ Access to business mentors and other similar/small business peers. |

The availability of support services is critical for entrepreneurial businesses. These companies should also be made aware of local/regional financial resources to avoid the prospect of outside investors taking them out of the region. It is also important to ensure that emerging businesses have the resources (e.g., labor, real estate, financing) they need to expand locally. The business retention program recommended above (under #1) can be used to facilitate these efforts. Regular outreach to start-up businesses can also help to identify gaps in services and find out what additional forms of support might be needed.



Resources currently available in Broome County to support entrepreneurship include the Entrepreneurial Assistance Program (EAP) offered at Broome Community College, the Small Business Development Center at Binghamton University, and Greater Binghamton SCORE. In addition, the Town of Union Local Development Corporation offers loans to encourage research and development in emerging fields and/or improve upon existing technologies. The Southern Tier High Technology Incubator planned for downtown Binghamton is expected to have a tremendous impact on the development of high-technology businesses, capitalizing on university-based research in the region.

Other initiatives that should be considered to support the start-up of entrepreneur businesses in Broome County include financing to support the growth of companies that “graduate” from the High Technology Incubator, and the development of a student-run investment fund offering seed capital or early stage financing for start-up companies. A number of college-based investment funds have been established to support high-potential start-ups.² Though not limited to companies within the university community, Cornell University’s BR Venture Fund invests up to \$250,000 in high growth companies in a variety of industries. A similar initiative could be developed on a smaller scale at BU or BCC.

A potential resource for Binghamton University is the National Collegiate Inventors and Innovators Alliance (NCIIA). Based in Massachusetts, the NCIIA supports “technology innovation and entrepreneurship in higher education to create experiential learning opportunities for students and successful, socially beneficial innovations and businesses.”³ Its membership is drawn from nearly 2,000 colleges and universities around the U.S. The organization offers training programs for educators and funding for courses and programs in invention, innovation and technology entrepreneurship, as well as financing, training, coaching, and investment for collegiate entrepreneurs. Syracuse University and SUNY Cortland are both members of the NCIIA.

Two events have been used to draw attention to entrepreneurial activity in Broome County. In Binghamton, an annual Business Plan Competition co-sponsored by the Binghamton Local Development Corporation (BLDC) and Broome Community College offers resources and support to aspiring business owners to start or grow their business in the City. This year’s winner received a \$5,000 cash grant from the BLDC, a \$5,000 advertising package from the *Press & Sun-Bulletin*, a one-year membership in the Greater Binghamton Chamber of Commerce, and a professional consultation in website design and Internet marketing consultation from RS WebWorks. Binghamton is also one of approximately 200 cities around the globe that has hosted a Startup Weekend, a weekend-long event during which people get together to pitch their ideas, form teams, and start companies. The event culminates with presentations to local entrepreneurial leaders and opportunities to receive feedback.⁴



² See “Students Fund Students: A Look at Campus-Based Investment Funds,” *Entrepreneur*, July 9, 2013. Accessed at <http://www.entrepreneur.com/article/227136>.

³ Website: <http://nciia.org>

⁴ More information on the Startup Weekend concept can be found at <http://startupweekend.org>.



As a long-term objective, Broome County may want to consider organizing a comprehensive, integrated network comprised of service providers, colleges and universities, business incubators, and other organizations that provide entrepreneurial support. The purpose of such a network would be to develop a seamless network of support that could be easily accessed, in person or online, by prospective and existing entrepreneurs. An entrepreneurship network could also be used to identify unmet needs, initiate joint projects, and develop a stronger culture of entrepreneurship in Broome County and the Southern Tier.

4. Develop a business attraction program to bring outside companies into Broome County.

One of the biggest challenges for economic development organizations is to reach out to companies looking to locate/expand their operations and attract them to their community. Although opportunities for business attraction were more limited during the recent recession, there has been an increase in activity based on the following examples:

- Food processing companies have been targeting New York State to establish operations related to the production of yogurt and other milk derivatives, craft beers, ethnic specialties (e.g., kosher, Hispanic), and other food and beverage items.
- There has been substantial activity just over the border in Pennsylvania in support of the growth of shale hydrofracking operations.
- Businesses are beginning to pull some of their production activity back to North America from China due to escalating labor and shipping costs, patent infringements, and other issues.
- Distribution operations continue to seek options for serving the northeastern U.S., given the limited land available for large box facilities and high costs in some locations.

Although Broome County has made and continues to make great strides in R&D and educational resources, it has a relatively low level of national awareness and attention among site selectors and business leaders. In addition, being in New York State – with its high taxes and high rates of unionization (although the unions are comprised mainly of public sector and utility employees) – results in a negative reputation that needs to be overcome. To address these issues, the County and the Southern Tier region should engage in marketing activities that promote their strong attributes in order to get on the “radar” of the national business community. Recommended actions include:

- Issuing an attractive quarterly e-newsletter that highlights positive economic development-related activities and successes in the region (e.g., R&D at Binghamton University, available resources at the Huron Campus, education programs, etc.).
- Inviting site selectors and major commercial brokerage firms to the Southern Tier via a paid familiarization (“fam”) trip, combining visits to companies, research facilities, and available real estate combined with some type of cultural or recreational activity.

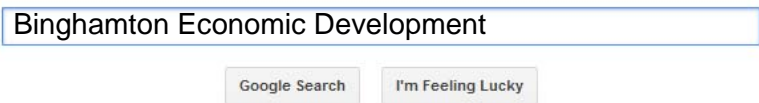


- Engaging site selectors to speak at regional economic development meetings and show them what is going on in the Southern Tier.
- Leverage industry influence points (such as technical consultants, business consultants, site selectors, and commercial real estate brokers) to gain access to companies within a given industry.
- Developing a Marketing Profile on the area’s resources and posting it on County and regional websites. Contents should include the most recent demographic data, a list of major employers by industry and level of employment, workforce statistics, education and training resources, maps, samples of available real estate, available incentives, quality of life information, etc.

5. Establish a single economic development website for the Binghamton area.

The Binghamton area needs one web-based point of interaction where prospective companies, site selectors, and other users can access the information they need in an expeditious manner. A single, comprehensive website that is regularly maintained and updated is preferred over multiple websites that each provide some information.

Today, simply *having* a web presence is not enough – the website must be filled with useful content.



Currently, a search on the term “Binghamton Economic Development” leads users to multiple economic development websites for Binghamton and Broome County. Local entries include the following:

| Site | Point of Contact | Comments |
|--|---|---|
| www.gobroomecounty.com/econdev (Broome County Economic Development Group) | Commissioner of Planning and Economic Development | <ul style="list-style-type: none"> ▪ Links to other local economic development sites and County GIS portal ▪ Community Profile from 2009 (quality of information will be suspect) ▪ Economic Development Newsletter from 2010 ▪ No other information provided |
| www.greaterbinghamton.com (Greater Binghamton Coalition) | Commissioner of Planning and Economic Development | <ul style="list-style-type: none"> ▪ Outdated; most content from 2008 and before ▪ Economic Development Newsletter from 2011 ▪ No information on incentives |
| www.bcida.com (Broome County Industrial Development Agency) | Executive Director / Staff | <ul style="list-style-type: none"> ▪ Active News section ▪ No property listings; links to Fast Facility search tool ▪ Some outdated content |



| Site | Point of Contact | Comments |
|---|--|---|
| www.binghamton-ny.gov/departments/economic-development/economic-development (Binghamton Office of Economic Development) | Director of Economic Development / Staff | <ul style="list-style-type: none"> ▪ Relatively up-to-date content on demographics, the regional economy, major employers ▪ Information on city incentives, with links to county and institutional websites ▪ No property listings |
| www.regionalcouncils.ny.gov/content/southern-tier {Southern Tier Regional Economic Development Council} | N/A | N/A |

Other economic development websites are maintained by the Town of Union, Binghamton University’s Office of Entrepreneurship and Innovation Partnerships, the Greater Binghamton Chamber of Commerce, and other agencies and organizations. However, these sites did not appear within the top 20 results of the Google search.

Components of the website should include:

- Listings of available (significant) sites and buildings, with property data that is easy to access and download/save⁵:
 - Location (address and map) and contact information
 - Past uses of the site/building, if applicable
 - Size, dimensions (ceiling height/column widths), type and age of buildings
 - Size, zoning, contiguous land uses, and level of readiness of sites
 - Access to GIS mapping software and parcel records from Broome County’s GIS portal at www.bcgis.com
- A current Marketing Profile (see previous recommendation).
- An overview of business resources and incentives, as well as workforce development programs.
- Quarterly e-newsletters referenced in #2 and #4 above and relevant news items.
- Links to other sources of information.
- Point(s) of contact for additional information (name, telephone number, e-mail address).

Periodically reviewing and updating the content of the website is imperative. Users are more likely to visit a website that is updated frequently. There are no hard and fast rules, but information on news and events which is more time-sensitive should be updated once or twice a month. Listings of sites and buildings should be reviewed monthly, or more often if commercial and industrial real estate activity picks up. Other site content, such as demographic and economic data, probably does not need to be updated more than once a year, but should be reviewed on a regular basis.

⁵ An excellent tool for finding available properties is North Carolina’s Access NC, an economic development intelligence system that helps users search site details, map out locations, and view business and demographic data. See www.thrivenc.com/accessnc/search.



Social media can be used to support both internal and external marketing, drive traffic to the website, and sustain relationships with employers, site selectors, educators, entrepreneurs, and other stakeholders. LinkedIn, Twitter and Facebook have been used effectively by economic development organizations, in part because they are widely used and open to diverse audiences. There may be value in other tools such as YouTube for presentations and online property tours. However, social media is often most effective as a follow-up to face-to-face meetings, fam trips, speaking engagements, or other activities. A Facebook page should not be used as a substitute for a content-rich and updated website.

A Few “Best-In-Class” Websites

Focus Central Pennsylvania

www.focuscenpa.org

Indy Partnership

www.indypartnership.com

City of Dayton Office of Economic Development

www.daytonohiobusiness.com



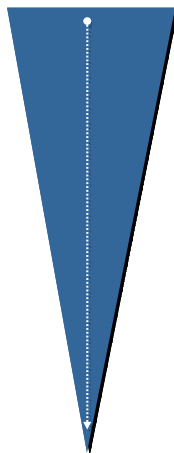
Typical Site Selection Process

Although the process may vary, the graphics on this page show how site selection consultants and companies typically select a business location. Phase 1 is the *feasibility phase*, in which the company defines its needs and, based on a hypothetical location, determines the cost advantages or challenges and the overall risks related to a location decision. Phase 2 is the *location selection phase*. First, the company and/or its consultant identifies and screens potential locations based on a set of predefined selection criteria.

The location screening process (Step 3) is shown in more detail in the chart below. Some locations are screened out; others are identified as top candidates and in-person visits are made.

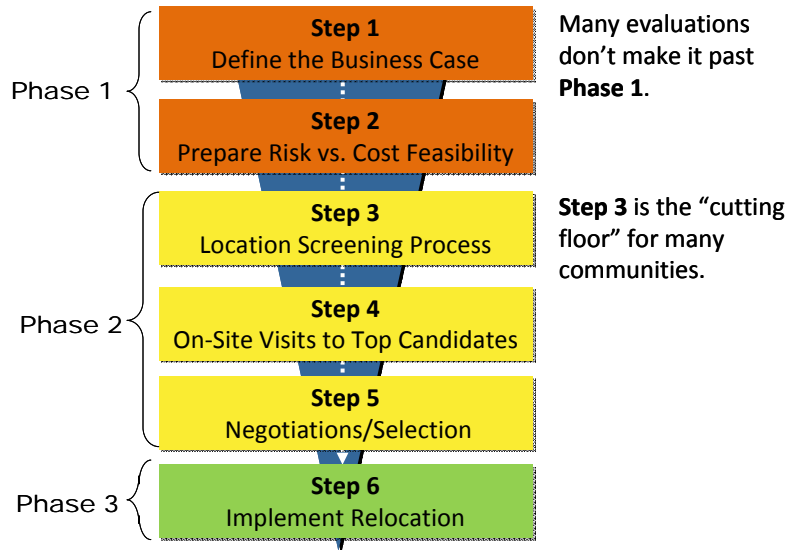
The site selection process has several implications for communities:

- Decisions are made without any direct input from or interaction with community representatives, based on the content of the community’s website. *This information must be easily accessible and up-to-date.* If a user cannot find the information needed after a few short minutes on a website, he or she will move on to the next candidate location.



- Having a *single* web site with all of the information required is critical to marketing a community.
- If a community gets a phone call, it is likely that the site selector or company has already done some analysis, and the community could be a serious contender. A point of contact should be featured on the website.

Typical Site Selection Process



Details on Step 3: Location Screening

Client Discussion: Define Key Selection Criteria

- Right to Work State (for manufacturing)
- Operating costs (taxes, real estate, labor, energy, etc.)
- Geographic positioning to optimize logistics
- Industry presence (for specific skills and support services)
- Transportation access (rail-bulk/container, air, interstate and water port)
- Demographics (population size by age group, education, etc.)
- Other resources available (land/buildings, high utility capacity, training resources, etc.)

Screen Locations and Profile Top Candidates

Engage in location screening based on criteria identified above.
Review web sites for information.
Profile top locations that pass the screen.

Present Results to Executive Team



Recommendations: Real Estate

Recommendations related to real estate focus on having the right types of sites and buildings available in optimum locations, served by the appropriate utilities and at a high level of readiness to support the attraction and expansion of specific industries and life stages of companies. The real estate is viewed from two perspectives: (1) *What do companies representing specific industries and life stages look for?* and (2) *What are the highest/best uses of the available sites?*

Many companies seeking manufacturing, distribution and office space will seek existing buildings to lease as a first priority. Others will opt to buy or build a building as part of their business strategy. For Broome County to remain competitive, it needs to maintain a portfolio of sites and buildings that match market demand, as described in the sections below.

| Manufacturing and Warehouse Space | |
|--|---|
| General Needs | Industrial and manufacturing companies are attracted to “flex space” because it can be adapted and divided for multiple purposes: small office, manufacturing and warehouse/distribution. This type of space has a wide application of uses for both emerging and mature businesses. |
| Details | Typical space requirements include ceilings >25’ and column widths >40’; the building is clean and meets all building codes (this is interpreted as buildings that are <20 years old or have been upgraded); and the size of the building is at least 50,000 SF and can be easily expanded. Buildings also need to have reasonable and safe access to an interstate highway or other limited access highway. Having the building available for lease at competitive market rates will eliminate the issue of high property taxes because they will be wrapped up in the lease rate. |
| Currently Available | Most of the available industrial/warehouse buildings in the area are much older than 20 years. Some are in an acceptable condition and have ceiling heights and column spacing that would be attractive to prospective businesses, including space available at the Huron Campus, at the airport and at Glendale Technology Park. |
| Recommendations Going Forward | Working with the Broome County IDA and the commercial real estate community, maintain an accurate inventory of properties that meet the basic criteria for flex space and develop a contingency plan to maintain an inventory of at least 200,000 total square feet for buildings at least 25,000 SF in size. |



| Office Space | |
|--------------------------------------|--|
| General Needs | Office space serves a number of target industry sectors ranging from engineering and architecture to information technology and multiple business services. Some firms will opt for a downtown environment, while others prefer the suburbs. The focus of this recommendation is on the midsize/larger needs of office users based on space requirements of 230 to 300 SF per person and contiguous space of 10,000 SF (30 to 40 employees) to 75,000 SF (250 to 300 employees). |
| Details | Class A/B office space with 10,000 to 75,000 SF contiguous layouts (on one or more floors) and adequate parking; located in downtown and suburban areas; served by local amenities (e.g., restaurants, shopping, lodging, etc.) and access to transportation (may include public transportation, interstate/feeder highway access, etc.). |
| Currently Available | There is currently a modest inventory of office space in the 10,000 to 75,000 SF contiguous space range located throughout the area (see Table 4 in the Real Estate Assessment). It is older space, some of which has undergone rehabilitation or been well-maintained. |
| Recommendations Going Forward | For the existing demand, the current space seems to be adequate. Going forward, it is important to work closely with the commercial real estate community to monitor the quantity, condition, location and amenities related to office space in the County. |

| Sites for New Construction of Manufacturing, Distribution and Office Space | |
|--|---|
| General Needs | Prospective companies will vary in their need for size, location (access to labor/transportation), and utility requirements based on type of operation, type of industry and life stage of company. Companies requiring unique facilities or unable to find an available building that meets their specifications will typically acquire a site and construct a building. |
| Details | Sites may range from 5 to 50 acres in size; not located in a flood plain or have rock outcrops or steep slopes; and are at a high level of readiness (or shovel ready status) based on the following: <ul style="list-style-type: none"> ▪ Ownership of the site is officially documented and in the hands of a third party ready to sell. ▪ Basic tests have been completed on the site, such as: <ul style="list-style-type: none"> ▪ Soils analysis for structural integrity based on core samples that provide evidence of the types and depths of soil deposits, depth to groundwater, depth to bedrock, etc. ▪ Environmental Site Assessment - Phase I (ASTM E1527-05 Standard Practice for Environmental Site Assessments) ▪ If it is a brownfield site, contamination issues have been addressed to state/federal standards and the range of uses has been defined ▪ Assessment of site's historical significance (buildings, archaeological sites, graveyards, etc.) ▪ Wetlands analysis and mitigation plan, 100-year flood plain presence, etc. ▪ Stormwater management plan ▪ Protected and rare species evaluation ▪ Traffic impact study as required ▪ A general site plan has been developed to define net usable land, water retention areas, and access roads. |



| Sites for New Construction of Manufacturing, Distribution and Office Space | |
|--|---|
| | <ul style="list-style-type: none"> ▪ Utilities, road, and rail access have been identified and the cost/timing of any required installation is reasonable. <p>Access to an interstate is typically within a few miles; smaller firms or those with limited truck traffic can be located further from an interchange.</p> |
| Currently Available | <p>A list of available sites and discussion on best use is presented below. The sites vary in size, access to an interstate, utility services, condition (from brownfield to undeveloped forested areas) and readiness (time required to commence construction).</p> |
| Recommendations Going Forward | <p>Broome County and its development partners from the private sector should maintain a portfolio of sites that meet the needs of target industry companies in order to stimulate additional economic growth. A critical challenge within the County is identifying shovel-ready sites that have reasonable interstate and full utility access but are not in a flood plain or have steep slopes. Future growth will depend, in some part, on the redevelopment of existing sites (clean up brownfields, acquire and raze structures on land zoned industrial or commercial, etc.). To meet this need, the County should:</p> <ul style="list-style-type: none"> ▪ Work with municipal officials to identify a master list of sites in the urban core, in surrounding towns, and near the interstates that have the best potential attributes as described above (e.g., full utilities, out of flood plain, reasonably flat without rock outcrops). ▪ Maximize the use of Broome Corporate Park by acquiring and aggregating properties contiguous to the park for future expansions. ▪ Initiate the NYS Shovel Ready Certification process for 1 or 2 sites. ▪ Continue to work with the state, municipalities, and private developers – and through the recently-approved Broome County Land Bank – to prepare brownfield sites zoned industrial or commercial for redevelopment through remediation, acquisition and demolition, and related activities. ▪ Work with Binghamton University and Broome Community College in identifying building space within a mile of each campus for designation as tax-free locations under the new START-UP NY program. |



Available Industrial/Commercial Sites in Broome County with Potential Uses and Recommended Actions

| | Description | Acres | Attributes of Site(s) | Potential Uses/Recommended Actions |
|----|---|----------------------------------|--|---|
| 1 | Binghamton Airport, Town of Maine Site 1A Site 1B Site 2 Site 3 Site 4 Site 5 | 28 74 87 13 42 42 | <ul style="list-style-type: none"> Majority of land is forested/undeveloped. Located 5+ miles from the interstate via a two-lane highway through residential areas. Utilities: power and water (nearby), sewer being installed in 2014; several of the sites have telecom/Internet Relatively long distance to concentrations of labor in Binghamton. Without public transit. | <ul style="list-style-type: none"> <u>Potential Uses:</u> expanded aviation services, assembly operation needing to be near airport, parts or components manufacturing, small distribution (<50,000 SF) due to distance to interstate on two-lane highway through residential area. Need to complete utility installation (sewer) before sites are viable unless it is a “dry” or low sewer use operation that can utilize a septic tank/drain field or other stand-alone system. There should be at least one site with ~5 acres cleared and brought to a high level of readiness. Offer both the existing available space at the airport along with the sites to maximize the options for prospective companies. |
| 2 | Off 12A near I-88 Chenango Bridge | 13.3 | <ul style="list-style-type: none"> Adjacent to Chenango River (majority of the site is within the floodplain) Zoned commercial Utilities: Power, water, telecom | <ul style="list-style-type: none"> <u>Potential Uses:</u> Small distribution/warehousing as well as other commercial uses. Need to complete sewer access to increase utilization. |
| 3A | 100 LaTourette La. Binghamton | 5.5 | <ul style="list-style-type: none"> Near Glendale Tech Park and sports park Long/narrow site. Full utilities | <ul style="list-style-type: none"> <u>Potential Uses:</u> Small manufacturing or office building (long/narrow site will be a challenge). |
| 3B | 1355 Campville Road, Union | 18.5 | <ul style="list-style-type: none"> Near Glendale Tech Park and sports park ~10 usable acres Power, telecom/cable (no public water or sewer) | <ul style="list-style-type: none"> <u>Potential Uses:</u> Need to complete water/sewer connection to be a viable site. |
| 4 | Charles Street Business Park, Binghamton | 25+ | <ul style="list-style-type: none"> Clean former GAF film site. Adjacent to residential area. Full utilities. Lots being divided into smaller sizes. | <ul style="list-style-type: none"> <u>Potential Uses:</u> Manufacturing of parts/components in buildings up to 100,000 SF (assuming lot sizes of 5 acres). Operations need to be compatible with adjacent residential communities. |
| 5 | Broad Avenue RR Property, Binghamton | 12.5 | <ul style="list-style-type: none"> Owned by CP Railroad, want rail user. Only site with rail access. Full utilities in vicinity of site. Close proximity to interstate | <ul style="list-style-type: none"> <u>Potential Uses:</u> Fabrication or plastics molding operations with a need for rail access. |



Available Industrial/Commercial Sites in Broome County with Potential Uses and Recommended Actions

| | Description | Acres | Attributes of Site(s) | Potential Uses/Recommended Actions |
|----|-------------------------------------|-------|--|---|
| 6 | 67, 71 Frederick Street, Binghamton | 11.2 | <ul style="list-style-type: none"> ▪ Older existing buildings on the site. ▪ Full utilities. ▪ Close proximity to interstate. | <ul style="list-style-type: none"> ▪ <u>Potential Uses:</u> Early stage manufacturing firm seeking low cost facility with opportunity to expand. |
| 7 | 399 Broome Corporate Pkwy, Conklin | 26.2 | <ul style="list-style-type: none"> ▪ Within Broome Corporate Park, interstate access. ▪ Full utilities. ▪ Direct access to interstate. | <ul style="list-style-type: none"> ▪ <u>Potential Uses:</u> Manufacturing (electronics, parts, components, assembly) as well as distribution. ▪ Site is well positioned for interstate access. |
| 8 | 379 Broome Corporate Pkwy, Conklin | 21.5 | <ul style="list-style-type: none"> ▪ Within Broome Corporate Park with interstate access. ▪ Full utilities. ▪ Direct access to interstate. | <ul style="list-style-type: none"> ▪ <u>Potential Uses:</u> Manufacturing (electronics, parts, components, assembly) as well as distribution. ▪ Site is well positioned for interstate access. |
| 9 | Off Exit 77, Windsor | 80 | <ul style="list-style-type: none"> ▪ Immediate labor force is very limited. ▪ Zoned commercial. ▪ Utilities: power, water, sewer. | <ul style="list-style-type: none"> ▪ <u>Potential Uses:</u> Storage/distribution and other commercial applications. ▪ Immediate labor force is limited. ▪ Site has steep slopes and would need to be terraced. ▪ If the back portion of the property is zoned industrial, the site could accommodate manufacturing, warehousing, or broader applications. |
| 10 | Borden Street, Deposit | 7.46 | <ul style="list-style-type: none"> ▪ Adjacent to residential properties and river. ▪ Immediate labor force is very limited. ▪ Utilities: power, water, sewer. | <ul style="list-style-type: none"> ▪ <u>Potential Uses:</u> Small manufacturing firm seeking a more remote location. ▪ Immediate labor force is limited. |

Other Recommendations

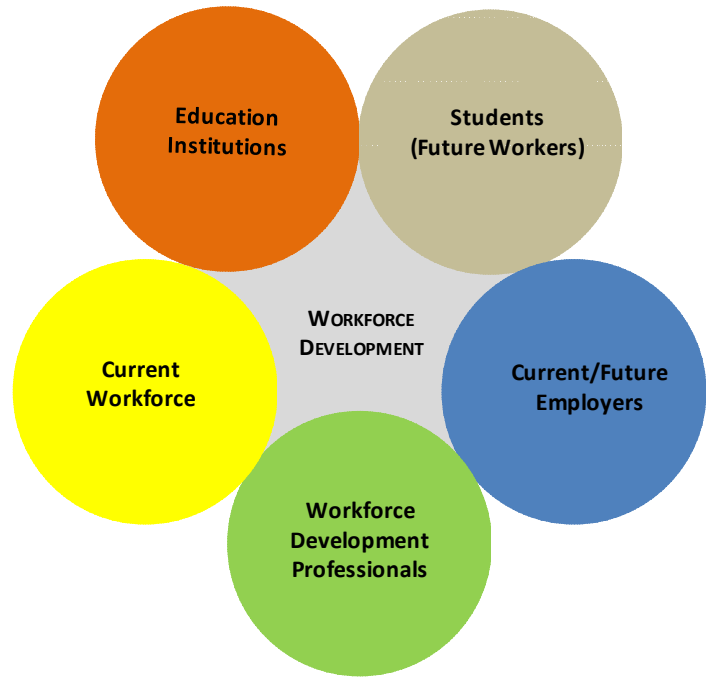
1. Provide a focused promotion on the existing real estate assets that are at a reasonably high level of readiness: e.g., the Broome Corporate Park, the Huron Campus, Glendale Technology Park, and other properties.
2. Develop a strategy that defines properties available to companies that “graduate” from the High-Technology Incubator, aligning needs by size and type of space offered at affordable rates (possibly with graduated leases based on business revenue growth).



Recommendations: Workforce, Education and Training

The cost, quality, and availability of skilled labor are among Broome County's most important assets for economic development. However, the workforce is aging; in some industries, upwards of one-quarter of the labor force is age 55 and over. This is a particularly critical issue for the County's manufacturing sector, and to a lesser extent, for transportation and warehousing.

It is important to maintain a responsive, highly qualified workforce that meets the evolving needs of local employers. This requires the involvement of economic development officials, workforce development professionals, and educators in understanding and responding to the needs of specific companies and industries. It also requires building an awareness of current and future career opportunities among students as well as existing workers. The following recommendations are provided to facilitate workforce development and preparation in Broome County.



1. Develop career pathways and related initiatives in local school districts to better prepare high school students for college and careers.

Around the U.S., many school districts are adopting new educational approaches that incorporate project-based learning and “real-world” internship experiences, enhancing the pathways from high school to college and a career while making education more relevant for students. The approaches vary:

- Some districts have established *career academies*, small learning communities within larger high schools focused on specific, high-growth industry sectors such as advanced manufacturing, health care, or engineering. Typical components include a rigorous college-preparatory curriculum that uses project-based learning to give lessons real-world context and relevance; a career technical curriculum that is infused into (rather than separate from) the core academics; opportunities for job shadowing, internships, or mentorships; and a strong network of support services to help students master the academic and career content.
- Other districts have developed *career pathways* based on existing vocational programs. As with career academies, career pathways programs involve both industry leaders and teachers in developing the curriculum and defining the skills that students should have for success in a chosen field. Students also have opportunities for hands-on experience through project-based learning, internships, and job shadowing. However, career and technical programs are not integrated into the academic curriculum as



they are in career academies. Nevertheless, unlike the old “vocational” approach – in which students were tracked to either enter a trade or go to college upon graduation – career pathways are meant to lead to an industry-recognized credential or certificate at the post-secondary level or to an associate’s or bachelor’s degree. Programs often have dual enrollment and/or articulation agreements that allow participating high school students to earn college credit.

Earlier this year, Governor Andrew Cuomo announced plans to designate 10 more schools to follow the example of the Pathways in Technology Early College High School, known as P-TECH, in Brooklyn.⁶ Formed through a partnership between public education and IBM, P-TECH is a unique institution that “connects high school, college, and the world of work through meaningful [public-private] partnerships.” The school was established, in part, out of a desire by educational leaders to seek new approaches to career and technical education. “The so-called ‘next generation of CTE’ consists of an emphasis on both college and career readiness skills and competencies through closer alignment with industry and higher education as well as focused pathways that bring students through postsecondary education to a solid career.”⁷

P-TECH is just one example of a high school that is transforming the way that students learn and preparing them for future success. Local school districts in Broome County should consider these and other effective strategies to engage high school students and better prepare them for college and employment, especially in industries and occupations that are in demand in the region.

2. Increase awareness of career opportunities in advanced manufacturing and other local industry sectors among high school students and unemployed youth.

In spite of the long-term decline in the number of manufacturing jobs in the Binghamton area, the demographic profile of manufacturing in Broome County – and in many areas of upstate New York – is disproportionately comprised of older workers, i.e., age 55 and over. This could become a serious problem as these workers begin to retire; manufacturers will have difficulty finding qualified replacement workers.

Broome Tioga BOCES has a welding program, but other manufacturing-related courses are being phased out due to a lack of interest. Many young people have inaccurate and outdated ideas about manufacturing. There is a need to introduce high school students and unemployed youth to advanced manufacturing and the high-paying career opportunities it offers.

In western New York, a program called *Dream It, Do It WNY* has been established to educate high school juniors and seniors about high-tech manufacturing careers. Dream It, Do It is a combined effort between the National Association of Manufacturers, the Buffalo Niagara Manufacturing Alliance, and the Buffalo Niagara Partnership. It provides an opportunity for students to learn about the products manufactured in their counties, the different types of careers available in manufacturing, and the education and skill levels required for these positions.

⁶ WAMC, “NYS and IBM Want to Prep Students for High-Skills Jobs,” March 4, 2013, accessed at www.wamc.org/post/nys-and-ibm-want-prep-students-high-skills-jobs.

⁷ For more information on P-TECH, see <http://www.ptechnyc.org/ptech>. For discussion of what various states are doing to build career pathways, see “New High School Pathways Emerging,” *Education Week*, April 23, 2013.



Since the program was first launched in 2009, Dream It, Do It WNY has had more than 7,000 students participate in career fairs, school presentations, technology tours, lean manufacturing training, and other activities. With funding assistance from the Western New York Regional Economic Development Council, the program has expanded throughout Chautauqua, Erie, Niagara, Cattaraugus, and Allegheny Counties, and several other counties in the Corning and New York City areas are interested in getting involved. A similar Dream It, Do It initiative in Broome County would be very beneficial.

3. Make a concerted effort to recruit unemployed workers, women, minorities, refugees, and recent immigrants to industries such as manufacturing, construction, and transportation and warehousing which have high proportions of older workers.

Another way to address the high proportion of workers approaching retirement age is to step up efforts to recruit individuals from groups that historically have been underrepresented in certain industries. For example, men comprise 70% or more of the local workforce in construction, transportation and warehousing, wholesale trade, and manufacturing. Educators, businesses, and workforce development professionals all have a role to play in mentoring and facilitating the entry of these groups into the labor force. Binghamton is used as a refugee resettlement area. There are also many international students at Binghamton University.

4. Improve the retention of college graduates in Broome County and the Southern Tier region.

Numerous stakeholders have commented on the need to retain college graduates and integrate them into the community. This is a common lament in communities across the country, even in large cities like Boston and Philadelphia where hundreds of thousands of students attend college every year. It is a particular salient issue for upstate New York because of the large proportions of residents age 55 and older.

“Engaging students and young professionals” is one of the vision items cited in the Action Plan of the Broome County Comprehensive Plan. The Action Plan calls for “provid[ing] the amenities and housing opportunities that appeal to students and recent graduates... more places to gather, socialize, and network which are not related to the bar scene.”

Increasing the retention of recent graduates could be achieved, in part, by engaging students in activities that integrate them into the broader community while they are still in school. This includes getting students involved in volunteer opportunities, inviting them to sit on the boards of local organizations, and facilitating paid or unpaid internships with local businesses.⁸ Encouraging entrepreneurship among BU and BCC students (see Business Attraction, Retention and Expansion recommendations) is another way to foster a sense of investment in the community.

5. Develop additional resources to educate and train Broome County residents for jobs in warehousing and distribution.

⁸ There was a student-led initiative established at Binghamton University, known as Catalysts for Intellectual Capital 2020, whose efforts focused on increasing the retention rate of BU graduates by enhancing connections between the university and the local community. Unfortunately, the initiative appears to have gone dormant.



Despite the significant presence and potential growth of warehouse operations in Broome County, there are no distribution and logistics-related training programs offered at local colleges and universities. In fact, only five post-secondary educational institutions in upstate New York have degree programs in logistics and supply chain management: Syracuse University, Clarkson University, Rochester Institute of Technology, SUNY College at Plattsburgh, and Rensselaer Polytechnic Institute (RPI).⁹ Graduates of these programs typically go on to management and supervisory positions in the industry.

To meet the needs of companies in the Capital Region, Schenectady County Community College (SCCC) is currently developing a new supply chain management degree. According to a May 2013 news article: “SCCC is awaiting State Education Department approval of the two-year degree program... [The college] is looking for companies that will provide 500 hours of paid, on-the-job training for students in the program.” The program is expected to be more hands-on than theoretical. SCCC has also established two non-credit certificate programs to train technicians and materials handlers.¹⁰

It should be noted that Broome Community College has offered a five-week Association for Operations Management (APICS) Supply Chain Management course through its Continuing Education arm. The course is the first in the APICS Certification in Production and Inventory Management (CPIM) program. The course is generally attended by individuals who are already employed, but Broome Tioga Workforce New York has, in the past, paid for unemployed jobseekers to attend.



A potential model for a BOCES-level program is the Material Handling/Logistics Technology Program at the Lehigh Career and Technical Institute (LCTI) in Pennsylvania. This program actively engages students in the processes of receiving, shipping, order picking, and operation of numerous types of material handling equipment. Students learn by working in a state-of-the-art 17,000 square foot distribution center which houses today's most contemporary technology: a computer-controlled warehouse management system, computer-controlled vertical and horizontal carousels, and a computer-controlled integrated conveyor system. All supply chain processes are replicated within the facility. LCTI is considered an exemplary school by the Material Handling Institute, an industry group whose members include the Raymond Corporation in Chenango County.

The development of additional programs to educate and train residents would further support the retention, expansion, and attraction of warehousing and distribution operations in Broome County and the Southern Tier.

⁹ Syracuse University and RPI have both bachelors and masters degree programs in logistics and supply chain management.

¹⁰ Pam Allen, “SCCC reaches out to local companies to help shape new supply-chain degree,” *The Business Review*, May 10, 2013. As this section was written, the program received formal approval from the State Education Department.



6. Continue to work with Broome Community College and Binghamton University to ensure the availability of appropriate programs to support workforce development in high-demand occupations and industries.

The educational institutions in Broome County have been highly responsive to the needs of local employers. Recently, Governor Cuomo announced the award of more than \$12 million in state funding to 36 SUNY campuses to support student training in identified “high-need” occupations. Occupations are considered high need if they are projected to have a large number of total openings, a high growth rate, or a combination of both in the coming years, based on data from the NYS Department of Labor. Established to meet state demand for nurses and engineers, SUNY’s High Needs Program has expanded to include “emerging 21st century” career opportunities related to health care, biomedical/biotechnical, renewable/clean energy, agriculture/agribusiness, and information technology.¹¹

Binghamton University will receive a total of \$1,704,000 to hire new faculty and expand programming in the areas of cyber security, mechanical engineering, and nursing, including a doctorate of nursing practice program. Broome Community College will receive \$191,301 to expand its clinical laboratory technician and histological technician programs. The two BCC programs are offered to students throughout the SUNY system online via distance learning. In order to receive funds, BU and BCC had to demonstrate how their program would become self-sustaining after three years.¹²

Broome County, its workforce development partners, and employers should continue to maintain strong relationships with BCC and BU. Information gathered from local businesses on labor needs and requirements should be formally reviewed and shared with educators for potential action on a regular basis.

¹¹ Governor Andrew M. Cuomo press release, “Governor Cuomo Announces \$12 Million for 36 SUNY Campuses to Train Students in High Need Fields,” June 6, 2013. Accessed at <http://www.governor.ny.gov/print/6738>.

¹² *Press Connects*, “BU, BCC set to receive funds from High Needs,” June 6, 2013.



Recommendations: Incentives

Incentives are used both to develop resources that generally support economic development, and to attract companies and encourage private investment, often by directly reducing the cost of doing business. *Financial incentives specifically for business attraction and expansion are described in Section C.* Incentives can also help to “fill gaps” in resources to enhance a community’s overall competitiveness. Based on the Real Estate Assessment and Incentive Evaluation, the following gaps or issues need to be addressed:

- Development/redevelopment of properties to achieve contemporary real estate options
- High property taxes
- High cost of power outside the Village of Endicott and the Huron Campus

Real Estate

Broome County should continue to take advantage of existing resources available to develop and redevelop sites at a high level of readiness. Resources include Regional Infrastructure Fund for Shovel-Ready Sites and the Community Revitalization Fund offered through the Southern Tier Regional Economic Development Council, though the latter can be used only for properties in downtown locations, restricting its use to office and/or mixed use development.

The County may want to consider offering incentives for the *redevelopment* of vacant and underutilized (yet structurally sound) buildings. Many of these structures were built for single end-users and are functionally obsolete, with code violations, low ceiling heights, and potentially minor contamination. Some of these buildings could be upgraded, converted, and marketed as multi-tenant properties serving manufacturing, warehouse/distribution, R&D, and other industrial users. The incentives offered could be financial (e.g., matching funds to leverage private investment) and/or regulatory (streamlined permitting and approvals). Given the relatively low cost of real estate in Broome County, it may not otherwise be feasible for a developer to pursue.

As an example of a financial assistance program focused on redevelopment, Genesee County in western New York recently established a new \$500,000 revolving loan fund to support the redevelopment of vacant and underutilized commercial/industrial buildings in downtown Batavia and town and village centers. The loans will range from \$25,000 to \$100,000 per project, with interest rates set at 80% of prime and repayment schedules of 3 to 10 years, depending on the project. To qualify, developers will need to have at least a 30% equity stake in the project or already have a traditional bank loan in place; they will also be required to provide a business plan with their loan application. Loans will be approved and administered by the Genesee Gateway Local Development Corporation. Broome County could develop a similar program to encourage adaptive reuse.

Property Taxes

Current mechanisms to reduce property taxes on commercial and industrial real estate in Broome County include the state’s Excelsior Real Property Tax Credit (available only to firms that meet certain employment



and investment thresholds) and payment-in-lieu-of-taxes (PILOT) agreements issued by the Broome County Industrial Development Agency (BCIDA). In 2010, the BCIDA provided nearly \$7 million in total tax exemptions; these were offset by \$3.4 million in PILOTs, resulting in net tax exemptions of approximately \$3.5 million.

Although property tax abatements are a well-established tool for economic development, many questions have been raised about their effectiveness. A common criticism is that tax abatements are provided to companies indiscriminately, with little or no accountability. The job creation promised by recipients of tax abatements is not always fully realized. Another criticism is that they are easily manipulated, often used by companies to pit communities against each other. Property tax abatements are sometimes given to businesses that would have selected the same location even in the absence of an incentive. Finally, taxpayers assert that by providing property tax abatements to large corporations, the tax burden in the community is then shifted to local homeowners and small businesses.

The report *Rethinking Property Tax Incentives for Business* published by the Lincoln Institute of Land Policy recommends that local governments set high standards for the use of property tax incentives “to avoid offering incentives with costs that exceed their benefits.” Specific recommendations that would apply to Broome County include:

- Restricting incentives to projects that meet certain standards (e.g., the retention or creation of high-wage jobs) and providing higher incentives to projects hiring local residents
- Limiting incentives to businesses that export goods or services out of the region (i.e., granting property tax abatements for manufacturing facilities, but not for commercial or residential development)
- Creating a transparent, apolitical process for making decisions on whether to grant incentives.¹³

In lieu of substantial changes to real property taxation at the local and state levels, the County should be aware that leasing is one way to neutralize the issue of high property taxes. A company renting office or industrial space is unlikely to see a tax bill, as property taxes are typically included in the lease rate. Another way is to utilize the state’s new START-UP NY Program to direct eligible businesses to designated tax-free space.

Utility Costs

As noted in the Incentives Evaluation, low-cost power is available for high energy users. For companies that do not qualify for electricity cost reductions through NYSEG, a location at the Huron Campus or in the Village of Endicott may be appropriate.

Broome County should also connect businesses with programs available through the NYS Energy Research and Development Authority (NYSERDA). NYSERDA’s aim is to help New York meet its energy goals: reducing energy consumption, promoting the use of renewable energy sources, and protecting the

¹³ Daphne A. Kenyon, Adam H. Langley, and Bethany P. Paquin, *Rethinking Property Tax Incentives for Business*, Lincoln Institute of Land Policy, June 2012. Accessed at http://www.lincolninst.edu/pubs/2024_Rethinking-Property-Tax-Incentives-for-Business.



environment. The agency offers several incentive programs to help companies increase their energy efficiency and reduce utility costs:

- **The Industrial and Process Efficiency Program (IPE)** provides performance-based incentives to help companies make energy efficiency and process improvements. Incentives are based on annualized energy savings and are capped at 50% of project cost. Eligible facilities include manufacturing facilities, support operations such as warehousing and distribution sites, and data centers. Incentives are available for both existing facilities and new construction. Applications are accepted on a first-come, first-served basis.

In 2012, NYSERDA provided IPE funding to Anheuser-Busch's Baldwinsville brewery for the installation of a 24-ounce can bottling line. In June 2013, the company was honored at the Northeast Energy Efficiency Summit in Springfield, MA for its continued efforts to advance energy efficiency at the brewery, resulting in annual energy savings of 9.3 million kilowatt hours (kWh).

- **The Existing Facilities Program** offers a broad portfolio of incentives to help offset the costs of implementing energy efficiency improvements in existing commercial facilities across the state. The program has two incentive "paths" based on the scope of the project: a pre-qualified path offering up to \$60,000 for "small, simple equipment changeouts" on a dollar-per-unit, reimbursement basis; and a performance-based path with incentives ranging from \$30,000 to \$2 million for "large, custom improvements." The latter requires applicants to assess their current energy usage and submit a plan for long term energy savings expected to result from the installation of energy-saving equipment.
- **The New Construction Program** for commercial/industrial businesses provides assistance when incorporating energy-efficiency measures into the design, construction, and operation of new and substantially renovated buildings. Technical assistance is available to help evaluate energy-efficiency measures and provide guidance to the design team on incorporating new and emerging energy-efficient technologies into a building. Funding is also available to offset the additional costs associated with the purchase and installation of approved equipment.