



Annual Report 2011-12"Anniversary Edition"

Improving the Economy



To our many stakeholders and partners,

Twenty-five years after its founding, UB TCIE continues to exemplify performance excellence and serve as an elite university extension program. By sharing best practices and pursuing excellence, we are contributing to UB's goal to increase its footprint and impact on the economy – growing businesses, creating jobs, expanding market share, and improving sustainability.

After decades of declining operations that have shed jobs from the economic landscape, New York is taking steps to revitalize its once-strong manufacturing base. Under the directive of Gov. Andrew Cuomo, the Western New York Regional Economic Development Council has placed emphasis on investments that boost the region's

advanced manufacturing sector and create jobs. We are encouraged by this commitment, and remain dedicated to supporting the industry's growth by leveraging university capabilities to assist businesses in our region.

We are also glad to report on UB's accomplishments. Once again, the university advanced this year in the ranks of the U.S. News & World Report's "Best Colleges," earning the distinction as one of the nation's "Best National Universities" with 29,000 students and more than \$349 million in research. UB's School of Engineering and Applied Sciences earned a top ranking among the nation's best undergraduate engineering programs.

Many thanks to our stakeholders, the business community, university leaders, and all economic development allies who share our mission in building the economy, one business at a time.

Sincerely,

Timothy Leyh

Timothy Leyh UB TCIE Executive Director

Fiscal Year 2011/12 Summary SERVICE RESULTS 131 **Number of Businesses Served** Professional Development - Number of People Trained/Certified 543 **Business Process Reengineering Projects** 162 Undergraduate/Graduate Students Placed 33 **Number of Markets Served** 22 **Total Revenue** \$1,452,223 STRATEGIC PARTNERSHIP INDUSTRIAL RESURGENCE IMPACT (SPIR) Number of SPIR Projects 15 371 **Client Jobs Created Client Jobs Retained** 5,600 Value of SPIR Pipeline \$400,000 Client Increased Revenue \$28,050,000

About Us



Founded 25 years ago, the center's first office was a storage room in Bell Hall on the North Campus. Today, offices are located in Baird Research Park at 1576 Sweet Home Road, UB's Technology Incubator.

Annually, UB TCIE supports hundreds of public and private organizations, connecting the business community with the expert resources of UB's School of Engineering and Applied Sciences. Companies experience technological advancement through research and development ventures made possible by our engineering solutions. Operational excellence services, targeting enterprise performance, establish a foundation for continuous improvement. Professional development offerings – from leadership and change management to business improvement methodologies – prepare individuals to better support and sustain their company's strategic initiatives.

While UB TCIE primarily serves New York State (NYS), offerings are provided to businesses across North America and the world. In 2011-2012, UB TCIE's programs increased net sales in excess of \$28 million and created or retained close to 6,000 jobs. Additionally, UB TCIE's professional development team trained nearly 550 professionals, strengthening businesses and the community through excellence in service. Our business development and resource teams include highly knowledgeable and engaging individuals who utilize their industry experience to achieve excellent results.

The center has been honored six times by the National Association of Management and Technical Assistance Centers (NAMTAC) and its descendent, the University Economic Development Association (UEDA), for projects resulting in significant gains. UB TCIE received recognition for work completed at Erie County, Saint Vincent Health Center in Erie, Pa., Delphi Thermal's Lockport facility, Quebecor, Bethlehem Steel and OhmCraft.

UB TCIE is the regional administrator for the State University of New York's Strategic Partnership for Industrial Resurgence (SPIR) grant, with SPIR offices located at SUNY Binghamton, New Paltz, and Stony Brook. The SPIR program offers an engineering resource that is unparalleled in the state.

Our Mission and Values

The mission of UB TCIE is to be a leader in building the economy, by strengthening businesses and communities through excellence in service.

Our approach is to be a leading university extension service organization recognized for collaborating with diverse partners and providing a broad array of services to our stakeholders.

Integrity

Building our reputation by being ...

- · Accountable
- Credible
- Ethical
- · Respectful

Excellence

Exceeding stakeholder expectations by ...

- Achieving results
- Demonstrating leadership
- Leveraging our resources and expertise

Service

Delivering results and fostering diversity by being ...

- Responsive
- · Adding value
- Providing solutions
- Collaborating

Innovation

Fostering a culture of creativity by embracing ...

- Change
- Lifelong learning
- Risk-taking

Strategic Partnership for Industrial Resurgence



Subsidizes technically advanced multi-disciplinary projects for New York State companies.

Companies with fewer than 500 employees can benefit from the Strategic Partnership for Industrial Resurgence (SPIR) grant by upgrading or introducing new technology, addressing challenges of product development and testing, enhancing a continuous improvement program, and making their business more sustainable through other initiatives. Companies apply by contacting UB TCIE with their technical assistance needs. Grant funds may cover up to 50 percent of the total project cost. UB TCIE works with approximately 30 companies each year to secure SPIR monies.

Specifically, SPIR projects include:

- · Engineering R&D projects
- Re-engineering business processes and improved/enhanced business systems
- Accessing university equipment and resources
- · Employing graduate student interns

Client projects contracted during the 2011-12 fiscal year receiving SPIR awards resulted in an estimated:

- · 371 jobs created
- 5,600 jobs retained
- \$28,050,000 revenue increase



Sectors Served & Client List

UB TCIE's client engagements include Engineering Solutions research projects that call on the expertise of UB faculty researchers, Operational Excellence consultation, and Professional Development and mentoring in the areas of Lean, Six Sigma, ISO, and Soft Skills. The client base covers the following sectors: Advanced Manufacturing, Life Sciences, Healthcare and Social Services, Food Processing and Food Services, Government and Education, Finance and Insurance, Specialty Metals, Recycling, Printing, Metal Forming, Automotive, Packaging, Agricultural, Distribution and Warehousing, Service, Aerospace and Defense, Electronics, Chemical, and Media/Advertising.

The featured sectors include a partial list of clients.

Manufacturing:









Life Sciences:









Healthcare and Social Services:









Food Processing & Food Services:









Government & Education:









Finance & Insurance:









University Partners



School of Engineering

UB is a premier research-intensive public university and a flagship institution in the 64-campus State University of New York (SUNY) system. UB's School of Engineering and Applied Sciences, led by

Acting Dean Rajan Batta, is the largest and most comprehensive public school of engineering in New York. Annual research expenditures are around \$50 million and the school's per faculty research expenditure places it in the top 10 percent of U.S. engineering schools. The engineering departments are: Biomedical; Chemical and Biological; Civil, Structural and Environmental; Computer Science; Electrical; Industrial and Systems; and Mechanical and Aerospace.



The UB Office of Science, Technology Transfer, and Economic Outreach (STOR) is UB's interface between the inventive work of faculty and students and the applied commercial development that benefits society.

NYSCEDII

The New York State Center for Engineering Design and Industrial Innovation (NYSCEDII) develops nextgeneration design, manufacturing, product and process development tools.



Directed Energy, a NYSERDA-funded program, seeks to facilitate the emergence and growth of an alternative energy technology and business cluster in Western New York.



The Office of the Vice President for Research & Economic Development and its constituent units have overall responsibility for UB's research enterprise, creating an atmosphere of creativity, collaboration and community.



The Center for the Arts Video
Production Group is a professional
television and video outlet
dedicated to enhancing
communication about the Center
for the Arts, UB and affiliated groups.



The School of Management's Center for Entrepreneurial Leadership (CEL) promotes business growth in Western New York through leadership development and experiential learning.



The UB Alumni Association (UBAA) provides support for and services to more than 220,000 alumni worldwide, creating and promoting lifelong bonds with graduates.

1987



The first project of The Center for Industrial Effectiveness (TCIE) is undertaken at MRC Bearings of Chautauqua County, N.Y.

The Strategic Partnership for Industrial Resurgence (SPIR) grant is created to subsidize university-led engineering projects at New York companies.



l 1994 1999 I



The Lean Enterprise Program debuts, featuring services that maximize customer value while minimizing waste.

The arrival of ISO implementation and audit services helps companies boost performance of their business management systems.



2001

Community Partners



Empire State Development (ESD) is the chief economic development agency driving job growth, strategic investment and prosperity in New York State.



The Buffalo Niagara Enterprise (BNE) provides comprehensive economic development assistance to companies looking to expand to the Western New York region.



The primary purpose of the Amherst IDA is to promote regional employment growth through the attraction, expansion and retention of companies within the Town of Amherst.



The Buffalo Niagara Partnership (the Partnership) advocates for policies and resources to increase privatesector investment and jobs, and offers services aimed at business success.



Niagara County The Niagara County Center for Economic Development facilitates economic growth and expansion and provides information support for businesses and the public.



The University Economic Development Association (UEDA) is aimed at enhancing economic development nationwide through innovation and entrepreneurship.



Like most elite university extension programs, we help our clients solve a wide range of business challenges and measure our success directly on the results we deliver. Our team of professionals has the skills and experience to provide innovative solutions for a broad range of needs, regardless of location.

www.tcie.buffalo.edu



The mission of the Erie County Industrial Development Agency (ECIDA) is to provide the resources that encourage investment, innovation, growth and global competitiveness in Erie County.

 ${f A}$ ssociation of Public and ${f L}$ and-grant Universities



The Association of Public and Landgrant Universities (A+P+L+U) is a research and advocacy organization of public research universities, land-grant institutions, and state university systems that advances learning, discovery and engagement.

2004



The Six Sigma Program is rolled out to the corporate world and UB students, providing access to the problem-solving methodology.

Blended Learning Training for Six Sigma combines instructor-led, classroom-based education with selfpaced e-learning.



2008

2009



Advanced curricula - the Certified Lean Professional, Master Black Belt, Change Management Program gives professionals an edge.

The Lean Sigma Blue Belt certification program enters the market to help health field providers improve patient satisfaction.



2010



For more information, please contact:

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