

New York Manufacturing Extension Partnership Report (2017 & 2018)

Program Overview and Purpose

The New York Manufacturing Extension Partnership (NY MEP) is a network of organizations that provide growth and innovation services to small and mid-sized manufacturers in every corner of the state to help them create and retain jobs, increase profits, and save time and money.

NY MEP is part of the National Institute of Standards and Technology's (NIST) Hollings Manufacturing Extension Partnership and is supported through a combination of federal and state funding. NY MEP is awarded approximately \$6 Million dollars in federal funds per year. New York State adds approximately \$3.7 Million dollars in state funding. This funding is awarded to 11 subrecipients through a competitive process. These eleven sub-recipient organizations—one in each economic development region and one "statewide" center offer a broad range of services.

NY MEP provides a variety of services including:

- Innovation strategies;
- Process improvements;
- Quality control;
- Manufacturing scale-up;
- Sustainable manufacturing;
- Supply chain assistance;
- Technology acceleration;
- New market strategies;
- Product development and prototyping;
- Workforce Development;
- Entrepreneurial and start-up assistance, including financing and grant information; and
- Other services tailored to regional priority industry clusters.

The information provided in this report is a requirement of Public Authorities Law Article 10A Section 3102A related the Industrial Technology Extension Services and Section 3102D related to the Technology Development Organizations.

This report lists each center with required and additional information included. Information about each center includes:

- Activities and accomplishments (including new services developed) taken from the centers progress narrative;
- Types of companies assisted;
- Impacts generated;
- Federal (NIST MEP) Scorecard provided for every center;

New York Manufacturing Extension Report (2017 & 2018)

- Support of Regional Cluster;
- Center state, federal and match (other sources) funding; and
- Industry-oriented Workforce Training.

In the case of the statewide center, FuzeHub, their primary focus: is marketing system capabilities; hosting awareness and training events; serving as a trusted advisory; and referring companies to the most appropriate regional MEP or other innovation asset for necessary assistance.

Alliance for Manufacturing and Technology (AM&T) Southern Tier Region Director: Carol Miller

Activities and Accomplishments:

As an important component to their holistic approach to business development, AM&T continuously meets with companies to help them understand the concepts, opportunities, requirements, partners, customers, and specific activities that lead to successful business growth and profitability. AM&T has partnered with Fuzehub, Empire State Development, Industrial Development Agencies, Workforce Development Institute and a long list of other economic development partners to engage and assist manufacturers. AM&T leverages partners and subcontractors to manage peak activities and provide special services as required by their clients.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	6	8
Number of jobs created	41	116
Number of jobs retained	862	577
Increased/retained sales	\$188,500,662	\$121,266,000
Cost Savings	\$3,484,200	\$1,095,200
New investment	\$6,154,150	\$5,263,020
Non-job Impacts Total	\$198,139,012	\$127,624,220

NIST MEP Operations Performance Management Score				
	AM	I&T		
		2017 NIST		2018 NIST
	2017	MEP	2018	MEP
	Normalized	Performance	Normalized	Performance
Metric (Threshold)	Impact	Score	Impact	Score
New Sales (\$15)	\$24.9	10	\$62.4	10
Retained Sales (\$35)	\$304.5	10	\$256.7	10
Jobs Created and Retained	1357.9	10	1823.7	10
(500)	1557.9	10	1023.7	10
New Investment (15)	\$8.7	0	\$13.9	0
Cost Savings (7)	\$2.1	0	\$2.9	0
Percent Improving	00 E0/	10	0.4.20/	10
Competitiveness (80%)	88.5%	10	84.2%	10
Survey Response Rate (70%)	86.7%	10	92.7%	10
Net Promoter Score(r) (75)	100.0	10	84.2	10
Mfg.Clients / \$M Fed (73)	97.0	10	82.0	10
New Mfg.Clients / \$M Fed (29)	26.0	0	21.0	0
Period Performance		70		70

Summary of Centers Support of Regional Cluster:

AM&T focuses on Advanced Transportation Products, Components and System Controls as a regional cluster strategy as chosen by the Regional Economic Development Council. AM&T leverages economic development partners in a wide variety of assistance to manufacturers including grants and assistance from regional universities, New York Manufacturing Extension Partnership (NYMEP), Pollution Prevention Institute (P2I), Empire State Development (ESD), Workforce Development Institute (WDI), and New York State Energy Research and Development Authority (NYSERDA). AM&T is the designated High Tech Advocacy Organization for the RG&E-NYSEG Manufacturing Accelerator Program (MAP) in the Southern Tier. This grant supports work with all manufacturers in the Southern Tier, with a focus on both transformational projects and all manufacturers in advanced manufacturing/transportation and agriculture/food industry clusters. AM&T has met with companies who have received, or were an application finalist for, the NYSERDA 76W Clean Energy program. In partnership with Binghamton University, GlobalNY, US Department of Commerce, and others they have promoted, supported, and completed two ExportNY programs. AM&T continues to be involved with local economic development organizations to assist Alstom in Hornell, a recipient of \$2.8B

rail contract, in expanding and improving their supply chains and have supported an Upstate Revitalization Initiative (URI) grant application to support these efforts.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$195,000	\$195,000
Federal Funding	\$380,000	\$380,000
Matching Funds	\$457,075	\$380,613
MEP-Dedicated Employees	7	5

Industry-Oriented Workforce Training

AM&T continues to promote and work closely with WDI (Workforce Development Institute) to provide funding support for workforce training projects. To date, AM&T has been instrumental in securing over \$1 million in WDI funding support for manufacturers in the Southern Tier.

Center for Economic Growth (CEG) Capital Region

Director: Michael Lobsinger

Activities and Accomplishments:

CEG continues to see increased referrals from program partners, clients, and some success with advertising on social media. CEG has rolled out a new program called SolarGEN, focused on assisting manufacturers interested in solar power generation.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	82	124
Number of jobs created	51	50
Number of jobs retained	385	414
Increased/retained sales	\$41,265,000	\$22,375,500
Cost Savings	\$11,948,905	\$1,119,849
New investment	\$14,480,630	\$8,061,880
Non-job Impacts Total	\$67,694,535	\$31,557,229

NIST MEP Operations Performance Management Score				
	CE	G		
		2017 NIST		2018 NIST
	2017	MEP	2018	MEP
	Normalized	Performance	Normalized	Performance
Metric (Threshold)	Impact	Score	Impact	Score
New Sales (\$15)	\$16.1	10	\$17.8	10
Retained Sales (\$35)	\$27.7	0	\$41.1	10
Jobs Created and Retained (500)	810.5	10	1221.1	10
New Investment (15)	\$16.5	10	\$21.2	10
Cost Savings (7)	\$30.6	10	\$2.9	0
Percent Improving	92.6%	10	86.1%	10
Competitiveness (80%)	92.076	10	00.170	10
Survey Response Rate (70%)	96.4%	10	87.8%	10
Net Promoter Score(r) (75)	74.1	0	82.9	10
Mfg.Clients / \$M Fed (73)	71.0	0	58.0	0
New Mfg.Clients / \$M Fed (29)	32.0	10	34.0	10
Period Performance		70		80

Summary of Centers Support of Regional Cluster:

CEG focuses on Research, Development and Commercialization as a regional cluster strategy as chosen by the Regional Economic Development Council. CEG is mapping the R&D and Commercialization resources in the Capital Region. They have been working with Innovate518 on the creation of a shareable online resource map to help innovators and entrepreneurs better navigate the resources. CEG is also broadening their Mentor list and areas of expertise.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$195,000	\$195,000
Federal Funding	\$380,000	\$380,000
Matching Funds	\$369,395	\$603,446
MEP-Dedicated Employees	7.79	7.78

CEG continues to develop the Pathways program in development of tiered and stackable manufacturing training program through a partnership with Hudson Valley Community College (HVCC) and Schenectady County Community College (SCCC). Additionally, Keybank is supporting the initiative with funding to trainers to offset the costs for unemployed and underemployed workers.

Central New York – Train, Develop, Optimize (CNYTDO) Central New York Region Director: Jim D'Agostino

Activities and Accomplishments:

TDO generates new leads by working closely with the team at Fuzehub with both incoming and outgoing referrals. TDO continues to make good progress on many of its strategic and tactical goals. TDO utilizes many NYSTAR assets to benefit manufacturing and technology clients within their region.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	70	22
Number of jobs created	56	136
Number of jobs retained	644	393
Increased/retained sales	\$49,326,628	\$44,262,000
Cost Savings	\$6,148,940	\$8,560,000
New investment	\$6,821,000	\$29,315,300
Non-job Impacts Total	\$62,296,568	\$82,137,300

NIST MEP Operations Performance Management Score				
	CNYT	DO		
		2017 NIST		2018 NIST
	2017	MEP	2018	MEP
	Normalized	Performance	Normalized	Performance
Metric (Threshold)	Impact	Score	Impact	Score
New Sales (\$15)	\$17.1	10	\$47.6	10
Retained Sales (\$35)	\$103.9	10	\$68.8	10
Jobs Created and Retained (500)	1634.2	10	1392.1	10
New Investment (15)	\$7.0	0	\$77.1	10
Cost Savings (7)	\$14.5	10	\$22.5	10
Percent Improving	80.0%	10	85.7%	10
Competitiveness (80%)	80.0%	10	65.770	10
Survey Response Rate (70%)	55.6%	0	87.5%	10
Net Promoter Score(r) (75)	70.0	0	96.4	10
Mfg.Clients / \$M Fed (73)	39.0	0	82.0	10
New Mfg.Clients / \$M Fed (29)	11.0	0	37.0	10
Period Performance		50		100

Summary of Centers Support of Regional Cluster:

TDO's regional cluster is Data to Decisions (D2D). Work continued on the National Institute of Standards and Technology (NIST) "Data for Smart Manufacturing Systems" project focused on hardware and software for real time collection of critical data. TDO engaged two companies in an initiative with NIST data scientists to model how NIST can better work with Manufacturers to promote the use of advanced data analytics. Each Company is providing data from a focus area to NIST so that NIST can build Artificial Intelligence (AI) models for learning. The models will then be validated and provided to the companies for leveraging Data to Decisions (D2D) cluster.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$195,000	\$195,000
Federal Funding	\$380,000	\$380,000
Matching Funds	\$580,255	\$457,711
MEP-Dedicated Employees	5	6

TDO works with industry partners to address workforce needs in their region.

CITEC Business Solutions North Country Region Director: John Zielinski

Activities and Accomplishments:

CITEC Business Solutions business continues to be strong based on strong manufacturing growth in the eastern section of the region, and continued interest across the North Country in the services provided by the MEP. Nationally, Manufacturing Day works to change the image of manufacturing careers, and this region's educational systems have embraced the need to focus on STEAM education and participates in many Manufacturing Day activities. Locally in the Plattsburgh area, CITEC is engaged with a staffing agency who piloted a one-year program to put high school graduates right to work in manufacturing plants with an option to switch jobs after four months. The program, called RAMP—Ready, Able, Marketable, Proven, also includes an educational component and counseling services.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies		
served	22	13
Number of jobs created	98	52
Number of jobs retained	199	275
Increased/retained sales	\$21,872,000	\$20,761,280
Cost Savings	\$1,067,501	\$1,980,001
New investment	\$16,579,200	\$3,985,701
Non-job Impacts Total	\$39,518,701	\$26,726,982

NIST MEP Operations Performance Management Score				
	CITI	EC		
	2017 Normalized	2017 NIST MEP Performance	2018 Normalized	2018 NIST MEP Performance
Metric (Threshold)	Impact	Score	Impact	Score
New Sales (\$15)	\$22.1	10	\$8.8	0
Retained Sales (\$35)	\$35.4	10	\$45.8	10
Jobs Created and Retained (500)	742.1	10	860.5	10
New Investment (15)	\$30.2	10	\$10.5	0
Cost Savings (7)	\$2.7	0	\$5.2	0
Percent Improving Competitiveness (80%)	96.4%	10	93.8%	10
Survey Response Rate (70%)	96.6%	10	86.5%	10
Net Promoter Score(r) (75)	78.6	10	90.6	10
Mfg.Clients / \$M Fed (73)	55.0	0	55.0	0
New Mfg.Clients / \$M Fed (29)	16.0	0	26.0	0
Period Performance		70	·	50

Summary of Centers Support of Regional Cluster:

CITEC's regional cluster initiative is Transportation Equipment and Materials. There are 30 or more companies involved in the regional Transportation Equipment and Materials cluster and those companies employ more than 9,000 people. CITEC utilizes this network to continue to grow an interconnected web of supply chain and support.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$195,000	\$195,000
Federal Funding	\$380,000	\$380,000
Matching Funds	\$305,510	\$361,451
MEP-Dedicated Employees	8.40	8.00

CITEC continues to work with Workforce Development Institute (WDI) to fund numerous projects with companies big and small across the entire region including Intrapac, Barton, Schluter Systems, International Paper, Current Apps, Vanderbilt Minerals, Bombardier, Norsk and Hi-Lite Airfield Services.

Industrial and Technology Assistance Corporation (ITAC) New York City Region Director: Kinda Younes

Activities and Accomplishments:

ITAC assists small manufacturing and technology companies in scaling up through training, coaching and consulting on manufacturing basics. The ultimate objective is to accelerate commercialization of new products, thereby creating revenue and jobs for NYC and NYS. The growth in sophistication of technologies in the maker market and in the overall manufacturing process continues to trickle down to smaller companies making them more agile and competitive. ITAC continues to see interest in new technologies, particularly digital manufacturing and robotic technologies.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	67	98
Number of jobs created	336	263
Number of jobs retained	407	776
Increased/retained sales	\$64,564,000	\$53,879,000
Cost Savings	\$19,394,500	\$11,641,743
New investment	\$78,996,600	\$40,817,002
Non-job Impacts Total	\$162,956,100	\$106,337,745

NIST MEP Operations Performance Management Score					
	ITAC				
	2017	2017 NIST MEP	2018	2018 NIST MEP	
	Normalized	Performance	Normalized	Performance	
Metric (Threshold)	Impact	Score	Impact	Score	
New Sales (\$15)	\$35.1	10	\$55.1	10	
Retained Sales (\$35)	\$38.6	10	\$29.8	0	
Jobs Created and Retained (500)	1018.9	10	1636.2	10	
New Investment (15)	\$63.1	10	\$64.3	10	
Cost Savings (7)	\$27.6	10	\$18.3	10	
Percent Improving Competitiveness (80%)	92.2%	10	92.9%	10	
Survey Response Rate (70%)	55.4%	0	62.9%	0	
Net Promoter Score(r) (75)	84.3	10	87.3	10	
Mfg.Clients / \$M Fed (73)	60.0	0	110.0	10	
New Mfg.Clients / \$M Fed (29)	19.0	0	43.0	10	
Period Performance		70		80	

Summary of Centers Support of Regional Cluster:

To support the Smart Cities cluster as it relates to manufacturing and technology, ITAC provides early-stage companies with technical assistance and access to New York City and New York State resources. ITAC assists small manufacturing and technology companies in scaling up through training, coaching and consulting on manufacturing basics.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$315,000	\$315,000
Federal Funding	\$635,000	\$635,000
Matching Funds	\$1,061,887	\$962,881
MEP-Dedicated Employees	8.00	8.00

Industry-Oriented Workforce Training

New York Manufacturing Extension Report (2017 & 2018)

ITAC works with industry partners to address workforce needs in their region.

Insyte Consulting Western New York Region Director: Ben Rand

Activities and Accomplishments:

As partners in Buffalo Manufacturing Works, Insyte and EWI continue their Advanced Manufacturing Implementation Strategy (AMIS) projects designed to help manufacturers develop a multi-year technology implementation strategy and plan for their businesses. Insyte, with EWI and NextStreet, have officially launched SHIFT. This program was previously known as the Innovation Capacity Building Program and is funded by Buffalo Billion II (BB II) with the Western New York Regional Economic Development Council (WNY REDC) and Western New York Empire State Development (ESD). Through SHIFT companies receive an innovation roadmap and assisting implementing technology as appropriate. Currently 73 manufacturers completed intake forms to join SHIFT, 18 assessments were completed (the first step in the SHIFT process) and 14 training sessions delivered. Through this program 4 companies also have undergone or completed innovation audits.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	19	15
Number of jobs created	251	266
Number of jobs retained	1099	802
Increased/retained sales	\$216,836,001	\$200,130,000
Cost Savings	\$14,297,080	\$6,619,800
New investment	\$42,616,172	\$56,431,460
Non-job Impacts Total	\$273,749,253	\$263,181,260

NIST MEP Operations Performance Management Score				
Insyte Consulting				
	2047	2017 NIST	2040	2018 NIST
	2017	MEP	2018	MEP
Metric (Threshold)	Normalized Impact	Performance Score	Normalized Impact	Performance Score
New Sales (\$15)	\$65.5	10	\$115.8	10
Retained Sales (\$35)	\$211.5	10	\$241.6	10
Jobs Created and Retained (500)	1726.8	10	1907.1	10
New Investment (15)	\$44.1	10	\$100.2	10
Cost Savings (7)	\$23.9	10	\$11.8	10
Percent Improving	96.7%	10	97.9%	10
Competitiveness (80%)	30.776	10	37.376	10
Survey Response Rate (70%)	75.0%	10	89.0%	10
Net Promoter Score(r) (75)	84.3	10	81.4	10
Mfg.Clients / \$M Fed (73)	86.0	10	82.0	10
New Mfg.Clients / \$M Fed (29)	36.0	10	25.0	0
Period Performance		100		90

Summary of Centers Support of Regional Cluster:

Insyte's priority cluster is Materials and Machinery. Insyte has been working with the Buffalo Niagara Manufacturing Alliance, a trade association that includes dozens of target Machinery and Materials Cluster manufacturers, to offer Succession Planning services.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$290,000	\$290,000
Federal Funding	\$560,000	\$560,000
Matching Funds	\$1,022,886	\$1,165,674
MEP-Dedicated Employees	10.77	11.18

Insyte works with industry partners to address workforce needs in their region.

Manufacturing and Technology Enterprise Center (MTEC) - formerly HVTDC Mid-Hudson Region Director: Tom Phillips

Activities and Accomplishments:

MTEC's Strategic Plan addresses three major areas (Project Revenue, Food & Beverage Cluster and Impact Survey Optimization) it is progressing as anticipated, with the addition of an external telemarketing campaign, a focused innovative internal sales campaign and the identification of funds available to clients to subsidize projects. MTEC's services continue to consist primarily of identifying and securing cost-effective sources of plastic molded parts, printed circuit boards, metal fabricated parts, electronic devices and various off the shelf components. This service remains very closely tied to their product design and development activities for start-ups, inventors and companies introducing new and enhanced products.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	9	15
Number of jobs created	31	20
Number of jobs retained	191	112
Increased/retained sales	\$16,154,000	\$26,833,000
Cost Savings	\$2,128,302	\$2,596,800
New investment	\$8,375,969	\$3,992,140
Non-job Impacts Total	\$26,658,271	\$33,421,940

NIST MEP Operations Performance Management Score					
	MTEC				
Metric (Threshold)	2017 Normalized Impact	2017 NIST MEP Performance Score	2018 Normalized Impact	2018 NIST MEP Performance Score	
New Sales (\$15)	\$4.7	0	\$3.4	0	
Retained Sales (\$35)	\$23.6	0	\$44.5	10	
Jobs Created and Retained (500)	367.9	0	235.7	0	
New Investment (15)	\$13.5	0	\$7.1	0	
Cost Savings (7)	\$3.3	0	\$4.6	0	
Percent Improving Competitiveness (80%)	76.0%	0	95.0%	10	
Survey Response Rate (70%)	75.8%	10	87.0%	10	
Net Promoter Score(r) (75)	80.0	10	100.0	10	
Mfg.Clients / \$M Fed (73)	48.0	0	68.0	10	
New Mfg.Clients / \$M Fed (29)	27.0	0	43.0	0	
Period Performance		20		50	

Summary of Centers Support of Regional Cluster:

MTEC staff continues to conduct one-on-one meetings with companies within the Food & Beverage cluster. The meetings continue to represent a diverse cross-section of the cluster including microbreweries, small food processors, equipment manufacturers, as well as larger food and beverage processors. The meetings have resulted in one additional engagement and two proposals under consideration for the direct delivery of MTEC services. *"The Food & Beverage Corner"*, The bimonthly newsletter is focused on the smaller, emerging food and beverage companies.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$290,000	\$290,000
Federal Funding	\$560,000	\$560,000
Matching Funds	\$507,139	\$386,623
MEP-Dedicated Employees	11.80	17.10

MTEC partners with local colleges to recruit STEM students for MTEC's paid intern program in support of Design/Prototype service offerings. Unlike most internships, MTEC looks to work with students for an extended period, usually starting at the end of their second year and concluding upon graduation. The program supports between 9 and 12 interns on a continuous basis with the majority being undergraduate engineering (computer, mechanical, electrical) candidates with some graduate students and occasionally an exceptional community college or high school student. Most recently MTEC has added an intern studying for their degree in Cybersecurity.

MTEC values providing students with real world experience, giving them the chance to apply knowledge from their coursework to projects with manufacturers in the Hudson Valley. Each student is assigned to one or more client project teams, responsible for not only the technical success of the project but also responsible to adhere to both schedule and budgetary requirements. This program creates a collaborative learning environment where interns can share and develop their own, innovative ideas.

The program has evolved to the point that it is now more than just an internship at MTEC. The matching and on-going exposure of the students to clients thru the client's specific projects has upon graduation, provided a seamless transition for the intern into a full-time position at the client company. The client company not only has a new product, machine, software product, etc. but also the intimate technical knowledge and expertise of the new hire. The "transition to employment" feature of the internship program provides the manufacturing client with a cost-effective method to evaluate the intern over an extended period prior to making a job offer, the intern benefits thru a quick transition from student to employee in a known environment in the field of their choice.

Mohawk Valley Community College – Advance Institute for Manufacturing (MVCC – AIM) Mohawk Valley Region Director: Cory Albrecht

Activities and Accomplishments:

Training and education projects range from AIM's MEP core services such as process improvement, Lean Six Sigma, OSHA Safety Training, and ISO Quality Management Systems and also included AIM's specialized "hands —on" programs in cybersecurity, electrical, welding, and blueprint reading training. AIM continues to grow in both client outreach, projects, and center revenues. They continue to leverage the relationships that Mohawk Valley Community College has with both Herkimer College and Fulton Montgomery Community College. This partnership has enabled their center to successfully reach all six counties within the region and keep a transparent image as the manufacturers connect with their local community college for education and training.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	17	54
Number of jobs created	55	63
Number of jobs retained	79	322
Increased/retained sales	\$13,216,942	\$33,961,446
Cost Savings	\$6,492,000	\$8,633,000
New investment	\$2,362,100	\$7,904,200
Non-job Impacts Total	\$22,071,042	\$50,498,646

NIST MEP Operations Performance Management Score					
	MVCC				
	2017 Normalized	2017 NIST MEP Performance	2018 Normalized	2018 NIST MEP Performance	
Metric (Threshold)	Impact	Score	Impact	Score	
New Sales (\$15)	\$3.6	0	\$23.1	10	
Retained Sales (\$35)	\$23.3	0	\$66.3	10	
Jobs Created and Retained (500)	307.9	0	1013.2	10	
New Investment (15)	\$7.3	0	\$20.8	10	
Cost Savings (7)	\$15.9	10	\$22.7	10	
Percent Improving Competitiveness (80%)	93.8%	10	95.7%	10	
Survey Response Rate (70%)	72.7%	10	82.1%	10	
Net Promoter Score(r) (75)	93.8	10	82.6	10	
Mfg.Clients / \$M Fed (73)	50.0	0	63.0	0	
New Mfg.Clients / \$M Fed (29)	29.0	10	34.0	10	
Period Performance		50		90	

Summary of Centers Support of Regional Cluster:

MVCC-AIM is part of the Cybersecurity Cluster in their region. AIM has assisted MEP Centers across New York State in the implementation of the FuzeHub Cybersecurity Grant, performing various cybersecurity related projects for small and medium manufacturers that they would not be able to afford without funding assistance. AIM has also joined the Working Group and continues their work in the Northeast Cybersecurity group in an effort to continue to share their knowledge and develop programs for MEP centers, as well as clients within the region.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$195,000	\$195,000
Federal Funding	\$380,000	\$380,000
Matching Funds	\$176,914	\$196,321
MEP-Dedicated Employees	5.00	4.00

In addition to the work mentioned above, MVCC works with industry partners to address workforce needs in their region.

NextCorps (formerly High Tech Rochester) Finger Lakes Region Director: Jim Senall

Activities and Accomplishments:

NextCorps project activity continued to be very strong. Sales activity was concentrated on engaging firms in the Rochester Gas and Electric Corp. (RG&E)/New York State Electric and Gas (NYSEG)/National Grid electric service area to leverage the Manufacturing Productivity Program/Manufacturing Accelerator Program reimbursement. NextCorps submitted RG&E/NYSEG Manufacturing Accelerator Program (MAP) applications for 27 companies. The MAP has provided a significant boost to MEP project activity in this region.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	25	33
Number of jobs created	138	179
Number of jobs retained	477	423
Increased/retained sales	\$30,374,240	\$52,060,686
Cost Savings	\$6,351,700	\$3,761,700
New investment	\$33,518,091	\$21,426,476
Non-job Impacts Total	\$70,244,031	\$77,248,862

NIST MEP Operations Performance Management Score						
	NextCorps (formerly HTR)					
	2017 NIST					
	2017	MEP	2018	MEP		
	Normalized	Performance	Normalized	Performance		
Metric (Threshold)	Impact	Score	Impact	Score		
New Sales (\$15)	\$8.6	0	\$14.9	10		
Retained Sales (\$35)	\$26.4	0	\$78.1	10		
Jobs Created and Retained (500)	916.1	10	1075.0	10		
New Investment (15)	\$36.5	10	\$38.3	10		
Cost Savings (7)	\$5.5	0	\$6.7	10		
Percent Improving	87.6%	10	88.0%	10		
Competitiveness (80%)	67.070	10	00.070	10		
Survey Response Rate (70%)	79.5%	10	87.0%	10		
Net Promoter Score(r) (75)	86.5	10	81.8	10		
Mfg.Clients / \$M Fed (73)	111.0	10	145.0	10		
New Mfg.Clients / \$M Fed (29)	43.0	10	68.0	10		
Period Performance		70		100		

Summary of Centers Support of Regional Cluster:

Nextcorps, with the regional cluster focus of Optics, Photonic and Imaging (OPI) continues to support cluster workgroups, AIM Photonics initiatives, outreach to OPI companies, and active projects within the cluster. NextCorps continues to wrap up a series of promotional videos featuring regional manufacturers including OPI companies such as Sydor Optics, OptiPro Systems, Applied Image, Navitar, Lumetrics, and Optics Technology Incorporated. The completed videos are provided to companies for marketing purposes and a NextCorps MEP video will also be produced to highlight support for Finger Lakes manufacturers. LUMINATE, a \$10 million multi-year business accelerator for optics, photonics and imaging funded by ESD kicked off its second cohort selecting 10 startups after they pitched their innovative ideas to an advisory panel comprised of industry experts at the Luminate NY Lightning Awards. Each company will receive an initial investment of \$100,000 and will be a part of the initiative's second cohort.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$290,000	\$290,000
Federal Funding	\$560,000	\$560,000
Matching Funds	\$1,633,345	\$2,334,090
MEP-Dedicated Employees	3.57	6.07

NextCorp works with industry partners to address workforce needs in their region.

Manufacturing and Technology Resource Center (MTRC) at Stony Brook University Long Island Region

Director: Dr. Imin Kao

Activities and Accomplishments:

MTRC 's marketing efforts have been very successful. Their work on the Long Island Food Council continues to be successful with 8 active projects totaling \$76,113. MTRC was a major sponsor and coordinator to the Long Island Manufacturing Symposium which brought in 150 attendees to the event. MTRC has started a series of breakfast informational meeting which bring together manufacturers and highlighting individual resources available to them. MTRC has also created a week-long summer camp for kids interested in robotics. This has been very well attended.

Types of companies assisted:

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	0	56
Number of jobs created	20	28
Number of jobs retained	12	30
Increased/retained sales	\$1,735,000	\$14,100,000
Cost Savings	\$269,800	\$598,500
New investment	\$3,336,500	\$2,125,700
Non-job Impacts Total	\$5,341,300	\$16,824,200

NIST MEP Operations Performance Management Score						
S	Stony Brook University - MTRC					
	2017 NIST 2017 MEP 2018 Normalized Performance Normalized		2017 M		2018 NIST MEP Performance	
Metric (Threshold)	Impact	Score	Impact	Score		
New Sales (\$15)	\$1.2	0	\$3.7	0		
Retained Sales (\$35)	\$1.5	0	\$18.5	0		
Jobs Created and Retained (500)	50.4	0	91.3	0		
New Investment (15)	\$2.9	0	\$3.3	0		
Cost Savings (7)	\$0.4	0	\$0.9	0		
Percent Improving Competitiveness (80%)	100.0%	10	93.5%	10		
Survey Response Rate (70%)	72.0%	10	96.9%	10		
Net Promoter Score(r) (75)	100.0	10	76.7	10		
Mfg.Clients / \$M Fed (73)	47.0	0	69.0	0		
New Mfg.Clients / \$M Fed (29)	38.0	10	44.0	10		
Period Performance		40	·	40		

Summary of Centers Support of Regional Cluster:

The regional cluster initiative on Long Island is Biotechnology. MTRC continues to support biotechnology companies by utilizing Stony Brooks Biotech CAT (Center for Advance Technology) to bring the knowledge they have 'in-house' into their region.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$315,000	\$315,000
Federal Funding	\$635,000	\$635,000
Matching Funds	\$253,701	\$5,170,566
MEP-Dedicated Employees	2.00	2.00

Industry-Oriented Workforce Training

MTRC works with industry partners to address workforce needs in their region.

Fuzehub Statewide Center Director: Elena Garuc

Activities and Accomplishments (include new services developed):

Over the past two years Fuzehub received 638 company requests for assistance and referred those companies to 1,515 resources with the expertise to address the manufacturer's needs.

FuzeHub regularly organizes events and workshops to engage manufacturers and assist them in finding the assistance they need to retain maintain or grow their business. FuzeHub's flagship event is the Solutions Forum they hold regularly in different regions of the state. For instance, they recently held a Solutions Forum in Brooklyn that joined 22 resources with 27 companies seeking business and technical assistance. Most of the resources were ESD/NYSTAR funded, including several MEP Centers. Start-ups, very small companies, and small-to-midsized manufacturers participated.

Additionally, FuzeHub and partners from across the state were selected by the U.S. Department of Energy to deliver Build4Scale, a manufacturing fundamentals training targeting energy technology innovators. Build4Scale training equips energy hardware innovators with the training and information they need to create manufacturing-ready prototypes, avoid costly redesign, and work with manufacturers. 64 companies attended workshops held in different areas of the state.

Fuzehub continues to manage the Jeff Lawrence Innovation Fund which includes:

- Commercialization Competition companies pitch at a live event to a panel of judges who help select the award winners;
- Manufacturing Grants these grants are available to help companies develop/improve a prototype and require a non-profit service provide to partner on the project; and
- Innovation Incentive Prize available funding for companies to incorporate new or existing technology into their operations.

Types of companies assisted:

FuzeHub Engagement Summary				
	2017	2018	Total	
Live Events	17	31	48	
# of Attendees	1,128	1,776	2,904	
Requests for Assistance	279	359	638	
Referrals	546	969	1,515	

Impacts	01/01/17 - 12/31/17	01/01/18 - 12/31/18
Number of unique companies served	7	21
Number of jobs created	0	30
Number of jobs retained	1	24
Increased/retained sales	\$5,000	\$251,794
Cost Savings	\$2,000	\$940,000
New investment	\$71,000	\$2,570,166
Non-job Impacts Total	\$78,000	\$3,761,960

NIST MEP Operations Performance Management Score						
	Fuzehub					
Metric (Threshold)	2017 Normalized Impact	2017 NIST MEP Performance Score	2018 Normalized Impact	2018 NIST MEP Performance Score		
New Sales (\$15)	\$0.0 M	0	\$0.1	0		
Retained Sales (\$35)	\$0.0 M	0	\$0.1	0		
Jobs Created and Retained (500)	0.9	0	47.6	0		
New Investment (15)	\$0.1	0	\$2.3	0		
Cost Savings (7)	\$0.0	0	\$0.8	0		
Percent Improving Competitiveness (80%)	75.0%	0	82.4%	10		
Survey Response Rate (70%)	51.7%	0	81.0%	10		
Net Promoter Score® (75)	100.0	10	80.0	10		
Mfg.Clients / \$M Fed (73)	13.0	0	18.0	0		
New Mfg.Clients / \$M Fed (29)	13.0	0	17.0	0		
Period Performance		10		30		

Other Company Engagements

As part of the Jeff Lawrence Innovation Fund, FuzeHub assists companies with prototype development, market identification, scaling, and many other activities.

2017 Awards	Industry	Innovation Partner	Funding
Manufacturing Grant	American Fuel Cell	Alfred State	\$75,000
Manufacturing Grant	LC Drives	Clarkson University	\$75,000
Manufacturing Grant	Ecovative Design	RPI	\$74,616
		Weill Cornell Medical	
Manufacturing Grant	Sterifre Medical Inc.	Center	\$75,000
		Stony Brook	
Manufacturing Grant	Carson Optical	University	\$74,891
	Cleanslate/ Grantwood		
Manufacturing Grant	Technologies	University at Buffalo	\$75,000

New York Manufacturing Extension Report (2017 & 2018)

Manufacturing Grant	ClerioVision	University of Rochester	\$45,760
	Preprocess/Battenkill		
Manufacturing Grant	Fiber/Sundstrand	SUNY New Paltz	\$75,000
Manufacturing Grant	Vistex Composites, LLC	RPI	\$69,791
Manufacturing Grant	Samscreen, Inc.	RPI-CATS	\$75,000
	LighTopTech Corp./		
Manufacturing Grant	BZDesign, Inc.	MCORP	\$75,000
Commercialization			
Competition	Ferric Contrast		\$50,000
Commercialization			
Competition	Potsdam Sensors		\$50,000
Commercialization			
Competition	NanoHydroChem		\$10,000
Commercialization			
Competition	Praxis Biotechnology		\$50,000
Commercialization			
Competition	Spark Charge		\$50,000
2017 Total Awarded			\$1,000,058

2018	Industry	Innovation Partner	Funding
		Center for Economic	
Manufacturing Grant	VARA Corporation	Growth	\$50,000
Manufacturing Grant	Create O&P	Clarkson University	\$49,200
		Regenerative	
Manufacturing Grant	StemCultures	Research Foundation	\$49,986

New York Manufacturing Extension Report (2017 & 2018)

Manufacturing Grant	Enetics	Rochester Institute of Technology	\$21,685
Wand actaining Craint	Effecties	recimology	\$21,003
		University of	
Manufacturing Grant	Imaginant	Rochester	\$50,000
		University of	
Manufacturing Grant	EndoGlow	Rochester	\$50,000
Manufacturing Grant	Freeform Fibers	Alfred University	\$49,497
Manufacturing Grant	LC Drives	Clarkson University	\$50,000
		Rochester Institute of	
Manufacturing Grant	Empire Medicinals	Technology	\$49,460
	Tire Conversion	Rensselaer	
Manufacturing Grant	Technologies, Inc.	Polytechnic Institute	\$49,326
		Rensselaer	
Manufacturing Grant	Tidy Tots	Polytechnic Institute	\$47,698
Manufacturing Grant	S Howes LLC	University at Buffalo	\$50,000
Commercialization			
Competition	Bonbouton		\$50,000
Commercialization			
Competition	Capro-X Inc.		\$50,000
Commercialization			
Competition	Iko Systems, Inc.		\$50,000
Commercialization			
Competition	Lux Semiconductors		\$50,000
Commercialization			
Competition	MicroEra Power, Inc.		\$50,000
Commercialization			
Competition	RemWell, LLC		\$50,000
Innovation Challenge	Caraway Tea Company		\$10,000

Innovation Challenge	Prolific Earth Sciences	\$10,000
Innovation Challenge	Nuravine	\$10,000
Innovation Challenge	ReNuble	\$9,898
Innovation Challenge	Farm Bridge	\$10,000
Innovation Challenge	Empire Medicinals	\$9,950
Innovation Challenge	Vigneri Chocolate	\$10,000
	The Arc of Livingston-	
Innovation Challenge	Wyoming	\$5,933
Innovation Challenge	Perfect Granola	\$10,000
Innovation Challenge	We Are the New Farmers	\$6,600
Innovation Challenge	Buffalo Brewing Company	\$10,000
Innovation Challenge	Little Bird Kitchen	\$10,000
Innovation Challenge	Fruition Orchards	\$7,500
2018 Total Awarded		\$986,733

Summary of Centers Support of Regional Cluster:

Fuzehub is not responsible for a regional cluster as they are not a regional center. They do however support each regions cluster initiative by providing support via marketing, advertising and events.

Center Funding and Staffing	01/01/17 - 12/31/17	01/01/18 - 12/31/18
State Funding	\$1,298,000	\$1,298,000
Federal Funding	\$1,135,194	\$1,135,194
Matching Funds	\$5,000	\$15,954
MEP-Dedicated Employees	11	11

Fuzehub works with industry partners to address workforce needs throughout the state. They collaborate with the regional centers to fill in any gaps of services that are needed.

APPENDIX

NIST MEP - National Institute of Standards and Technology's Hollings Manufacturing Extension Partnership provides roughly \$6 million per year to NYSTAR to manage this program.

Impacts – NIST MEP contracts with a third-party survey house to reach out to companies that have received assistance from a NY MEP center to identify impacts that have been realized through the engagement. Impacts captured include: jobs created; jobs retained; cost savings; retained sales; increased sales; and cost avoidance.

NIST MEP Score Card – NIST MEP provides each center with a Scorecard. All calculations are based on the sum (or aggregate) of the impacts reported by the center's clients over a rolling 4 quarter period.

NIST MEP Operations Performance Management Score

For each metric category, a score of 10 is given for meeting or exceeding the metric threshold. If a metric is below the threshold, a score of zero is given. Scores are based on a rolling four quarter average of survey results.

Metric	Threshold	
New Sales	\$15	Per million federal funding
Retained Sales	\$35	Per million federal funding
Jobs Created and Retained	500	Per million federal funding
New Investment	\$15	Per million federal funding
Cost Savings	\$7	Per million federal funding
Percent Improving Competitiveness	80%	% of companies that realized a benefit
Survey Response Rate	70%	Percentage % of companies submitted for survey and complete the survey
Net Promoter Score(r)	75	Companies rank from 1 to 10 the likelihood of recommending the center to others
Mfg.Clients / \$M Fed	65.0	Per million federal funding
New Mfg.Clients / \$M Fed	28.0	Per million federal funding

Funding Levels-formula

The amount of funding for the regional MEP centers is based on the number of manufacturers with less than 500 employees within each region. For the current NY MEP designation period of 1/1/2016 - 12/31/2020 the funding levels, if state and federal funding remain constant, are set at:

Number of Manufacturers in a Region	Regional Funding Level
0 - 1,000	\$575,000
1,001 – 2,000	\$850,000
Over 2,000	\$950,000