NIST MEP ANNUAL REVIEW REPORT

From: José A. Colucci-Ríos, NIST MEP Resource Manager

Gloria Solomon, NIST MEP Federal Program Officer

Subject: 6th Year Annual Review

Center Information:

LEGAL RECIPIENT: North Carolina State University, Industry Expansion Solutions

(IES)

CENTER NAME: North Carolina MEP

Cooperative Agreement: 70NANB20H061

Date of Review: February 24, 2021

Location of Review: Virtual

I. Review Participants

Reviewers:

José A. Colucci-Ríos, NIST MEP Resource Manager

Gloria Solomon, NIST MEP Federal Program Officer

Center Representatives:

- Phil Mintz, Executive Director, IES and Director, NCMEP
- Dr. Fiona Baxter, Associate Executive Director, IES and Assistant Director, NCMEP
- Madelene Brooks, Financial Manager, IES
- KeAnne Hoeg, Manager, Market Research & Reporting, NCMEP
- Barbara Williams, Associate Executive Director Field Services
- Heather Mitchell, Administrative Assistant

II. Executive Summary and Project Analysis

The review of NCMEP completed February 24, 2021 complies with the Hollings Manufacturing Extension Partnership' (MEP) enabling legislation, 15 USC 278k, and regulation, 15 CFR 290.8 (d), published September 17, 1990 and amended April 20, 1994. The program was reviewed with respect to the areas listed below. The Center's operations were judged to be satisfactory. The Center's performance, as demonstrated by the IMPACT report, has been very consistent between 80 and 100 for the last 4 years. Specific comments and recommendations are made at the end of the review.

Section 1: Center Background

a. Strategy, Market & Business Model Yes □ No ⊠ i. Center Strategy Changes to the NCMEP strategy will include an additional focus on Industry 4.0 technologies such as cybersecurity, additive manufacturing, and robotics/automation. In addition, NCMEP will be adding internal resources to target new industry sectors to include food manufacturing. • With the addition of enhanced engagement efforts with new partners and the addition of new subrecipients, the type of services and number of clients to be served will grow. This will include the addition of projects that help expose the future workforce to manufacturing. ii. Market Understanding 1) Market Segmentation Yes □ No ☒ NCMEP do not anticipate any changes to market segmentation. Yes □ No ⊠ 2) Needs Identification, Product/Service Offerings NCMEP are fully committed to the Trusted Advisor Model and plan to continue to train their staff around this approach. They plan to utilize client assessments for needs identification more than they have in previous years to include the use of the Competitiveness Review and Core Values tools. iii. Business Model The Center does not have to submit any changes to documentation on file. Yes □ No ☒ 1) Outreach and Service Delivery

NCMEP do not anticipate any fundamental changes to the their outreach and service
delivery. They will continue their primary outreach through current partners although
virtual services related to existing and developing products are expected to be a more
prominent option for customers. Due to the pandemic, the Center has modified its
service offerings (both open enrollment and on-site work) to allow for the flexibility of
virtual offerings; however, the overall service delivery remains the same, and the Center
plans to return to face-to-face as soon as possible while keeping its virtual options if
clients prefer.

2)	Partnership Leverage and Linkages	Yes □ No ⊠						
•	 With the addition of new subrecipients and complementary partners, NCMEP is better positioned to offer additional services and to engage more clients to include very small and rural clients as well as startups. They continue to realize new partnerships for cybersecurity, additive manufacturing, marketing services, and - most recently - the textile industry. 							
iv. Perf	formance Measurement and Management Process/System	Yes □ No ⊠						
•	 NCMEP do not anticipate any changes to the their performance measurement and management process/system although they will continue to enhance existing efforts to assist in better day-to-day management of their metrics and visibility into their performance via dashboards in their Salesforce CRM system. 							
b. Qua	lifications of the Applicant, Key Personnel and Organizational Stru	ucture						
i. Key F	Personnel ¹	Yes □ No ⊠						
•	 No changes are anticipated to key personnel (all changes over the past five years have been documented and recorded). 							
ii. Orga	anizational Structure ²	Yes □ No ⊠						
•	No changes are anticipated to the organizational structure.							

Section 2: Operating Outcomes

Center Client Activity Levels by Type of Company

- a) Client Activity levels with a focus on very small, rural, emerging, small and mid-sized enterprises (SMEs), and other manufacturers: NIST MEP Strategic Goal; Enhancing Competitiveness.
 - NCMEP continues to leverage partnerships and utilize customer feedback to serve very small, rural and start-up clients. Notable projects include the following examples: IES submitted rural client New PECO (Cherokee County) to the MEPNN Supplier Scouting program to find a potential supplier as well as submitting rural

¹ Please note, if any of the Key Personnel have changed or will be changing the appropriate prior approval requirements must be followed as stated in the Hollings MEP General Term and Conditions.

² As part of the certification process please ensure that the Oversight Board meets the current Hollings MEP General Terms and Conditions.

client Pactiv (Moore County) as a response to a MEPNN supplier scouting opportunity. IES also identified and placed an engineering intern at a small manufacturer (2 employees) DaVinci Aerospace as part of the NC State College of Engineering's Rural Works program. Partner First Flight Venture Center (FFVC) provided Phil Williams, LLC (1 employee) with prototyping services for a project for the United States Government as well as microfluidic testing of proprietary microchip technology for Redbud Labs (10 employees). Partner NC Community College System (NCCCS) connected start-up Metyx USA with Gaston College, resulting in a customized training project. Partner the Polymers Center of Excellence (PCE) conducted extrusion trials (21mm Theysohn) for start-up and a very small manufacturer (2 employees) Multi3D. Partner the Economic Development Partnership of North Carolina (EDPNC) assisted Trelleborg Coated Systems US with moving three pieces of equipment to its rural Rutherford County facility after the facility was forced to lay off staff and then close its Connecticut facility due to COVID-19.

NCMEP and its partners have also conducted programs for mid-sized clients such as
the COVID-19 PPE testing provided by partner the Manufacturing Solutions Center
(MSC) for Hanes Companies Dye & Finishing (491 employees); IES connected Harris
& Covington Hosiery Mills (240 employees) with a FDA Medical Device consultation
with expert Darren Reeves and conducted an ISO 9001 Internal Auditor class for
Parker Hannifin Corporation (350 employees). NCCCS provided Keihin Carolina
System Technology (468 employees) with a customized training program that
provided technical training for production and production support personnel to
acquire improved skills to enable them to be more effective and to contribute more
to the profitable operation of the facility.

b) Transformational Clients: NIST MEP Strategic Goal; Enhancing Competitiveness.

• NCMEP continues to support transformational engagements with clients. Examples include the following: EDPNC provided assistance to Additive America that enabled them to expand their 3D printing capacity to produce more face shields. EDPNC also provided expansion assistance to NanoExplore, helping them to add a full paint line with 6 new jobs per shift. Butterball invested \$33 million in a technology upgrade for its facility in Wayne County, and NCCCS assisted them with training their employees in every department on the new technology. NCCCS also assisted TENOWO with continuous improvement training after major management changes; this training has had a significant impact on production and overall productivity.

Top and Bottom Line Growth

a) Engagement in "Top Line Growth": NIST MEP Strategic Goal; Enhancing Competitiveness.

• NCMEP top-line growth projects remain very strong, especially as the Center focuses on services that enhance COVID-19 manufacturing response. Partner EDPNC helped connect Bright View Technologies, a manufacturer producing disposable plastic face shields to their first buyer, the state of North Carolina. Bright View has been able to deliver over 300,000 face shields. IES assisted Renfro Corporation with PFE and BFE materials testing with RTI through its EAP program (CARES Act funding). MSC provided COVID-19 testing for Parkdale Mills to determine whether samples provided could be used to develop PPE. PCE provided Corning Optical Communications with material rheotens testing on plastic samples. FFVC enabled lab testing for MedPharma Services for dermatological product development.

b) Engagement in "Bottom Line Growth": NIST MEP Strategic Goal; Enhancing Competitiveness.

 Projects impacting the bottom line remain strong with NCMEP partners IES and NCCCS leading the Center's efforts via continuous improvement and standards project facilitations. IES provided Haynes International with internal audits for AS9100D, ISO 14001 and ISO 45001 as well as ISO 45001 virtual internal auditing training for Henniges Automotive. NCCCS helped Mohawk Industries with a project that included leadership, computer, safety continuous improvement and technical training. Another NCCCS project with Iconic Marine Group provided training in leadership, safety and life skills for the 46 new employees

c) Making New Technologies Available: NIST MEP Strategic Goal; Enhancing Competitiveness.

This is an area where NCMEP sets a high bar for the MEP National Network.

• NCMEP continues to make new technologies available. Since March, MSC has helped North Carolina textile manufacturers with testing for mask and gown PPE production and has worked with a local textile consortium to mobilize cut and sew capabilities to produce PPE. NCMEP also continues to make advancements on executing a strategy to bring Industry 4.0/Advanced Manufacturing (AM) technologies to NC manufacturers. The Center installed a 3D printer at partner PCE and has prepared it for client use (and developing skills with test prints, such as a fully functional prototype of a drone delivery box for medical supplies developed by an NCSU faculty member). They anticipate pilot AM projects with companies to start in early 2021. Related to this program, NCMEP invested in a Solidworks license to expand internal capabilities with designing parts for 3D printing. In addition, the Center's recently-established partnership with First Flight Venture Center's Hangar 6 has been

instrumental in advancing NCMEP's additive manufacturing program. First Flight provides guidance to IES staff and co-op students training on Solid works and the NCMEP Ultimaker 3D printer. They have over half a dozen 3D printers (including a new metal 3D printer that will be operating in early 2021) to assist with client projects using a wider variety of materials and printing technologies.

• NCMEP continues to participate in the MEP Industry 4.0 Working Group and has been an active participant in Manufacturing Institute CESMII's Affinity and Small Manufacturer meetings. In November, the Center posted a job description for a Manufacturing Technology Specialist designed to bring staff expertise to assist with the launch of NCMEPs automation and robotics program. NCMEP met with several MEPs to learn more about their approaches to in house vs. third party expertise and the equipment those centers have access to provide demonstrations to their clients. Working with their Lean improvement specialists, they began discussing ways in which aspects of automation and robotics can be incorporated into their legacy continuous improvement offerings. Finally, NCMEP designated a staff member to be a liaison to the MEP Advanced Tech Team that TN, WA, and NY are leading.

d) Other Key Initiative of the Center: NIST MEP Strategic Goal; Support National, State, and Regional Manufacturing Eco-Systems and Partnerships.

This is another area where NCMEP sets a high bar of excellence for the MEP National Network. Several examples include:

- Similar to the section Making New Technologies Available this is another area where NCMEP excels. However, the majority of their services during this period have remained virtual. NCMEP have been able to deliver over 20 topics (OSHA, ISO and Safety and Health primarily) either asynchronously or as virtually instructor led. The Center served 135 attendees from 20 manufacturers through open enrollment courses and served 78 manufacturers through project work. NCMEP also held 11 webinars during this period to provide awareness and outreach to manufacturers on a variety of topics related to business conditions and COVID-19. Topics included 2 CARES Act overviews; a two-part series on Finding Innovations; OSHA and Workplace Safety; How to Adapt Your Culture to COVID; How to Pivot for the Public Good; PPE Manufacturing: Do I Stay or Do I Go?; EUA Has Expired...What Next?; and How to Implement an ISO 13485 QMS. Of the 400 attendees of these webinars, 50% were manufacturers.
- In the area of assessments, another strength of NCMEP, in July they deployed a survey to assess the needs of NC manufacturers as the first step of helping NCMEP qualify for the CARES Act funding the Center received. The Center received 170 qualified responses from clients requesting assistance, and field staff follow up with clients to ascertain their needs. All NCMEP partners are involved in this effort either as a service provider or information provider, and they have almost 40 projects underway or completed.

- NCMEP also held a mini MFGCON in November that focused on the economy and supply chain issues. The webinar had 186 people attend of which 39 were manufacturers. Other virtual activities included participating in webinars held by a variety of state and regional groups providing a forum to introduce the Center, its services and CARES Act funding. Partner EDPNC hosted a series of roundtable discussions about business conditions during COVID-19 as well as a regional economic outlook in 6 regions in November and December with an average of 105 attendees per webinar. Partner ECU hosted a series of webinars on business continuity and supply chain optimization. Other interactions included the Iredell County Economic Development Industry Leaders Group, SBTDC, and the Catawba County Lean Council.
- Other activities include participation in Supplier Scouting program. The Center also continues to build relationships with the Manufacturing Institutes. They had several meetings with America Makes around workforce development for additive manufacturing and are working on a textiles workforce development grant for mostly rural counties.

e) Board Development: NIST MEP Strategic Goal; Serve as Voice to and Voice for Manufacturers.

• NCMEP held a virtual Advisory Board meeting on August 20, 2020 and then sent virtual updates throughout the rest of the year. Topics continue to revolve around the impact of the pandemic, including supply chain disruptions board members were seeing, as well as how to deploy the CARES Act funding. NCMEP plans to restructure the NCMEP Advisory Board and combine it with the IES Advisory Board since this college unit's work is overwhelmingly focused on NCMEP and manufacturing and there is existing overlap among members. Meetings on this restructuring will begin in the near future.

f) Performance Measures.

• NCMEP's score on the IMPACT metrics remains strong in almost every category. In the area of clients served per federal million they are working with NIST MEP reporting staff to ensure that the Center clearly understands the reporting requirements and does not include potential clients. Also, the connections NCMEP are making with clients due to the CARES Act funding will be an additional source of potential clients. Other focus on the reporting include better identification of transformational projects and inclusion of services to very small and rural manufacturers. Regarding the latter, NCMEP is making strategic decisions to serve those markets. One such program is the Rural Works program sponsored by the NC State College of Engineering which seeks to place engineering students with manufacturers in rural areas for the summer in order to try to

develop a workforce pipeline for those companies. NCMEP also has established annual economic impact targets for partners. They have developed individual scorecards for each partner to reflect their contribution to NCMEP goals after each survey, giving them greater visibility and insight into how their work impacts the overall score.

Section 3: Financial Performance

	Federal Forms	When to Submit	Questions to Ask	Y/N	Comments
1	SF-424 "Application for Federal Assistance" (CFDA #11.611)	As applicable	Has any information from your initial submission changed? If so, submit a revised form.	N	The Center Director is considering taking FY 2021 cost share relief. The SF-424 is required if there is a change in the cost share.
2	Five-Year Budget Summary Table	Update Required Annually	Have prior year or future year budgets changed based on the most recent financial performance of the Center? If so, submit a request using the current template. *Note that, unless specifically requested, changes to prior year budgets should be	Y	
			reflected in the Five-Year Budget Summary Table only. Centers are not required to submit revised detailed budget workbooks to reflect changes in prior years.		

3	CD-511	Required	Υ	Required Annually
	"Certification	Annually		
	Regarding			
	Lobbying"			
	(signed)			
4	Approved Indirect	Required	Υ	Required Annually
	Cost Rate (IDC)	Annually, <i>as</i>		
	Agreement or	applicable		
	submitted IDC			
	Rate Proposal			
	Transmittal Letter			

Compliance with 2 CFR 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements" and the NIST MEP General Terms and Conditions is a condition for receiving NIST MEP federal assistance.

	MEP Budget Documents	When to Submit	Questions to Ask	Y/N	Comments
1	One-Year Budget Workbook for upcoming operating period(s)	As applicable	1. Are you requesting to carry over Unexpended Federal Funds (UFF) from the prior operating year? Will it be used ABOVE or TOWARD base? If so, submit a request on the "Revenue" tab of the most current workbook template and adjust	Υ	The amount is not known yet. The SRAs were challenged with drawing federal funds. The request will be ABOVE base.

	your Five-Year Budget		
	to reflect the carry over		
	2. Are you requesting to	N	
	carry-over Unexpended		
	Program Income		
	(UPI)*? If so, submit a		
	request on the		
	"Revenue" tab of the		
	most current workbook		
	template and adjust		
	your Five-Year Budget		
	to reflect the carry		
	over.		
	3. Have the Center's	N	
	planned revenue		
	sources changed? If so,		
	submit a revised		
	revenue description.		
	4. Has the Center's		
	budget changed	Υ	Possible revision due to SRA contribution to
	significantly or does the		cost share.
	Center plan to make		
	changes to the budget		
	that were not		
	previously approved? If		
	so, submit a revised		
	budget narrative.		
	Budget Harrative.		

2	Draft proposed Subrecipient (SRA)/Third-Party Contributor (TPC) Summary Table and any associated agreements of \$150,000 or more	Required Annually, as applicable	Does the Center have SRA or TPC agreements with valuations of \$150,000 or more? If so, submit draft agreements including detailed budget tables and narratives.	Y	Drafts are acceptable.
3	Draft proposed contracts with budgeted amounts of \$150,000 or more	Required Annually, as applicable	Does the Center have contracts with valuations of \$150,000 or more? If so, submit draft agreements including information on proposed pricing and fees.	Y	
			Does the Center have amended multiyear contracts with valuations of \$150,000 or more? If so, submit draft amendment page(s) including information on proposed pricing and fees, if applicable.	N	

^{*} Per the MEP General Terms and Conditions, carry over of UPI is limited to 50% of the total Federal amount of the award.

Comments on the overall financial performance of the Center:

NCMEP's overall financial performance is acceptable.

The Center relies on SRAs, state funds, and program income for match. The Center is engaged with state agency partners and highlights economic impacts at the state level. The Center has drawn down 51.14% of the current budget as of February 12, 2021. ASAP has a federal funds balance of \$1,666,297.21. This is consistent with draws in prior years. The FY20-21 budget request did not include FY 20 cost share relief. NCMEP anticipates requesting carry forward of unexpended federal funds (UFF) ABOVE base. The UFF amount is not known at this time.

Budget (prior and current budgets)

- In line with scale of services and product delivery
- Proposed projections for income and expenditures are appropriate for the scale of services
- Proposed narrative for budgeted items explains the rationale for each of the budgeted item

Funding Sources (as it relates to MEP activities) and Cost Share/Match

Funding Sources Table

Year 6 Budgeted	Actuals for Year 6 (as of 12-31-20)	Percent spent in Year 6
\$3,410,118.00	\$1,506,638.51	44%
\$1,282,415.00	\$556,025.00	43%
\$294,703.00	\$123,345.02	42%
\$1,833,000.00	\$759,945.76	41%
\$6,820,236.00	\$2,945,954.29	43%
	\$3,410,118.00 \$1,282,415.00 \$294,703.00 \$1,833,000.00	Budgeted 6 (as of 12-31-20) \$3,410,118.00 \$1,506,638.51 \$1,282,415.00 \$556,025.00 \$294,703.00 \$123,345.02 \$1,833,000.00 \$759,945.76

The SRA cost share match is cash and in-kind. The Center relies on SRAs for 53.80% of its match. Most of the SRA's have been in place for years. The Director and staff monitor the SRAs to maintain working relationships. This interaction provides information for training and changes as needed to remain compliant and meeting goals. The state relations are solid and

help maintain continued state funding. Cost share meets basic requirements of allowability, allocability and reasonableness under applicable federal costs principles set forth in 2 CFR 200, Subpart E.

Cost Share/Match Amounts

State and local funds	\$1,282,415.00	38%
Program Income	\$294,703.00	9%
Other-SRAs	\$1,833,000.00	54%
	\$3,410,118.00	

Other

- IDC rate
 - o NIH is cognizant agency and their IDC is effective until 7/01/24
- Budget preparation and justification quality is satisfactory.
- D&B Report/Financial Risks

The D&B report indicates the center has a low risk in all areas but the Credit Limit Recommendation which is at a moderate risk. As the center is directly connected to the University this is not a concern.

III. Center Performance

The outcome of the annual review finds NCMEP operations to be acceptable. The Center's performance, as demonstrated by the IMPACT report, has been very consistent between 80 and 100 for the last 4 years.

NCMEP also continues to demonstrate excellent Network Citizen practices and a valuable role as a leader in both the Southeast region and the whole MEP National Network™. In addition, NCMEP continues to partner with multiple Manufacturing Institutes to include Power America, AFFOA, America Makes, and MxD.

IV. Identified Areas for Improvement

 NCMEP continuous focusing on increasing the clients served per federal million and new clients served per federal million. They are addressing this metric as discussed earlier and below.

V. Identified Risks

No risks were identified.

VI. Recommendations

 Continue the excellent work on the three key areas that were identified for improvement which are: aging of the technical staff, continuation of the Advisory Board development efforts and consistently meeting and exceeding the requirements for clients served and new clients served per federal million. All of these were discussed in detail in other sections.

VII. Progress on Previous Recommendations

Three key areas that were identified for improvement are 1) aging of the technical staff, 2) continuation of the Advisory Board development efforts and 3) consistently meeting and exceeding the requirements for clients served and new clients served per federal million. These were addressed as follows:

1) ONGOING - In an effort to address the issue of aging technical staff, NCMEP engaged a student via the NC State College of Engineering Cooperative Education Program (co-op). Based upon reported successes, NCMEP plans to continue to participate in this program on a regular basis. The student engaged with multiple manufacturing companies statewide in line with his career and academic goals while multiple companies report specific benefits. NCMEP believes that this program affords an excellent pipeline for recruitment of future technical staff. During the pandemic, NCMEP staff participated in a number of staff cross training opportunities. These efforts are ongoing as administrators believe that they are better informed about

- which employees are most prepared to move into roles that carry more responsibility.
- 2) ONGOING NCMEP has added new members to its Advisory Board in the last year and plans to combine it with the IES Advisory Board in order to have one energetic, enthusiastic board.
- 3) ONGOING NCMEP has made the clients served and new clients served a key part of its performance evaluation with its partners and has worked with each to go over the requirements and help them think about other clients that they have worked with that could be submitted. The Center feels that it is under-reporting activities and continues to monitor this metric. The Center also anticipates more clients served due to the funding received from the CARES Act (since July 1, 2020, 145 new clients have been engaged).

VIII. Other Observations

NCMEP continues to demonstrate excellent Network Citizen practices, as is evident from their distinctive and shareable practices, activities, projects and programs for which they either lead or are a substantial collaborator. They set the bar at the MEP National Level in areas such as balanced service portfolio, transforming clients, making new technologies available and key initiatives. Specific examples include:

- NCMEP have been able to deliver over 20 topics (OSHA, ISO and Safety and Health primarily) either asynchronously or as virtually instructor led.
- In July 2020, NCMEP deployed a survey to assess the needs of NC manufacturers as the first step of helping them qualify for the CARES Act funding the Center received.
- NCMEP also held a mini MFGCON in November that focused on the economy and supply chain issues. The webinar had 186 people attend of which 39 were manufacturers.
- NCMEP participated in the Supplier Scouting program.

IX. Attachments

- 4-quarter IMPACT report
- Standard Tables: Client Activity Goals, MEP Metrics Map, Survey Continuity
- cc. Phil Mintz, Center Director

Kyle Martin, Oversight Board Chair

Dean Louis Martin-Vega, NCSU Dean of Engineering

Nicole C. Saulnier, Grants Management Specialist

Certification: By signing this report, I certify that the financial information provided at the
time of the annual review was correct to the best of my knowledge and that the Financial
Performance section is accurate:

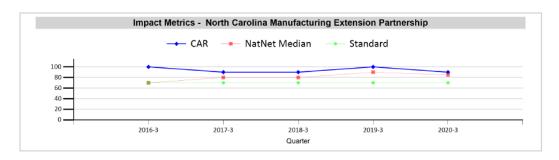
Name:	
Title:	
Signature:	 Center Director or Authorized Representative
Date:	

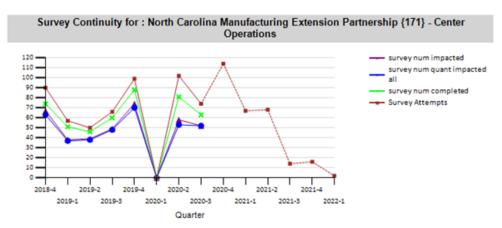
APPENDIX

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2020-3 - IMPACT Metrics as of Tuesday, February 2, 2021

CAR Operations Performance Management IMPACT Metrics										
CAR Current Quarter Performance				90						
Federal Funding - \$3,464,340.03 Total Cash Resources - \$6,879,680.03 (Four Quarter Rolling Average)										
Impact Metrics										
CAR Reported Normalized CAR Performance CAR Metric Performance Standard Points							From Threshold			
Impact data based on MEP Client Survey responses										
New Sales (10)	\$208.5 M		60.2	\$15	10	\$22.4	401%			
Retained Sales (10)	\$130.7 M	37.7		\$35	10	\$56.5	108%			
Jobs Created and Retained (10)	5,961	1720.7		500	10	724.7	344%			
New Investment (10)	\$1,035.8 M		299.0	15	10	\$22.1	1993%			
Cost Savings (10)	\$27.3 M		7.9	7	10	\$9.0	113%			
Percent Improving Competitiveness (10)	184.0 / 232.0		79.3%	80%	0	84.6%	-0.7 PP			
Net Promoter Score(r) (10)	89.1 - 1.3		87.8	75	10	86.6	12.8 PP			
Impact data based on Client/Project Su	bmissions									
Mfg.Clients / \$M Fed (15)	277		80.0	73	15	80.0	110%			
New Mfg.Clients / \$M Fed (15)	175		51.0	29	15	40.4	174%			
Supplemental Data										
Survey Response Rate (0)	232.0 / 275.0		84.4%	70%	N/A	85.4%	14.4 PP			





GOAL	Period	Very Small Establishments < 20 employees	Rural Establishments (Use USDA Definition)	Start-up Establishments	Transformational Clients (NIST MEP Defined)	Other Manufacturers	Total unique manufacturers	Top Line Growth	Bottom Line Growth
Over 3 years	Goal	107	260	1	148	349	864	50	50
(2020-3 - 2023-2)	2020-3	27	16	12	18	30	82	76%	24%
	2020-4	12	20	7	8	31	65	53%	47%
	2021-1	1	2	0	1	0	3	33%	67%
	Total Unique	39	36	18	29	60	148	66%	34%
	Projected	156	144	72	116	240	592	54%	46%

Metrics Map for North Carolina Manufacturing Extension Partnership (171

