

## **SITE Next-Gen: A Regional Manufacturing Cluster for North Carolina’s Piedmont Triad**

The *SITE Next-Gen Cluster* will put the American Dream within reach of people across the 12-county Piedmont Triad of North Carolina. *SITE Next-Gen* will build on the region’s legacy of manufacturing and innovation to help dismantle a legacy of limited wealth creation for certain zip codes, people of color, women and rural areas that keeps too many of its residents from sharing in the region’s educational, economic and entrepreneurial bounty.

“SITE” stands for **Strengthening Innovation, Talent and Equity**; innovation and equity of opportunity are its core strategies, objectives and, ultimately, the truest measures of its success. *SITE Next-Gen* envisions a globally recognized cluster with renewed capacity to innovate, create jobs, attract private investment and promote upward mobility and economic resiliency across 6,000 square miles in an Economic Development District of about **1.7 million residents**.

*SITE Next-Gen* will invest in workforce, educational and entrepreneurial assets to catalyze next-generation, **Industry 4.0** manufacturing production in the region’s historic sectors of **textiles** and **furniture**, its newer, robust sectors of **aviation** and **automotive**, and the emerging sector of **regenerative medicine**, with activity spanning the region from Burlington to Winston-Salem. Champions in academic R&D, business, development, education, philanthropy and social justice are united in providing the institutional infrastructure to support this vision of Industry 4.0 as linchpin for the American Dream.

**Inaugural Members and Partners:** The Piedmont Triad Regional Council (PTRC), a voluntary association of 12 county and 63 municipal governments, leads the coalition and will facilitate success of *SITE Next-Gen*. Other coalition members—the applicants or co-applicants of the constituent projects—are Piedmont Triad Regional Development Corp.; Alamance Community College; Business High Point; City of High Point; Forge Greensboro; Greensboro Chamber of Commerce, N.C. A&T State University (N.C. A&T); Nussbaum Center for Entrepreneurship; Piedmont Triad Partnership; RegenMed Development Organization; Wake Forest University Health Sciences (WFUHS), Wake Forest Institute for Regenerative Medicine (WFIRM); and Winston-Salem State University (WSSU). **The coalition will recruit and attract additional and diverse partners** through unprecedented regional engagement, which PTRC is using Phase 1 funds to launch in its convening role as the regional intermediary organization interacting with EDA and mediating impact and success.

**Component Projects:** The projects comprising this proposal will each contribute to the success of the regional growth cluster, some by **promoting upward mobility** through workforce training in new and emerging technologies; others by promoting economic resiliency; others by attracting private investment that create jobs. Taken together, the projects (A-G in Phase 1 application) will advance the coalition’s vision of putting the American Dream within reach of anyone in the region for generations to come. Component project applications constitute these broad initiatives:

1. Next-Gen Talent Development. PTRC is the applicant.
2. SITE Next-Gen Entrepreneurial Ecosystem. The Piedmont Triad Regional Development Corporation (PTRDC) is the lead applicant. The Greensboro Chamber of Commerce and WSSU are co-applicants. This project is for programming.
3. Center for Manufacturing Simulation (CEMS). Alamance Community College is the applicant.
4. Next-Gen Maker Mentoring. Nussbaum Center for Entrepreneurship (Nussbaum Center), and Forge Greensboro are applying for programming support.
5. Advancing Manufacturing at the Steelhouse. The Nussbaum Center is applying for construction support.

6. Small-Scale Manufacturing (SSM) for Equitable Opportunity. The City of High Point is applying for construction support.
7. Next-Gen Furniture Design & Manufacturing. Business High Point is the applicant.
8. Smart Manufacturing Hub. N.C. A&T State University is the applicant.
9. RegenMed Hub. RegenMed Development Organization and WFIRM, through WFUHS, are co-applicants.

**CEDS Alignment:** The submission package aligns with economic development needs and objectives outlined in *Triad Tomorrow*, the CEDS for the Economic Development District. The table below shows only the strongest alignments among the CEDS, the four key elements, and *SITE Next-Gen* initiatives.

CEDS	Key Elements	SITE Next-Gen Initiative
Goal 1: Build on the region’s competitive advantages and leverage the marketplace	Regional Assets Industry Leadership	Talent Development SITE Next-Gen Entrepreneurial Ecosystem CEMS Manufacturing at the Steelhouse SSM for Equitable Opportunity Maker Mentoring Next-Gen Furniture Design & Manufacturing Smart Manufacturing Hub RegenMed Hub
Goal 2: Establish and maintain a robust regional infrastructure	Regional Assets Industry Leadership Sustainability	SITE Next-Gen Entrepreneurial Ecosystem CEMS Manufacturing at the Steelhouse SSM for Equitable Opportunity Next-Gen Furniture Design & Manufacturing Smart Manufacturing Hub RegenMed Hub
Goal 3: Create vibrant, healthy and resilient communities	Regional Assets Sustainability Equity	Talent Development SITE Next-Gen Entrepreneurial Ecosystem Manufacturing at the Steelhouse Next-Gen Furniture Design & Manufacturing SSM for Equitable Opportunity
Goal 4: Develop talented and innovated people	Regional Assets Sustainability Equity	Talent Development SITE Next-Gen Entrepreneurial Ecosystem CEMS Maker Mentoring

**Complementary Initiatives:** The Coalition will leverage multiple efforts in the region such as a Department of Labor-funded project (MI-35892), in which colleges and employers are creating digital badges that attest to manufacturing workforce skills, and a National Science Foundation-funded project (DUE 1800909) in which the National Center for the Biotechnology Workforce is defining skills manufacturing technicians will need in tissue engineering and regenerative medicine. It will also leverage philanthropic efforts such as the Eastern Triad Workforce Initiative and Guilford Apprenticeship Partners funded by the Community Foundation of Greater Greensboro; the Winston-Salem Foundation’s commitment to racial equity and inclusive pathways to family-sustaining careers; and publicly funded workforce development.

**Metrics of Success:** Phase 2 funding for the Piedmont Triad will generate 10,000 jobs and \$20 million in private investment. More transformative, EDA funding will empower engagement and build connective tissue that have measurable economic and social impact at the neighborhood, block and census tract level. Partners commit to working with affected neighbors, populations and stakeholders and to collecting outputs and impact data that can be disaggregated by race, gender and socioeconomic status and brought to life through case studies of individual and equitable access to opportunities for success.

**General Timeline:** *Smart Manufacturing* and *RegenMed* hubs, and Construction projects, 4 years; Non-Construction projects, 2-3 years.

## **PROJECT LOCATION AND REGION**

The Piedmont Triad of North Carolina comprises 6,000 square miles of urban, suburban and rural communities across 12 counties (see FIPS Addendum). The innate potential of a population 1.7 million strong is diluted in the Piedmont Triad because the region appears fragmented with its three MSAs: Greensboro-High Point (ranked 76th nationally), Winston-Salem (88th), and Burlington (251st). Five counties are considered coal-impact counties: Davie, Forsyth, Stokes, Surry and Yadkin. The Piedmont Triad region suffered “**direct and significant loss**” when a Caterpillar plant was restructured from a mining support operation to primarily supplying equipment for rail locomotives resulting in the loss of 75 jobs, according to a 2017 report for the state.<sup>1</sup> A reminder of coal’s persistent regional impact came in February 2022, when Duke Energy announced that it will phase out coal use at its generating plant in Stokes County, which employs 120 employees.

Manufacturing and innovation have been at the heart of the Piedmont Triad economy for more than a century.<sup>2</sup> Despite the staggering loss of 40% of manufacturing jobs from 2002-2013, the region accounts for **21% of all manufacturing jobs in North Carolina**. The regional location quotient (LQ) for manufacturing is 1.61. The LQ is 1.68 for aviation and aerospace manufacturing, 6.42 for furniture manufacturing, and 12.32 for textile manufacturing. Combined with the adjacent Research Triangle Park counties, the LQ for pharmaceutical and medical products is 2.4.

The region has **multiple assets**, from shovel-ready industrial sites that influenced recent announcements by Toyota, Boom Supersonic, Nature’s Valley and others to locate, expand or consolidate manufacturing operations in the Piedmont Triad to a transportation and logistics infrastructure that includes multiple interstate highways and the **FedEx Express Mid-Atlantic Hub** at **Piedmont Triad International Airport**. The assets most critical to success, however, are an education and workforce system bridging fifteen (15) public school systems, nine community colleges, four-year research, teaching and performing arts institutions both public and private (including three HBCUs), and its **formal and informal networks of public, private and philanthropic organizations committed to equity of opportunity** throughout the region.

The Piedmont Triad lags in comparison to North Carolina’s other major growth and innovation hubs, most notably the Durham-Chapel Hill, Raleigh and Wilmington MSAs.<sup>3</sup> On the Innovation Index Headline, Greensboro-High Point was sixth, Winston-Salem seventh, and Burlington ninth. On the index for Economic Well-Being, the 3 MSAs were 66%, 69% and 73%, respectively, of the measure for Raleigh, highest in the state at 123.0. The region’s silver lining, however, lies in the capacity for innovation of its largest counties: Forsyth’s headline index was 107.9, and

<sup>1</sup> Assessment of Western N.C. Communities for Potential Coal Impacts (2017) by Hodge Economic Consulting

<sup>2</sup> Unless otherwise noted, data in this section are from JobsEQ as of Q1 2021.

<sup>3</sup> <https://www.statsamerica.org/ii2/about.aspx>

Guilford's was 104.1. This is partly a reflection of signature assets behind two project applications: N.C. A&T, proud to be the U.S. leader in awarding baccalaureate and master's level engineering degrees to Black graduates (not to mention the 1960 sit-in that sparked the civil rights movement); and WFIRM, which is perfecting ways to grow new organs, such as bladders, from a patient's own cells. Two reasons the region lags are the impact of globalization on manufacturing and lack of investment. Phase 2 funding offers the opportunity to quite literally, build back better and to regain regional strength in its historic specializations while developing new ones.

## **PRIVATE SECTOR PARTICIPATION**

Private sector interests in the region have pledged \$2.98 million in available, unencumbered support for *SITE Next-Gen Cluster* partners and the collective vision of putting the American Dream within reach throughout the Piedmont Triad. In addition, ED-900Bs submitted by private sector interests reflect combined expectations of more than 650 new jobs directly resulting from Phase 2.

The *SITE Next-Gen Cluster* also has active and growing support from both regional and national private-sector interests among manufacturers in the aerospace, automotive, biomedical, furniture and textile industries. These range from international heavyweights such as Biogen, Labcorp and Merck to Core Technology Molding Corp., an MBE-certified provider of injection-molded parts founded by an engineering graduate of N.C. A&T with an MBA from Wake Forest University. The private-sector participation revolves around workforce needs—talent is in short supply at all levels, across industry sectors, from skilled manufacturing and production technicians to research scientists—and innovation. The ABB company expects to contribute \$180,000 in equipment and hire 150 workers from the *Center for Manufacturing Simulation* at Alamance Community College (ACC), and Merck Sharp & Dohme Corp., subsidiary of Merck & Co., Inc, for example, set aside \$50,000 toward the project. The ACC and seven other community colleges have formalized a business and industry leadership team for manufacturing operating under a \$5 million workforce development grant from the Labor Department to Forsyth Technical Community College (Forsyth Tech). Under this relationship, manufacturers take the lead deciding the skills and competencies that college programs in advanced manufacturing need for their students to acquire to be competitive applicants for jobs. With the spread of Industry 4.0 manufacturing practices that the *SITE Next-Gen Cluster* will engender—support letters document wide interest—ongoing private sector participation in workforce development across the Piedmont Triad will be of even greater consequence, with the *Smart Manufacturing Hub* at the nexus of opportunity. Two Manufacturing USA Innovation Institutes envision working with N.C. A&T's *Digital Manufacturing Institute* (MxD) and will consult on its proposed Digital Manufacturing Grid, provide cybersecurity assessment of manufacturers to close security gaps, and partner for a “Virtual Training Center” for smart manufacturing curriculum and certifications. Advanced Functional Fabrics of America, which transforms textile-based products into sophisticated, integrated, and networked devices and systems, will use resources the Smart Manufacturing Hub develops. BioMADE, a Manufacturing Innovation Institute building a sustainable, domestic end-to-end bioindustrial manufacturing ecosystem, is linked to *SITE Next-Gen* through the National Center for the Biotechnology Workforce at Forsyth Tech.

There are other broad and significant private-sector connections to *SITE Next-Gen*, notably through the Piedmont Triad Partnership (PTP), a regional economic organization, a private leadership organization connecting and leveraging the region's leaders and assets to drive increased economic growth and jobs. It has strong interest in promoting the RegenMed and Smart

Manufacturing hubs. VX Aerospace and SHD Composites will be “happy to collaborate” with the new *Smart Manufacturing Hub* facility in design and development of lightweight drones. HAECO, which manufactures key components of commercial aircraft including cabins, envisions “an enduring partnership” dramatic effect for high-volume cabin components and its regional maintenance-repair-overhaul (MRO) operations.

Participation by the Community Foundation of Greater Greensboro and the Winston-Salem Foundation, influential place-based philanthropies with combined annual giving of \$57 million, will lend moral authority and political clout to the PTRC and its project partners. The foundations’ public commitment to inclusive communities and equity of opportunity are in the DNA of the *SITE Next-Gen Manufacturing Cluster*. The foundations already provide financial support for various complementary initiatives under the cluster’s umbrella, including equitable access to the entrepreneurial pipeline by women, people of color and residents of marginalized neighborhoods, wealth creation and postsecondary success for a just and inclusive economy.

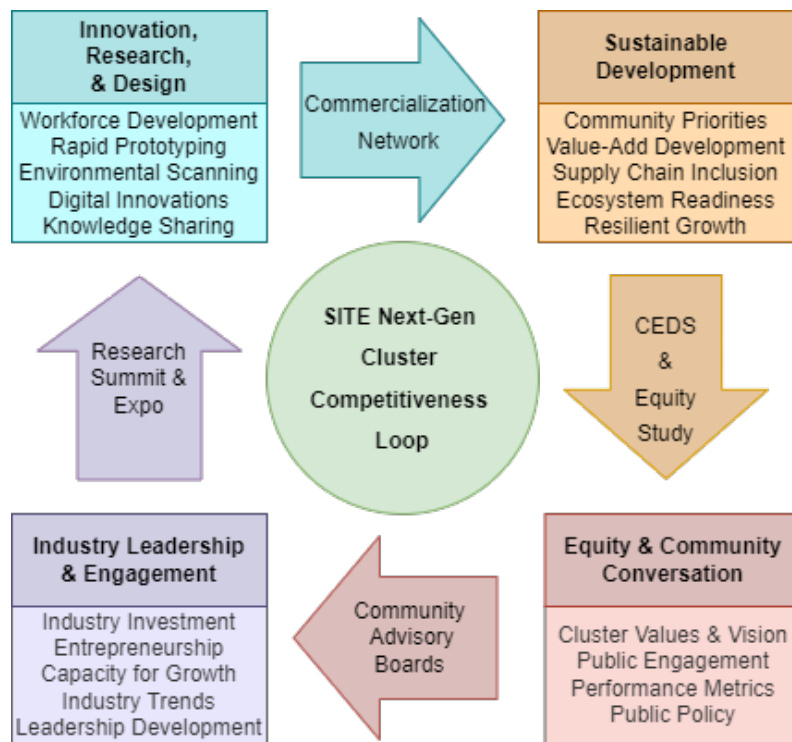
**SUSTAINABILITY PLAN**

With the weight of diverse public engagement and the power of continuous improvement, **PTRC will be the regional intermediary for impact, success and sustainability.** The long work of building inclusive engagement and mutual understanding among diverse interests and stakeholders started with Phase 1 dollars will culminate in Phase 2 with the commitment of 12 counties to keep rowing together as never before toward the American Dream. Funding streams marshalled to make this possible will include philanthropic and other investment prospects; recurring funds the North Carolina General Assembly awards to K-12, community college and state university systems; local, regional, and state economic development projects and incentives, along with other local, state and federal programs. This will sustain the development of new talent, reward innovation and enterprise, and build new capacity for a competitive growth cluster built on equity of opportunity.

**Research Summit & Expo** will showcase research that connects higher education and cutting-edge innovation in the knowledge-intensive cluster with industry leaders. Collaborators will include anchor institutions: N.C. A&T, UNC-Greensboro, WFIRM, and WSSU.

**Commercialization Network** will leverage coordinated efforts of makers, entrepreneurs, the marketplace, and commercialization professionals housed at anchor institutions and elsewhere in

*SITE Next-Gen Cluster Competitiveness Loop*



the region. It will provide for products and research to reach new markets, fostering opportunities shared equitably across geographies and communities.

The region's *CEDS and 2022 Equity Study* will inform the strategic and assessment plans for the **SITE Next-Gen Cluster**. Triad Tomorrow, as the CEDES is known, will undergo annual review aligned with public engagement. The 2022 Equity Assessment, funded with Phase 1 support, will be completed by Sept. 30 will update a 2014 report, providing both a measure of progress since then and a new baseline from which to assess Phase 2 impact

**Community Advisory Boards (CABs)** for the automotive, aviation, furniture, textiles & regenerative medicine advanced manufacturing cluster will be created to inform community benefit, opportunity and leverage for the competitiveness loop.

## **ENGAGEMENT PLAN**

This ambitious effort cannot succeed without unprecedented engagement of myriad actors and beneficiaries of the Cluster, a sprawling and diverse 12-county region. The Piedmont Triad is punching below its weight compared with other metropolitan areas of North Carolina. The engagement plan initiated with Phase 1 support and augmented by Phase 2 funding will change this by adding connective tissue among disparate stakeholders. Essential to engagement around equity as both process and outcome is conveying a mindset of doing “with” and not doing “for” or “to.” Inclusive engagement and mutual understanding require shared responsibility and leadership, issues of equity, power and culture-building that are embedded from the start. Engaging with affected neighbors, populations and stakeholders is how the *SITE Next-Gen Cluster* will succeed. This requires communication built on shared language and definitions. For example, what do the words “putting the American Dream within reach” mean to different people in different situations in different parts of the region?

The PTRC is engaging stakeholders beyond the founding members of its coalition and expects broad spheres of participation. The following spheres must be engaged 1) Private sector cluster partners and supporters, including business and industry leaders, economic developers, recruiters and local chambers of commerce; 2) Community engagement and non-profit partners, including entrepreneurial interests, rural interests, environmental interests, DEI interests, public bodies and ad-hoc groups of changing composition and interests; 3) Educators, including research and teaching universities, community colleges and K-12 systems; and 4) Workforce partners, including both public entities and private training programs.

An ongoing governance structure to help the Piedmont Triad to **speak in more united cadence** will emerge in coming months. To begin this engagement process, PTRC started activating multiple formal and informal networks across the 12 counties. Examples include business leadership and advisory teams that help community colleges align their manufacturing-related and other programming needs; advocacy groups such as Asset Building Coalition of Forsyth County and Guilford Nonprofit Consortium; United Way organizations serving 11 of the 12 counties; and various and overlapping network connections of partners and supporters associated with the component projects.

The PTRC will take the lead in creating a dedicated web presence for the Cluster that will serve as a communication medium. To ensure more **transparent, accountable relationships and maximum engagement**, details about web content, messaging, and activity will reflect the principles of governance and shared decision-making that mature through ongoing engagement.

## **EQUITY OF BENEFITS**

Equity as a process in these overarching projects mean that all groups will have access; equity as an outcome will mean that a person's economic or educational outcomes cannot be predicted by factors such as race, gender, neighborhood or socioeconomic status of parents and grandparents. Similar logic applies when considering equity of benefits shared by communities across the cluster; for this to happen, there must be equity of opportunity as well. This starts with communication and awareness, essentials of engagement for *SITE Next-Gen*.

During the initial phases of community engagement described above, PTRC will listen for **each diverse group defines the success** of potentially transformative cluster-based funding from their individual, household, community or regional perspective. In conjunction, PTRC will be evaluating responses to an RFQ for updating *Piedmont Together's 2014 Equity Assessment*. These parallel approaches will be a foundation for objectively assessing—and unflinchingly reporting—the extent to which benefits of the cluster are shared across all affected communities, both urban and rural, including efforts to reach historically excluded populations, racial minorities and women. The RFQ is scheduled for release after March 15.

Some potential benefits may be both obvious and immediate during the period of performance: construction contracts, for example. Other benefits may take longer and be harder to quantify, such as family wealth creation and educational attainment in the next generation. Whatever the case, PTRC commits with its partners to collecting impact data that can be disaggregated by race, gender, and socioeconomic status and brought to life through case studies of individual opportunities for success.

The PTRC is partnering with champions of diversity, equity, and inclusion initiatives across the region, such as Maximum Enterprises, to curate in-house training for the benefit of project partners and others who are not part of a large employer, such as a college or university, with its own such program. *Start the Conversation*, which the Piedmont Triad Workforce Development Board developed for use by management and staff, is a training resource available to entrepreneurs in start-up or scale-up ventures who recognize its value but could not afford such training on their own. While such training is not intended as a one-and-done proposition, it can be effective in **changing assumptions across the region and what kind of future is possible based on what has happened in the past**.

As production related to the aerospace, automotive and biotechnology subsectors has grown in recent years, the false narrative about an irreversible “decline” in manufacturing in the Piedmont Triad has been replaced by one that touts the emerging need for “knowledge” workers to run computer-controlled machinery and sophisticated equipment at the heart of manufacturing and production. Engagement will carry this new message while dispelling another false narrative: that certain groups start with deficits that cannot be overcome. The coalition mindset is one of growth and opportunity.

## **EXPECTED OUTCOMES**

The bottom line is this: EDA's investment in the Piedmont Triad is estimated to generate 10,000 jobs and \$2 billion in private investment. Equally important, EDA funding will empower an ambitious engagement strategy to build connective tissue among what would otherwise remain fragmentary parts of what will be greater as a whole. *Strengthening Innovation, Talent and Equity—SITE*—will have **cascading impact, uniting regional stakeholders with both converging and diverging interests** to help steer regional assets on a sustainable path to inclusive prosperity.

As the Cluster’s regional intermediary, PTRC will animate progress, measure, and assess achievement toward six long-term objectives: 1) global recognition; 2) innovation; 3) job creation; 4) private investment; 5) upward economic mobility, and 6) economic recovery and resiliency. Talent development, innovation, entrepreneurialism, and competitive advantage are critical dimensions of success. Expected outputs and outcomes along one or more of these dimensions over the next five years will include the following:

- 3,000 additional quality jobs in manufacturing, including positions related to supply and distribution, held by historically excluded or marginalized workers

- 60% increase in the number of people who complete manufacturing-related education or training, including postsecondary, apprenticeship, and short-term certificate programs

- Increase in the number of upskilled workers, including adults taking new pathways

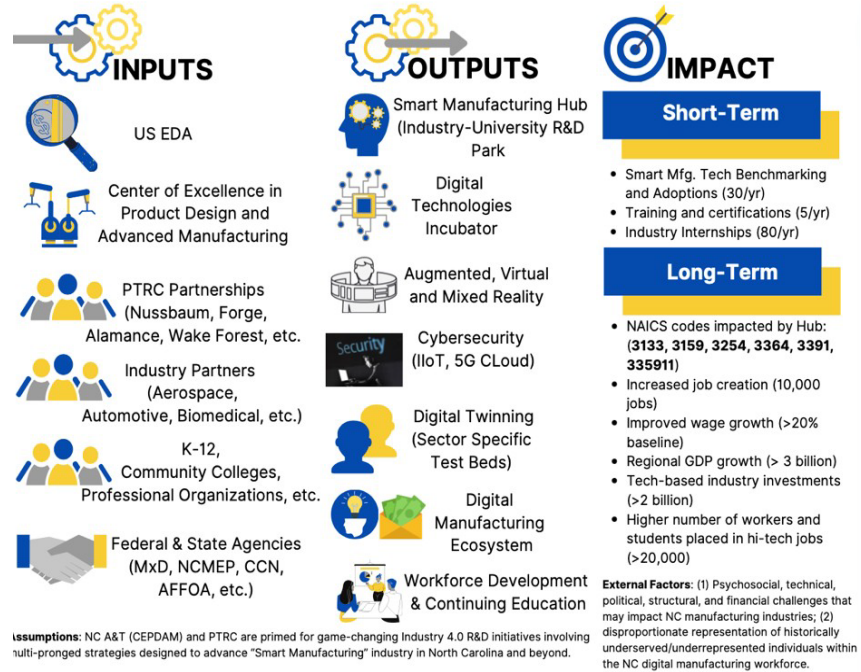
- 50% increase in the number of MWBE start-ups or scale-ups, and certifications

- 5% growth in regional economic output with increases in all 12 counties

- Increased location quotients for aerospace (LQ 1.68), automotive (1.61) and furniture production (6.42)
- Adoption rate by manufacturers in the region of project-generated technical innovation
- International participation in trade and other expos, research conferences and symposia
- Increasing participation by diverse community members, partners and organizations
- Neighborhoods and communities improved through investment without displacement
- Manufacturing-related employment demographics that more closely mirror the region
- More historically underserved or excluded populations on pathways to C-suite positions
- Greater regional self-awareness and alignment
- Fewer binding constraints to equitable growth and opportunity across the Piedmont Triad
- More regionally interconnected grant awards from federal agencies and departments that fund agriculture, arts, education, engineering, environmental, health, manufacturing, research, science, transportation, workforce and other projects.

Better quality of life with fewer “broken rungs of the ladder” to opportunity and success  
 PTRC and partners will hone specific expectations through ongoing public engagement to ensure that resources and benefits are delivered equitably to all. Data will be gathered to allow for the disaggregation by **race, gender, socioeconomic status and place**. The *SITE Next-Gen Cluster*

Smart Manufacturing Hub Inputs, Outputs and Impact





will identify ways in which its data collection could complement current and future regional research such as efforts by the *Center for the Study of Economic Mobility at WSSU*, the *Bryan School of Business and Economics at UNC-Greensboro*, and the *Division of Public Health Sciences at Wake Forest University School of Medicine*.

### **PROGRESS SINCE PHASE 1 AWARD**

Since the Phase 1 award, PTRC has made focused and needed progress around three main areas: **articulating vision, broadening engagement, and coordinating with partners** to further align their individual projects with emergent opportunities and one another. PTRC’s efforts in these areas have ranged from tactical considerations such as memoranda of understanding regarding decision-making, structure, financial reporting and specific conditions expected of awardees, to strategic activities underscoring its convening role as the regional intermediary organization responsible for interacting with EDA and mediating regional impact and success. Thirteen industry leaders who compete globally have joined the effort, bringing to 35 the number supporting the Phase 2 application. Seven industry leaders supporting the Phase 1 application have elevated their commitments to either directly connecting within SITE Next-Gen projects, creating jobs or retaining jobs, or making private investments in support of Phase 2 success. Also:

- PTRC scheduled an RFQ for updating *Piedmont Together’s Equity Assessment*, the region’s 2014 equity assessment plan, to be funded with Phase 1 dollars and complete by September 2022. This decision complements efforts since December to broaden efforts around diversity, equity and inclusion and a renewed commitment to public engagement during Phase 2.
- PTRC met weekly with project partners and motivated them to identify and articulate connections among the Phase 2 initiatives and complementary initiatives underway or pending approval across the region. Project leads were also asked to consider the consequences, both positive and negative, of creative destruction.
- PTRC worked with the N.C. Biotechnology Center, North Carolina’s other Phase 1 winner, to ensure Phase 2 project applications were distinct yet complementary. (WFIRM and Alamance Community College are participants in both Phase 2 coalitions.)
- PTRC secured architectural and engineering support for two Phase 2 projects.
- PTRC coordinated support among the four workforce development boards serving the region.
- PTRC presented to local jurisdictions and philanthropies to build interest and leverage political commitments; approached industry leaders for unique commitments; and engaged community, grassroots, and “grass top” leaders and champions for their input and continued participation in coming months and years, among other engagement.
- PTRC and supporters activated regional networks of more than 70 partners to focus and refine Phase 2 entrepreneurship efforts. The risk of dislocated communication was mitigated by working collaboratively with the existing entrepreneurship effort in Guilford County supported by Bruce Katz and Christopher Gergen. Business High Point Chamber, the Greensboro Chamber, and the Community Foundation for a Greater Greensboro provided funding.
- PTRC enlisted new initiatives and projects essential to the cluster to be supported after Phase 2 application, including White Oak Legacy Foundation, Maximum Enterprises Equity Strategy, Davie County Regenerative Medicine Satellite Incubator, Alamance County Biotechnology Accelerator, Auxano Rural and Minority Market Engagement.

As related to regional opportunities for advanced manufacturing, far-reaching stimuli for progress—with **huge potential for equitable and sustainable growth**—came from news in December and January. The week before EDA named its Phase 1 finalists, Toyota Motor North

America announced plans to build a \$1.29 billion battery manufacturing plant at the Greensboro-Randolph Megasite, part of a “journey to achieve carbon neutrality and provide mobility for all.” Toyota plans to start production in 2025 and is committed to using 100% renewable energy at the plant. Barely seven weeks after EDA’s announcement, Boom Supersonic of Colorado chose Greensboro for its first supersonic airliner manufacturing facility. Boom’s Overture Superfactory will begin production in 2024. PTRC incorporated these two transformative developments and partners into its strategic thinking—particularly around workforce development, innovation and employer engagement—as it progressed toward the Phase 2 application and beyond.

### **CHANGES FROM PHASE 1 CONCEPT PROPOSAL**

The overall vision between the Phase 1 and Phase 2 proposals remains the same, albeit framed in different words: putting the **American Dream** within reach of people across the 12-county Piedmont Triad region of North Carolina. Following are changes to individual projects.

Project A: Innovation in Next-Generation Aviation, Automotive, and Digital Manufacturing is retitled **Smart Manufacturing Hub**, which better reflects its transformative potential to optimize manufacturing and distribution across all industry subsectors. The project was converted to non-construction. The budget was increased by 18%, to \$12,406,828.74 from \$10,500,000.

Project B: Creating a National Hub for Regenerative Medicine Manufacturing is retitled **RegenMed Hub**, which better reflects its potential to win international renown for the scaled biomanufacturing of **products that can cure disease** and creation of diagnostic platforms that will usher personalized medicine into the standard of patient care. The project was converted to non-construction. The budget was cut by 43%, to \$11,315,909.90 from \$20,000,000. WFUHS, instead of a component, WFIRM, is co-applicant with RegenMed Development Organization.

Project C: The **Center or Manufacturing Stimulation** budget was cut by 21%, to \$3,692,919 from \$4,660,000.

Project D: Next-Generation **Furniture Design & Manufacturing** was converted to non-construction. The budget was cut by 13%, to \$3,211,070 from \$3,700,000.

Project E: Catalyzing Small-Scale Product Development and Manufacturing was reconfigured. Part 1 is retitled **Advanced Manufacturing at The Steelhouse**, named for a local landmark, to establish a sense of place in a **Qualified Census Tract** around which residents can collectively reimagine and reinvent a future. The budget was increased by 37.5%, to \$12,980,000 from \$9,440,000. Part 2 is retitled **Small-Scale Manufacturing for Equitable Opportunity**. The budget was increased from \$6,100,000 to \$8,507,940, an increase of 39%.

Project F: The **Talent Development** for Next-Generation Manufacturing budget was decreased slightly to \$4,011,290 from \$4,040,000.

Project G: Strengthening the Triad’s Entrepreneurial Ecosystem for Next-Generation Manufacturing was reconfigured. Part 1 is now **SITE Next-Gen Entrepreneurial Ecosystem**, which underscores core coalition values of innovation and equity of opportunity. Winston Salem State University and the Greensboro Chamber Foundation are co-applicants. The programming budget was cut by 59%, to \$4,385,479 from \$10,800,000 and the revolving loan fund project removed, to be submitted later in 2022. Part 2 is now titled SITE Next-Gen’s **Maker Mentoring**, with Nussbaum Center for Entrepreneurship, Forge Greensboro as co-applicants. The budget was cut by 74%, to \$1,267,500 from \$4,880,000.

SITE Next-Gen  
FIPS ADDENDUM

**Optional Template for BBBRC Phase 2 Primary Service Area County List**

BBBRC Phase 2 applicants may use this template to list the counties in their primary service areas, which is required as part of both the Overarching Narrative (see p. 21 of the NOFO) and the project narratives of all Component Applications (see p. 23 of the NOFO).

<https://www.census.gov/geographies/reference-files.2019.html>

Overarching Narrative	"A description (~1 page) of the project's location and region, including a definition of its primary service area by county or counties. Counties should be identified by both name and 5-digit FIPS codes. See <a href="https://www.census.gov/geographies/reference-files.2019.html">https://www.census.gov/geographies/reference-files.2019.html</a> . The description of the region should include identification of the communities served and a description of the target participants served and stakeholders engaged. The description should also include the identification of assets in the region critical to the success of the regional growth cluster. The locations and regions should directly correspond to Questions 14 and 16 of Form SF-424 as submitted in each constituent component project. If applicable, also provide information demonstrating that the project is in or directly benefits a coal community." NOFO p. 21.
Component Application Project Narratives	"Section 2a: A description of the component project's location and region. The locations and regions should directly correspond to Questions 14 and 16 of Form SF-424 and align with the information provided in the Overarching Narrative. If the applicant expects impacts beyond the noted region, the applicant should note the region of expected impact. Additionally, applicants must identify their proposed primary service area(s) by county or counties. Counties should be identified by both name and 5-digit FIPS codes. See <a href="https://www.census.gov/geographies/reference-files.2019.html">https://www.census.gov/geographies/reference-files.2019.html</a> ." NOFO p. 23.

FIPS Code	NC Piedmont Triad Region County
37001	Alamance County
37033	Caswell County
37057	Davidson County
37059	Davie County
37067	Forsyth County
37081	Guilford County
37123	Montgomery County
27151	Randolph County
37157	Rockingham County
37169	Stokes County
37171	Surry County
37197	Yadkin County