

Synopsis

The BioFabrication Cluster: Over the last decade, Southern New Hampshire has established itself as a leader in the field of biofabrication, an emerging area of medicine that utilizes manufacturer cells, tissues, and organs to improve the standard of care for chronic diseases and traumatic injuries while significantly lowering the cost of healthcare. Biofabrication as an innovative manufacturing industry segment is creating state-of-the-art innovations in biomaterials, cell processing, bioprinting, and automation. It encompasses applications including skin and musculoskeletal tissues; neurological and ophthalmological tissues; cardiovascular and lung tissues; renal tissue; and hematological and immunological conditions. Each biofabrication therapy brought to market will save lives and create hundreds to thousands of industry jobs.

The emergence of a BioFabrication cluster in the City of Manchester will transform the Southern New Hampshire economy, further grow the regenerative manufacturing industry, create new high-quality jobs, and increase wages for underserved populations. Manchester will lead the nation in the production and distribution of regenerative tissues and organs. Its location ensures that its industry benefits will reach historically excluded populations. Manchester's poverty rate of 14.1% is double that of the state and its median household income of \$60,711 is 23% lower than the statewide median. The city's diversity is a key asset but is lagging behind in terms of high school graduation rates and college education. Through tailored education and workforce development programs as well as partnerships with community-based organizations serving disadvantaged populations, the BioFabrication cluster will spur equitable economic growth.

Through the BioFabrication Cluster, our Coalition and industry partners will create 23,000 jobs (7,800 direct and 15,200 indirect), which translates to under \$4,200 of federal investment per job created in the Southern New Hampshire Region.

The BioFabrication Cluster will utilize existing economic and infrastructure assets, including the Advanced Regenerative Manufacturing Institute, the historic Amoskeag Millyard, the Manchester-Boston Regional Airport, and institutions of higher education. In addition, the cluster will leverage the burgeoning advanced aerial mobility (AAM) industry, another leading industry cluster for the region, to build an organ distribution network that can be scaled and replicated across the country. This innovative approach will achieve the promise of manufactured organs by dramatically increasing organ supply, significantly reducing the inequities in the U.S. organ transplantation system – especially in minority and underserved populations – and saving thousands of lives.

Our Coalition Members and Partners:

The City of Manchester is the economic engine of Southern New Hampshire, the most diverse region in the state. City leadership is committed to equitable economic growth, leveraging core relationships with the coalition members, industry partners, community stakeholders, and program participants to lead the BioFabrication cluster application.

The **Advanced Regenerative Manufacturing Institute (ARMI)**, a non-profit Manufacturing Innovation Institute (MII) within the National Institute of Standards and Technology's (NIST) Manufacturing USA network, is focused on large-scale manufacturing of cells, tissues, and organs. ARMI's consortium of more than 160 member organizations cuts across industry, government, academia, and the nonprofit sector.

Southern New Hampshire University (SNHU) is a private, non-profit institution with a 90-year history of educating traditional-aged students and working adults. SNHU offers 200+ accredited undergraduate, graduate and certificate programs, both online and on its campus in

Manchester, and has been recognized as the "Most Innovative" regional university by U.S. News & World Report and one of the fastest-growing universities in the country.

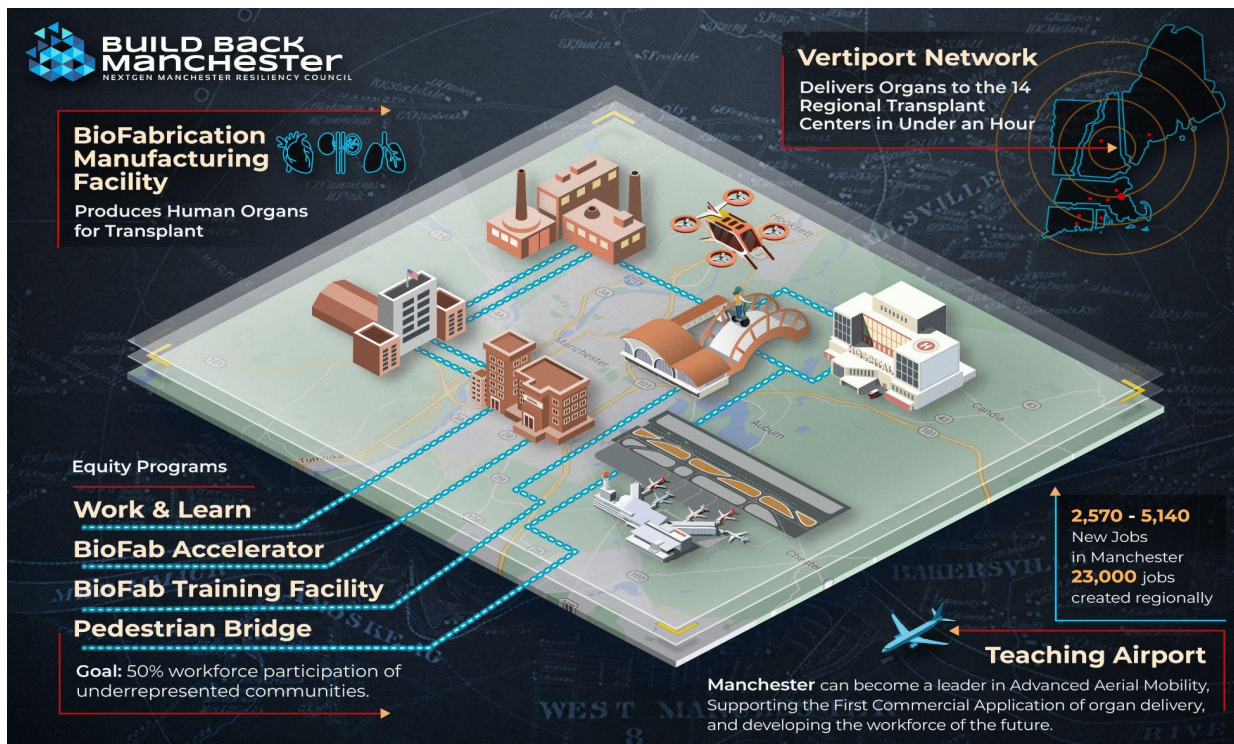
Manchester-Boston Regional Airport (MHT) is the premiere aviation gateway for the region located in Manchester and Londonderry, NH. It operates flights daily through four commercial carriers, including nonstop flights to 12 destinations (with an additional in April 2022), and processes more air cargo each year than all other regional New England airports combined.

University of New Hampshire (UNH) is the state's flagship public research university with campuses in Durham, Manchester, and Concord. It is a Carnegie-designated doctoral research university with very high research activity (i.e., R1) with annual research expenditures exceeding \$140 million. Its Manchester campus is located in the heart of the Millyard to support the workforce needs of the BioFabrication cluster.

Manchester Transit Authority (MTA) is the designated recipient of Federal Transit Administration (FTA) funding and public transit provider for Manchester and surrounding communities of the region. MTA plays a key role in serving the mobility needs of the region's historically disadvantaged groups and connecting workforce to new jobs in Biofabrication.

The Southern New Hampshire Planning Commission (SNHPC) serves as the Metropolitan Planning Organization for the Manchester urbanized area and acts as the regional coordinating agency for federal transportation funding. SNHPC also oversees the development of the region's CEDS, with a deep understanding of the region's economic needs, opportunities, and challenges.

Our Component Projects:



Economic Development and CEDS Alignment: These projects directly respond to many of the goals and objectives outlined in the [region's CEDS](#), including:

Goal 1: Maintain the region's quality of life as an attractive place to live, work and play.

Objectives: support projects that enhance and sustain the quality of life of the region, such as sustainability, walkable communities, low impact development, mixed-use development, etc.

Goal 2: Facilitate opportunities to develop, maintain and strengthen adequate hard and soft infrastructure for business development.

Objectives: encourage the development of partnerships between governments, investors, nonprofits, businesses, and other groups; support the development of a strong local workforce, including quality education; facilitate the expansion and maintenance of key infrastructure, including but not limited to water, sewer, public transportation, roads, parking etc.

Goal 4: Identify support for implementing the CEDS.

Objectives: identify and secure private investment; ensure that business recovery is part of public disaster recovery efforts.

Goal 6: Support business promotion and development.

Objectives: encourage and foster the development of growing and emerging industries; reinforce and strengthen regional industry clusters and industries of local importance, including the development of strategies for the expansion of complementary businesses and services; expand business technical assistance and development assistance services; ensure access to sector specific skills training; engage area investors, traditional financiers, and alternative financiers, to facilitate business development and financing.

Our Complementary Initiatives:

UNH: UNH has made significant investments in the research and educational infrastructure necessary to support a vibrant BioFabrication cluster. In 2019, UNH opened the Biotechnology Innovation Center (BIC) on its Manchester campus. The \$7 million, 18,500 square foot facility houses advanced wet labs which support faculty research, hands-on laboratory skills training, and hosts startup companies in the early stages of their scientific research and development.

UNH is a founding, Tier 1 member of ARMI; the Dean of UNH Manchester serves as a member of ARMI's leadership as its Chief Workforce Officer, creating a strong and direct connection between the mission of the university and the workforce needs of the BioFabrication cluster.

SNHU: Last fall, SNHU reduced on-campus tuition by over 50%, this after holding online tuition flat for over a decade. Low tuition provides access to higher education for a broader socioeconomic population and creates a more diverse pipeline for employers. SNHU continues to build capacity of its School of Engineering, Technology, and Aeronautics since its 2017 launch, including the renovation of a 20,000sf lab space and the opening of a new 67,000sf facility. SNHU also received a foundation grant to establish a Center for Project Based-Learning. These efforts will directly support the Teaching Airport, providing a workforce of aeronautical engineers, mechanical engineers, construction managers, computer scientists and those with unmanned aerial systems certificates to grow a new industry of transport models.

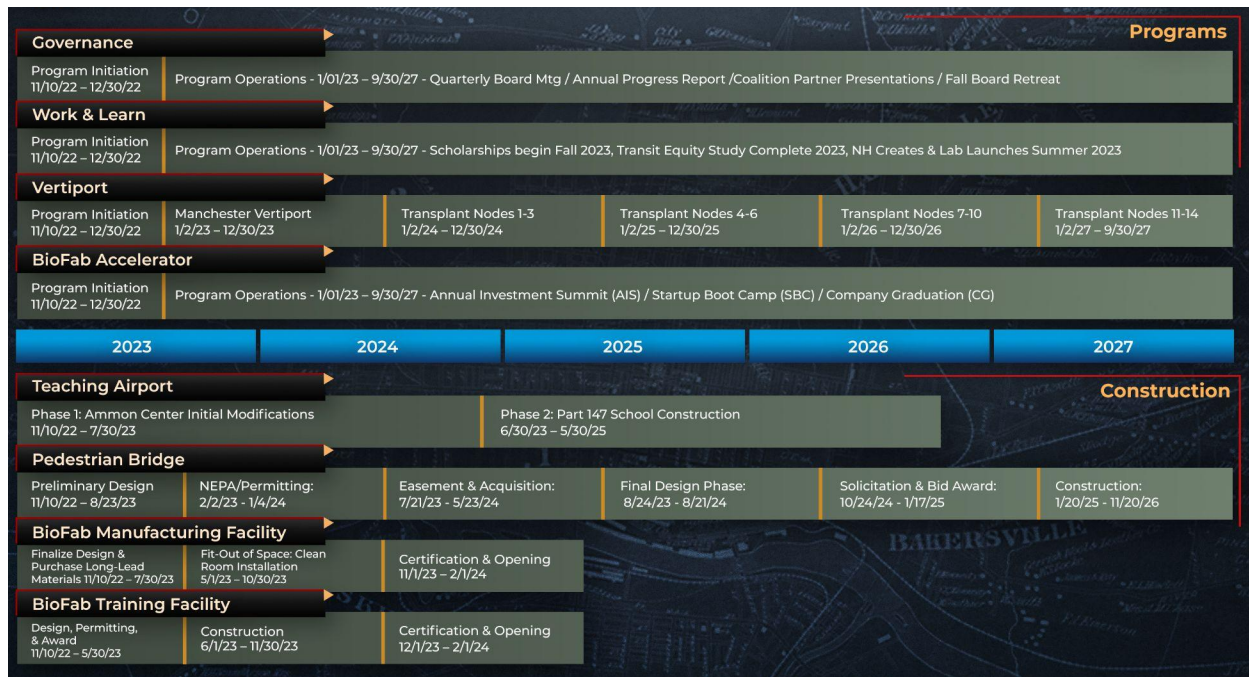
MHT: Cargo growth at MHT has been strong over the past two years due to the growth in e-commerce with little signs of slowing. To meet this new demand, a new 64,000 square foot cargo facility under construction will double cargo warehouse capacity at MHT. This cargo activity is located just south of the proposed Teaching Airport and will provide employment opportunities for Teaching Airport graduates as they complete their education.

ARMII /BioFabUSA: As a member of Manufacturing USA, received \$80 million from the Department of Defense with a \$218 million private sector match, and was recently approved for a 5-year renewal to continue its mission to establish the BioFabrication industry.

Our Metrics of Success: The coalition will measure the number of direct and indirect jobs created by the project. This project is anticipated to contribute to the growth of the region's GDP rate. The coalition will measure the annual economic impact of the Biofabrication cluster as well

as its impact on suppliers, and the collective induced demand to determine a cumulative effect on the region’s GDP. The project’s success is reliant on a conduit of skilled workforce. As such, the coalition will measure participation of the *Work & Learn, Teaching Airport, and Start-Up Lab* programs. The coalition will also collect income data of program participants to measure the number of individuals who are pulled out of poverty as a result of participation. The coalition will measure the number of direct jobs obtained and education opportunities utilized by both minorities and individuals who have experienced poverty at the time of admission. The coalition will use demographic data to measure contributions towards closing the gap between the city’s current minority population rate and the City’s minority workforce participation rate.

Our Implementation Timeline:



Our Location and Region: This project is centered in the City of Manchester, with a focus on the City’s Millyard and regional airport, and will serve the Southern New Hampshire region. Manchester (pop. 115,000) is the seat of economic and political influence within Southern New Hampshire and accounts for nearly 10% of the state’s and 40% of the region’s population.

Primary Service Area: See attached Primary Service Area Template Form provided by EDA.

Communities Served: The BioFabrication cluster will serve all Southern New Hampshire residents, including those seeking to move to the region for a better future with the ultimate goal of large-scale manufacturing of health therapies and organ transplantation to serve communities nationwide. This project’s target participants are skilled and unskilled workers in the region, with an emphasis on recruiting and training underserved populations to build a diverse workforce. This includes people of color, women, low-income workers, and refugees. Manchester has a unique regional role as a refugee resettlement site; it embraces this responsibility and works to provide refugees with not just everyday needs, but gainful, long-term employment.

Stakeholders Engaged: This coalition has engaged a broad set of regional stakeholders across the disciplines of education, health, transportation, and businesses to provide a holistic approach to growing the BioFabrication cluster. This includes ARMI, the University and Community College Systems of New Hampshire, Southern New Hampshire Health and Elliot Health System

(AKA SolutionHealth), Catholic Medical Center, Dartmouth-Hitchcock Health, the Manchester VA Medical Center (veterans), the Manchester School District, the International Institute of New England (refugees resettlement), My Turn (HiSET education), For Inspiration and Recognition of Science and Technology (FIRST/K-12 STEM education), YWCA NH (minority and female empowerment), and the U.S. Department of Defense. Each of these stakeholders have physical assets within Manchester and provide direct services to target participants within the region.

Critical Asset 1: The Millyard, once the largest planned industrial facility in the world, is now home to the region's growing BioFabrication industry, hosting the highest concentration of jobs in New Hampshire. Millions of square feet of historic mill buildings within the Millyard have been renovated to provide a new home for technology companies. The Millyard is a catalyst for the biofabrication industry, hosting engineering and rapid prototyping resources, universities, incubators for early stage companies, wet labs for research and development, and supply chain partners. The Southern New Hampshire region benefits from this agglomeration of available workforce, institutions of knowledge, hospitals, and BioFab manufacturing in the Millyard.

Critical Asset 2: MHT operates flights daily through four commercial carriers (Spirit, United, American, and Southwest Airlines) and processes more air cargo each year than all other regional New England airports combined. MHT is home to FedEx and UPS operations, as well as several tenants with workforce needs, including Signature Flight Support, ProStar, and Wiggins Airways. These entities provide aircraft handling, maintenance, fueling, deicing, and custom installation of advanced avionic packages. The commercial carriers also have their own workforce needs including pilots, ground crew, cabin crew, and maintenance technicians.

Our Expected Participation from Private Sector Entities

Beta Technologies is one of the world's leading developers of AAM (Advanced Aerial Mobility) solutions and has committed a \$1.8 million match for the Vertiport Network project component. This match will be used to fund the establishment of an organ delivery network that will serve 14 transplant centers in CMS Region 1, which encompasses Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island.

ProKidney, a clinical-stage biotechnology company with a transformative proprietary cell therapy platform that can treat multiple chronic kidney diseases using a patient's own cells, is currently working with ARMI to scale up and automate its current manufacturing processes, and has committed to co-location their manufacturing facilities so as to utilizing the proposed CMO. ProKidney anticipates the needs for hundreds to thousands of employees over the next five years, as well as a \$650 million capital investment in approximately 750,000 ft² of manufacturing facilities in the City of Manchester. ProKidney regards the Millyard's BioFabrication cluster as an ideal site/top prospect to establish its manufacturing lines and hire its workforce.

Toohey Law is providing legal service to the Governance structure and Startup Lab participants.

Advanced Solutions Life Sciences, CVS Health, Royalty Pharma, StageNext have each committed to mentoring startups in areas such as reimbursement and investment strategies, business plan and pitch preparation, and diverse board development. **Organamet, Salentra, STEL**, all startup members of ARMI, have committed to joining the Startup Lab and using the CMO facilities. **Mayo Clinic** has committed to being a partner for clinical trials as appropriate.

Our Sustainability Plan

This application, while focused on the BioFabrication cluster and its component projects, builds on a regional strategy that centers the local recovery from the COVID-19 pandemic based on equitable investments that will directly and positively impact the economic well-being of

residents of Southern New Hampshire, especially among historically disadvantaged populations. The coalition recognizes the importance of public-private partnerships in achieving a sustainable cluster – just as Manchester and local entrepreneurs did when they worked together to transform the Millyard over the last three decades, through diversified ownership and economic stability.

Leveraging public funds: Manchester is using federal resources to build a foundation for health and sustainability of the BioFabrication cluster should its application be funded. This includes:

- **\$43 million through American Rescue Plan Coronavirus State and Local Fiscal Recovery Funds (SLFRF)** for community violence prevention to improve the safety and quality of life of all residents, increased capacity within the Manchester Economic Development Office, the modernization of Manchester’s branding strategy to better support the airport, local hospitality and tourism, as well as small business grants and program assistance, with a particular focus on outreach to small businesses owned by people of color.

- **\$7.3 million (including \$4.3 million of federal HOME funds)** for high quality housing across all facets of the market that will be critical to maintaining continued growth of the cluster.

Manchester has over 1,000 units of housing currently in development within walking distance of the cluster’s main construction projects.

- **\$27 million (including \$25 million in federal RAISE funds)** for investments in multimodal transportation and improved accessibility to the Millyard, including the construction of a pedestrian bridge connecting northern and southern sections of the Millyard, additional road access to the southern section of the Millyard, a multimodal corridor, a redesign of South Elm Street, a complete streets project running parallel to the Millyard that promotes pedestrian safety and connection between the Millyard and downtown. Each of these projects complement the infrastructure investments outlined in this proposal and support its long-term sustainability.

Securing private investments: The proposed project component investments are being met with enthusiastic support from ARMI and its industry partners, who are committed to accelerating the growth of the BioFabrication cluster to ensure the large-scale manufacturing capacity and workforce necessary to bring their products to market. To that end, ARMI has leveraged an initial investment of \$80 million from the Department of Defense to create a coalition of 174 members from 33 states. This coalition has completed 56 manufacturing technology, education, and workforce development projects; assembled and sustained working groups with 250 active members; facilitated 26 U.S. Food and Drug Administration submissions and 12 patent filings; and launched 6 Tissue Foundry manufacturing lines to support process development. This effort laid the foundation for its workforce outreach programs, which currently serve more than 8,000 program participants.

ARMI’s track record will guide its sustainability plans for the BioFabrication Manufacturing Facility, BioFab Accelerator, and BioFab Training Facility. Long-term operations will be financed and sustained through contracts, leases, and dues from participating commercial partners. Its collaborations with key workforce partners like UNH, MCC, and SNHU will help ensure equitable participation in the BioFabrication cluster. Likewise, these workforce partners will bring expertise in ensuring the long-term sustainability of the Work & Learn program.

Our Plan for Engaging Community Based Organizations and Labor Unions

Our coalition maintains strong relationships with local labor unions that the coalition will continue to engage with throughout Phase II implementation. We have received letters of commitment from New Hampshire AFL-CIO, AFSCME Local 93, IBEW Local 490, LIUNA Local 668, Teamsters Local 633, Bricklayers Local 3, Sheet Metal Workers Local 17, and the

New Hampshire Building and Construction Trades Council (Ironworkers Local 7, Boilermakers Local 29, Operators Local 4, Operators Local 98, Sprinkler Fitters Local 669, Laborers Union, Insulators Local 6, UA Local 131). Each has committed to working with our coalition partners to develop Project Labor Agreements that ensure “on time, on budget” results and that local workers are benefitting jobs created by these federal investments.

All construction projects outlined in this application will utilize Project Labor Agreements (PLAs). These PLAs will acknowledge that the construction of the projects are of critical importance to the development of the economy of New Hampshire, especially for job-creation and workforce opportunities in Southern New Hampshire, and the importance of maximizing the hiring of qualified craftworkers based in the region. These PLAs will outline the wages, hours of work and other conditions of employment for workers, and ensure that wages are at or above the prevailing rate and will include local hire provisions. They will outline a uniform grievance arbitration process and ensure workplace harmony.

Detailed Plan on Engaging Equitably

Our Coalition will ensure that the benefits of the cluster will be shared across all affected communities by including organizations deeply rooted within these communities within our governance structure. This will ensure that we are not just consulting with affected communities, but that they maintain a seat at the table as key decision making processes are taking place.

The work of our coalition will be governed by a non-profit made up of not only our coalition partners, but also the YWCA NH, International Institute of New England, My Turn, and the Manchester School District.

When looking at our growth sectors, we know that we needed to create an environment that not only created high-paying jobs, but made sure that those jobs would be going to the residents in our region that would benefit most from them, and that have been left behind in previous industry growth.

In addition to ensuring our job training and education initiatives focus on the underserved populations of our region, we must make sure that our public transportation and physical infrastructure are equipped to support job growth within high-poverty neighborhoods where large portions of our residents of color reside. Increased access to public transportation is a critical element of equitable economic growth, and a lack of public transportation can be a major barrier to workforce and economic development. By strengthening our public transit system, by conducting an equity analysis of multimodal transit in Manchester with a particular focus on education and employment access, funding vouchers for Work & Learn participants, and increasing accessible and multilingual signage, we are better able to decrease barriers to employment.

Detailed Overview of Expected Outcomes

Before the end of the project period, Manchester will establish its significance as the global epicenter for the Biofabrication Cluster. As a result, the Coalition estimates these programs and projects will create 7,800 new direct jobs and 23,000 total direct and indirect jobs in the region. The outputs of this project are anticipated to contribute an additional 0.7% to Manchester’s Gross Domestic Product (GDP) on an annual basis over the project’s reporting period. The cumulative value of that additional GDP is estimated to be \$400 million by the end of project reporting. The regional creation of these jobs in the R&D/Life Sciences (NAICS 541710) and similar industries will result in region-wide income growth given the industry’s average per capita income of \$99,842. For learning and training program participants, especially those targeted for assistance

in overcoming workforce barriers, the impacts to personal finances would be life changing, easily lifting people out of poverty and into the middle class.

City Of Manchester: Estimated Jobs - Direct and Indirect	New Jobs High	New Jobs Low	Const. Jobs	Direct Jobs	Supplier Jobs High	Supplier Jobs Low	Induced Jobs High	Induced Jobs Low	Indirect Jobs	Direct & Indirect Jobs
C1: CMO	3,636	1,212	164	2,588	5,556	1,852	3,936	1,312	6,328	8,916
C1: ProKidney Const.	0	0	3,543	3,543	3,120	3,120	3,172	3,172	6,292	9,835
C1: ProKidney Factory	606	606	0	606	926	926	656	656	1,582	2,188
C2: Innovation	4	2	23	26	20	20	20	20	40	66
C3: Startup Lab	650	650	0	650	394	394	180	180	574	1,224
C4: Work & Learn	30	10	0	20	0	0	0	0	0	20
C5: Teaching Airport	16	16	133	149	117	117	119	119	236	385
C6: Vertipport Logistics	124	48	49	135	43	43	44	44	87	222
C7: Pedestrian Bridge	2	0	76	77	67	67	68	68	135	212
C8: Governance	2	2	0	2	0	0	0	0	0	2
Total	5,070	2,546	3,988	7,796	10,243	6,539	8,195	5,571	15,274	23,070

A goal of the project is to reduce the poverty rate in Manchester by 1% from 14.1% to 13.1%, a reduction of 1,150 people experiencing poverty, by the end of the reporting period. Additionally, project components will focus on serving historically under-represented

populations to make up approximately 30% of program participation opportunities. The Work & Learn project expects to engage over 2,500 participants over the reporting period, assisting with our goal of closing the gap between the City’s minority population (15.2% in 2022) and their workforce participation (9.1% in 2019). The BioFab Startup Lab expects to attract a minimum of 10 startups to the region where they will take root, attracting investments, creating jobs, and developing products through the CMO. The Training Facility and Innovation Facility will not only renovate the historic Manchester Armory, it will become a central place for young and old to convene and learn about STEM and specifically biofabrication, solidifying the Millyard as the global biofabrication capital. The Teaching Airport expects to increase the number of certified Aviation Maintenance Technicians from 9 graduates a year (historical average of Nashua Community College) to 25 graduates a year. Additionally, we are aiming for a target goal of 20 pilots per year graduating from the Part 141 Flight School while supporting the emergence of innovations in aviation and advanced aerial manufacturing.

Overview of Our Phase 1 Work

Our coalition took a collaborative but specialized approach to the work conducted between the Phase 1 award and the Phase II application submission. Our coalition leads met weekly to share progress, discuss barriers and brainstorm solutions.

City of Manchester hired an Manchester Economic Development Director to serve as our Regional Economic Competitiveness Officer to coordinate the Phase 2 application process, commissioned engineering, environmental as well as seeing through the spin-off feasibility studies of the Infrastructure for Equitable Growth (Pedestrian Bridge, Complete Streets), created a dashboard located on the City website to receive feedback and inform residents of the Coalition's progress, conducted press outreach to ensure broad regional awareness of the project. **MHT** developed detailed conceptual planning, design, and engineering reports, environmental documentation for not only EDA but also for an FAA Categorical Exclusion request, and an architectural study to develop preliminary concepts and massing for the planned building that will house institutions of higher education. MHT has also worked to secure additional private support for the Teaching Airport including from Nashua Community College, Signature Flight Support which provides fixed base operator and ground service equipment maintenance at MHT.

SNHU conducted a survey of 700 individuals in New England who are interested in STEM careers but need additional education or job training to achieve their goals. Respondents were asked if they had previously heard of biofabrication, their barriers in reaching education and workforce training, and their demographic identifiers. They also hosted several convenings of community and industry partners in conjunction with the Work & Learn and Teaching Airport proposals.

ARMI commissioned an evaluation of the Vertiport flight corridors for the vertiport logistics network, which resulted in the vertiport location shifting northeast to deconflict an approach vector for MHT. They engaged with a broad range of biofabrication and Aerospace industry partners to secure manufacturing commitments from clinical stage companies, commitments to participate in the accelerator from early stage companies, and commitments to support the logistics and supply chain elements needed to support the industry cluster. They worked with the National Guard to evaluate renovation of the Armory Drill Hall and build a new CMO in their parking lot. Additionally, ARMI designed a CMO space in a historic mill building.

SNHPC provided technical assistance to the City of Manchester with scoping and selection of engineers to conduct preliminary engineering for City led components from the Phase I award. SNHPC developed a survey to identify employer observed barriers to workforce participation. SNHPC assisted the City of Manchester in distribution of the survey to MillYard businesses and the State of New Hampshire's list of Businesses in Good Standing. SNHPC completed analysis of the survey and reported findings to the coalition membership.

MTA commissioned engineering, environmental and feasibility studies for the Multimodal Transit Hub.

UNH conducted a comprehensive assessment of its K-12 STEM educational assets and determined which would be of most impact to the BioFabrication Cluster Work & Learn Program. These assets leverage prior investments and learnings from its education and workforce development leadership role at ARMI as well as recent grants from NIH-SEPA. UNH also updated the original market assessment that established the important role of a research and early product wet-lab incubator in a successful biofabrication ecosystem.

Changes to Our Proposal

CMO: The total cost increased from \$18,000,000 to \$31,250,000. An engineering study conducted on the original location resulted in a higher cost than expected. A more reasonable location was found which will also accelerate time to impact significantly.

Innovation Facility: The total cost increased from \$3,000,000 to \$4,000,000 based on a detailed review of site renovation needs.

Start-Up Lab: The total cost increased from \$3,000,000 to \$5,877,362 based on a shift in the concept resulting from talking with ARMI startup members during customer discovery. We also received an overwhelming interest from established ARMI members such as CVS Health to provide mentorship.

Work & Learn: The total cost of the Work & Learn program increased from \$4,000,000 to \$10,148,698. While the original scope of work was to deploy scholarships and barrier removal funding to youth and adult students interested in entering the BioFabrication cluster, the scope has been expanded to address a larger set of workforce pathway barriers including technological access, transit, and English language acquisition. When the Transportation Portal project was removed from scope, transportation still needed to be addressed. The Coalition members added a Transportation Equity Study along with travel vouchers and bilingual signage to develop plans while addressing known transportation issues.

Teaching Airport: The total cost of the Teaching Airport increased from \$8,000,000 to \$28,865,558. We achieved a better understanding of the required phasing for delivering the Teaching Airport concept. Nashua Community College has committed to more than \$1,115,000 of support for the Teaching Airport component project, which includes programmatic staff costs, equipment and training aids, and new avionics. They are also committed to relocating to MHT, which would bring FAA certification as an Aviation Maintenance Technical School, as well as additional revenue through the leasing instructional space.

Vertiport Logistics Network: The vertiport location shifted northeast to deconflict an approach vector for MHT, and BETA technologies committed to provide a \$1,800,000 cash match to support the project. The total cost of the Vertiport Logistics Network increased from \$7,000,000 to \$9,000,000.

Pedestrian Bridge: This project stayed relatively consistent with Phase 1, however we increased the estimated overall cost of the project from \$20,000,000 to \$24,774,503.

Governance Structure: We are proposing creating a non-profit organization, NextGen Manchester Resiliency Council, with a board structure made up of each of our original coalition partners as well as additional partner organizations within the community. This organization will be responsible for communicating the progress of our coalition to the community, creating a platform for collaboration between coalition partners to ensure a cohesive implementation of EDA investments as well as a cohesive strategy for future investments in the region. Our coalition also met with several community partners who will be part of the governance structure. We secured commitments from Toohey Law Firm to provide legal and accounting services and commitments from coalition partners to serve on the Board of Directors with a commitment of 60 hours/year for at least the duration of the grant.

Removal of Component Projects: Our cluster's Phase 1 application included a component project "Infrastructure of Equitable Growth." This project outlined two mobility projects, both the pedestrian bridge over the Merrimack River and a multimodal complete street project along one of the City's major East/West thoroughfares. After completing preliminary engineering and environmental reviews through Phase 1 of this application, we ultimately decided to include only the pedestrian bridge as a component project.

We did not come to this conclusion lightly, but ultimately feel that the complete streets project, while incredibly valuable to our residents, was not ultimately necessary for the success of the growth cluster, and funding will be pursued through programs created under the Infrastructure and Jobs Act. The estimated cost of this project was approximately \$11,000,000, and our coalition determined that those funds would be better utilized by other component projects. The City is able to use the plan to prioritize project funding through SNHPC's regional allocation of Federal Highway Administration's Surface Transportation Block Grant funds.

Our Coalition also ultimately decided to remove the multimodal transit hub from our final component projects as well. While this project is also incredibly important to our residents, we believe that we can accommodate the additional transportation needs of our cluster through additional funding towards our Work & Learn component project.

MTA remains a coalition partner of our cluster and is committed to continuing to engage with our coalition to ensure that equitable transportation remains at the forefront of our objectives, and MTA is able to use the engineering to support an application for full project funding through FTA's Bus and Bus Facilities Discretionary Grant.