

## Application for Federal Assistance

**ID:** 3016382  
**Applicant Name:** Vanderbilt University  
**Project Title:** Middle Tennessee Lifeworks Facilities  
**Project Period:** 12/08/2021 - 05/08/2022  
**Federal Funding Requested:** \$482,236.49  
**Non-Federal Funding Requested:** \$0.00  
**Fiscal Year of Funding Requested:** 2021  
**Federal Application Receipt Date:** 10/19/2021  
**Submitted for:** EDA-2021-ARPABBBRC - Phase 1  
**Notice of Funding Opportunity Number:** EDA-HDQ-ARPBBB-2021-2006976  
**CFDA Number:** 11.307

## Application Documents for Review

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# BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006  
Expiration Date: 02/28/2022

## SECTION A - BUDGET SUMMARY

Grant Program Function or Activity  (a)	Catalog of Federal Domestic Assistance Number  (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Economic Adjustment Assistance	11.307	\$	\$	\$ 482,236.49	\$	\$ 482,236.49
2.						
3.						
4.						
5. Totals		\$	\$	\$ 482,236.49	\$	\$ 482,236.49

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### SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) <div style="border: 1px solid black; padding: 5px; min-height: 150px;">Economic Adjustment Assistance</div>	(2)	(3)	(4)	
<b>a. Personnel</b>	\$ <div style="border: 1px solid black; text-align: right;">88,710.75</div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; text-align: right;">88,710.75</div>
<b>b. Fringe Benefits</b>	<div style="border: 1px solid black; text-align: right;">21,024.45</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">21,024.45</div>
<b>c. Travel</b>	<div style="border: 1px solid black; text-align: right;">0.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">0.00</div>
<b>d. Equipment</b>	<div style="border: 1px solid black; text-align: right;">0.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">0.00</div>
<b>e. Supplies</b>	<div style="border: 1px solid black; text-align: right;">0.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">0.00</div>
<b>f. Contractual</b>	<div style="border: 1px solid black; text-align: right;">245,000.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">245,000.00</div>
<b>g. Construction</b>	<div style="border: 1px solid black; text-align: right;">0.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">0.00</div>
<b>h. Other</b>	<div style="border: 1px solid black; text-align: right;">9,000.00</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; text-align: right;">9,000.00</div>
<b>i. Total Direct Charges (sum of 6a-6h)</b>	<div style="border: 1px solid black; text-align: right;">363,735.20</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; text-align: right;">363,735.20</div>
<b>j. Indirect Charges</b>	<div style="border: 1px solid black; text-align: right;">118,501.29</div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; text-align: right;">118,501.29</div>
<b>k. TOTALS (sum of 6i and 6j)</b>	\$ <div style="border: 1px solid black; text-align: right;">482,236.49</div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; text-align: right;">482,236.49</div>
<b>7. Program Income</b>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>	\$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	Economic Adjustment Assistance	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
9.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
10.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
11.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
12. TOTAL (sum of lines 8-11)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
14. Non-Federal	\$ <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
15. TOTAL (sum of lines 13 and 14)	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	Economic Adjustment Assistance	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>
17.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
18.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
19.	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
20. TOTAL (sum of lines 16 - 19)		\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: <input type="text" value="363735.20"/>	22. Indirect Charges: <input type="text" value="118501.29"/>
23. Remarks: <input type="text"/>	



## CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

## LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

## \* NAME OF APPLICANT

Vanderbilt University

## \* AWARD NUMBER

## \* PROJECT NAME

Middle Tennessee Coalition

## Prefix:

## \* First Name:

Michelle

## Middle Name:

## \* Last Name:

Wachter

## Suffix:

## \* Title:

Assistant Director

## \* SIGNATURE:

Michelle A Wachter

## \* DATE:

10/19/2021

A Gantt Chart such as the following may be helpful to present key milestones and deliverables for the project.

	Proposed Phase 1 Project Period of Performance = 6 Months					
Task/Deliverable	1	2	3	4	5	6+
Identification of Regional Economic Officer						
Steering Committee Staffing & Coordination						
Individual Partner Outreach Meetings						
Real Estate Scoping & Strategy Development						
Phase 2 Grant Writing						
Steering Committee Coordination in Phase 2						
Phase 1 Financial Closeout Preparation						

Ramp Up	
Execution	
Wind Down	

Instructions:

1. Leave the months as numeric values - the Project Scope of Work should remain in general terms for the period of performance.

**Executive Summary:** Middle Tennessee (TN) is perfectly positioned to demonstrate how communities can Build Back Better. Our coalition of academic, government, and non-profit institutions (see Table 1) will come together with industry partners to seek funding for *Middle Tennessee Lifeworks*, a vision of the evolution, advancement, and sustainability of a robust life sciences ecosystem that is powered by information technologies in the greater Nashville region to create high-quality jobs, grow correlated industry clusters, and provide its fast-growing, diverse population with equitable access to new opportunities for employment and entrepreneurship. We understand that all our residents, from people of color to those with disabilities to rural Tennesseans transitioning from the coal industry, will need access to high-quality jobs and the chance to create wealth through ownership and other positions of power. As we turn the page on the Covid crisis, Middle TN can lead the way with new businesses that enhance America's leadership in the life science space while opening new career paths for those who seek them. A key differentiator from other life science support initiatives across the country, this effort will be powered by artificial intelligence and data science capabilities of Coalition Members. With Vanderbilt's breakthroughs in the fight against Covid, numerous private and public stakeholders targeting biotech, and capital markets looking to Nashville as a source of strength in this emerging global sector, this investment will bring a multiplying return across the region.

Table 1: Coalition Members.

Academic	Local Government	Non-Profit
Vanderbilt University	Mayor's Office	Launch Tennessee
Vanderbilt University Medical Center	ECD Office	Life Science Tennessee
Meharry Medical College	Public Schools	Nashville Tech Council
Global Action Platform University Consortium	Economic Development District (GNRC)	Bio Tennessee
Nashville State Community College		GEM Consortium

**Coalition's Vision:** The Coalition aims to connect and align the disparate resources of the Middle TN regional ecosystem to create new businesses, expand existing companies, and grow the workforce and entrepreneurs in the life and information science and technology sectors. This vision builds on ten years of work by the Global Action Platform University Consortium created by local universities and area businesses to facilitate and increase collaborations, build knowledge and applications of cluster economic development models, expand investment for new business formation from research, connect markets and partners, and lay foundations for an innovation district in Nashville.<sup>1</sup>

**Economic Opportunity:** The Coalition's efforts are expected to affect the thirteen counties of the Economic Development District and reverberate across Tennessee's fast-growing population. The greatest impact is expected in the Nashville Metropolitan Statistical Area, which contains about 2 million people and more than 53,000 businesses. The total labor workforce approaches 1.1 million people with a labor participation rate of 68%. Roughly 72,000

<sup>1</sup> Donahue R, Parilla J, & McDearman B (2018 Jul). *Rethinking Cluster Initiatives*. Brookings Institution.

members of the labor force work in “professional, scientific, and technical services” jobs.<sup>2</sup> In addition to Music City’s vibrant healthcare services and entertainment scenes (see Appendix 2), it also enjoys top-quintile placement in several EDA categories assessed among the nation’s 917 metropolitan and micropolitan areas. These statistics include annual wage (8), labor force productivity (11), total workers completing a bachelor’s degree or more (12), and young adult population growth (7).<sup>3</sup> This has led, in part, to a second Brookings Institution Report in 2019 identifying Nashville as a prime metropolitan area in the South for development of a strategic growth center thanks to the presence of solid research universities and existing innovation sector momentum.<sup>4</sup> Despite these impressive statistics, Nashville faces significant challenges in economic development. Of greatest concern is the relative dearth of venture capital and cluster strength in the Nashville metropolitan area compared to others metro areas, with Nashville scoring in the bottom half of the fifth quintile for both metrics.<sup>3</sup> While the data show that the region possesses significant innovation capacity and resources, new economic cluster growth lags due to misalignment, lack of shared strategy, and missing or weak connectivity among the regions’ many activities and assets. In addition, tackling poverty has to be included in this initiative, as 77% of the region’s families below the poverty line live in Poverty Vulnerable Areas. Covid-19 further highlighted the local inequities to be addressed by this initiative with communities of color experiencing unemployment at more than double the rate of their white counterparts in the region.<sup>5</sup> With a special focus on these families who have often been overlooked in the life science industry, Middle TN can meaningfully address some of its most significant socio-economic issues.

**Coalition Members:** Vanderbilt University is a level 1 medical research institution consistently ranked among the nation’s top 20 research-oriented schools, while Vanderbilt University Medical Center (VUMC) is one of the nation’s top-rated healthcare providers and research hospitals. Meharry Medical College, one of the nation’s oldest and largest historically black academic health science centers, has existing partnerships with VUMC on multiple fronts through the Meharry-Vanderbilt Alliance and will play a central role in the effort. In addition, the Coalition also includes Tennessee State University and Fisk University, two other HBCUs. Over the past decade, academic Coalition Members collectively have deployed more than \$10.9 billion dollars in research expenditures, including about \$7 billion in government funding and \$850 million in industry sponsored research. The Government Coalition members recognize the importance of diversifying the regional economic development portfolio and stand ready to aid in projecting and assessing the economic impact of the Coalition’s activities. Each non-profit Coalition member brings relevant expertise to a planned project. The Coalition will assemble a Steering Committee, chaired by the Regional Economic Competitiveness Officer and staffed by member representatives, to provide oversight of activities and coordinate component projects.

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<sup>2</sup> Nashville Chamber of Commerce (2020). *Economic Development*. <https://www.nashvillechamber.com/>.

<sup>3</sup> U.S. Cluster Mapping (2018), Institute for Strategy and Competitiveness, Harvard <http://clustermapping.us>

<sup>4</sup> Atkinson RD, Muro M, & Whiton J (2019 Dec). *The Case for Growth Centers*. Brookings Institution.

<sup>5</sup> Greater Nashville Regional Council (2020). *Nashville Regions Vital Signs*. <https://www.gnrc.org/>

**Component Projects:** Project 1 – Lifeworks Accelerator and Programming – The Coalition will enhance its infrastructure and capabilities to better prepare, launch, capitalize, harden, and grow life science startups, thereby improving the readiness of such new ventures to attract capital and talent to the region. Further development of the Middle TN entrepreneurial ecosystem will increase the number and quality of life science and other high-tech startups leveraging the innovations developed at our strong research institutions. The Coalition plans to take extra steps to build equity into this component, focusing on wealth creation for those traditionally excluded from this space. **The Lifeworks Accelerator is a crucial step in aligning and recruiting entrepreneurial resources needed to overcome the challenges to the growth and diversification of the Middle TN economy.** University-related accelerator programs are consistently able to attract seed and early-stage investments to accelerator cohort companies – from sources of capital both within and outside the region – supporting the notion that an accelerator can lead to peer effects that encourage additional local entrepreneurial spillover activity.<sup>6</sup> Launch TN will support the cluster by providing networking for accelerator companies, encouraging them to apply for SBIR matching funds, and connecting them to other relevant opportunities. Launch TN will also help explore state-wide engagement opportunities as new initiatives expand and advocate for Coalition activities in state forums.

Project 2 – Shared Biomaking Facilities – Vanderbilt has already demonstrated the ways that research can propel advancement in scientific knowledge and industry innovation with its nationally recognized work on the COVID-19 vaccine and the discovery of an ultra-potent monoclonal antibody against multiple variants of SARS-CoV-2. Building on that strength in the region, shared wet lab space will provide prototyping and working space for startups in the Lifeworks Accelerator, as well as demonstration and training activities for workforce development projects. Wet lab equipment will focus on transformative areas of life science research. For example, digital fabrication of microfluidic devices by photolithography generally requires specialized training and access to a cleanroom. However, 3D printing enables a cost-effective fabrication process that would be suitable for many biomedical applications. Middle TN researchers have developed a universal strategy that allows for rapid prototyping of these devices, while eliminating the need for cleanrooms.<sup>7</sup> Establishing the capabilities to enable this technology would create an asset unique to our region. Startups will also have access to world-class core facilities and institutes of the academic Coalition members. Life Science TN will help support the cluster by facilitating activities between the Coalition and private sector partners, advocating for the Coalition in state forums, and advising the Coalition on life science industry needs in our region (e.g., resources, talent, technology).

Project 3 – Shared Artificial Intelligence (AI), Data Science, Cybersecurity, & Logistics Facilities – Cyber and data science facilities will provide computational resources required for startups in the Lifeworks accelerator, as well as demonstration and training activities for workforce

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<sup>6</sup> Fehder DC & Hochberg YV (2019 Apr). Spillover Effects of Startup Accelerator Programs: Evidence from Venture-Backed Startup Activity. *MIT Innovation Initiative*.

<sup>7</sup> O’Grady BJ et al. (2021). Rapid Prototyping of Cell Culture Microdevices Using Parylene-Coated 3D Prints. *bioRxiv*

development projects. This facility will provide similar benefits to those outlined in project 2 above, and it will provide a virtual makerspace for technology exchange, validation, and discovery. While the resources in this facility may be broadly applicable, they will focus on those complementary to life science. For example, establishment of a HIPAA-compliant, cyber-secure, open-source platform that allows companies to integrate existing and emerging biosensors into a data infrastructure for analysis and algorithm development.

AI in particular will be a top priority for this project, and is supported by the 2021 Brookings report highlighting Nashville as an up-and-coming tech hub that would be integral in forming a Southeastern AI superregional hub to strategically share AI-enabled workforce, supply chain, and research assets in healthcare and life sciences that leverage respective specializations.<sup>8</sup> For example, Middle TN researchers have developed a computational pipeline that enables rapid translation of model-centric AI from concept to deployment in the areas of medical imaging, algorithm design, and medical science.<sup>9</sup> This creates a community-level ecosystem informed by major players in medical imaging and innovative AI-based model validation of core technologies. Startups will also have access to world-class core facilities and institutes of the Academic Coalition members in addition to the *Lifeworks* facilities. The Nashville Tech Council will help support the cluster by facilitating activities between the Coalition and private sector partners and advising the Coalition on data science industry needs in our region.

Project 4 – Workforce Development Certifications – People of color, veterans, individuals with disabilities, rural coal communities – all of whom have frequently been left out of the life science world – are woven into the fabric of the workforce development plans. In fact, a comprehensive strategy will be necessary to fill new and existing positions. The first prong of this project focuses on the talent pipeline stemming from students in the regional K-12 schools and colleges, as well as the educators and administrators in those systems. The second prong of this project focuses on the talent pipeline stemming from military activity in the region, including military veterans, military spouses, and National Guard citizen soldiers. The facilities described in projects 2 and 3, as well as some academic Coalition Member facilities, will be available for demonstration and training. When structuring the certification process, the Coalition will leverage and align multiple existing programs, relationships, and regional assets outlined in Appendix 1. When developing the curricula, the Coalition will solicit input from industry leaders listed in Appendix 2 to assure the skills of the workforce are aligned with their needs. BioTN will help support the cluster by leveraging existing initiatives in both K-12 and post-secondary education. The GEM consortium will guide the Coalition's best practices on removing barriers to entry for underrepresented groups in STEM. Finally, with the Tennessee Valley Authority's move away from coal, many rural Middle TN residents will be seeking retraining in a new field, and the Coalition, through Nashville State and with the support of local leadership, will ensure that certifications are offered in affected communities.

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<sup>8</sup> Muro M & Liu S (2021 Sep). *The Geography of AI*. Brookings Institution.

<sup>9</sup> Bennett L et al. (2020). Scalable, TRaceable Ai for Imaging Translation. *NSF Convergence Accelerator Award*.

Project 5 – Integrated Regional Economic Development Planning – By putting together a plan that can be implemented across time, understanding that institutions and leadership change but that certain tactics and strategies need to be applied consistently, the Coalition members can create a realistic, expansive vision that grows opportunities and economic power in Nashville for a generation. Metro Nashville and the Chamber of Commerce have extensive experience in devising and executing economic development plans that expand a sector. The Global Action Platform is uniquely positioned to support the cluster in this regard, especially through formal affiliation with Harvard’s Institute for Strategy and Competitiveness (ISC).

**Preliminary Proposed Specific Metrics:** Annual Wages: The Nashville MSA’s annual wage as of 2018 ranked 81st compared to others in the Nation at \$53,383. With the high wages related to biotech, the goal is to position the region into the top 40 with at least 5% wage growth annually. Employment: Increased employment in companies with biotech NAICS codes (those beginning with 5417) will show the success of the private sector through hiring. Poverty: Poverty in the region persists in both underserved, high-minority census tracts and low-income, rural tracts. The Coalition will target the top 40 census tracts in the region with people living below the poverty line and monitor as they reach out to these populations. R&D Expenditure per Capita: Nashville MSA ranks 86th in the country at \$674/person in 2017. The Coalition’s goal for attracting private investment and capital into the biotech sector will elevate this measure and look to double it while pushing the region into the top 50 in the country.

**Potential Matching Funds**: The Middle TN Coalition has identified funds (see Appendix 3).

**Mitigation of Implementation Barriers:** Underserved Population Outreach: Minority populations, veterans, and those living under the poverty line in both urban and rural communities are often difficult to engage. Going through trusted sources such as faith communities and civic organizations is also a proven method for outreach. The Coalition already has partners that can address these issues or connect people with needed resources. Real Estate: Some of the projects likely to be proposed by the collaborative for Phase II funding will require physical construction. Current land costs in the Nashville region are very high with construction costs also incredibly high. Fortunately, Vanderbilt University has the more acreage in Nashville than any other non-governmental entity. This will allow these projects to be sited on land already under ownership with grant funds supporting only construction costs. Workforce Training Capacity: The program’s success rests within the region’s ability to train the workforce needed to support the many jobs related to the biotech sector ranging from those getting certificates in IT to researchers with PhD degrees. The region’s growth has put some strain on the capacity of some educational institutions. However, the strong partnerships within this Coalition will allow members to support each other and fill in for training in areas where others may be too full. In addition, these federal funds will leverage the increased millions of state dollars going towards regional community colleges and technical schools.

**General Timeline**: Six months (see Timeline, Budget Narrative, and Staffing Plan).

The Middle TN Coalition is dedicated to integrating and prioritizing equity, diversity, and inclusion (EDI) initiatives into each component project, as evidenced by the core members and supporting partners. By bringing this collective experience to the table, the Coalition is positioned to intentionally ensure the economic benefits stemming from cluster activities will be shared equitably across all communities. The Coalition's EDI plan has four main foci: i) communities of color, ii) military families, iii) neurodiverse populations, and iv) rural coal communities.

The Coalition is committed to helping address the stubborn inequities that lead to disparities in levels of achievement of our local youngsters, especially in post-secondary education opportunities. As part of that commitment, Vanderbilt has formed a research-practice partnership with Metro Nashville Public Schools to support education equity research focused on eliminating disparities in educational outcomes linked with factors such as race, class, and disability. This research will help ensure the talent pipeline for the region's workforce of the future will be representative of its diverse population. Meharry Medical College and the Graduate Education for Minorities (GEM) Consortium, both of whom are Coalition Members, are national leaders in enhancing the value of the human capital by increasing the participation of underrepresented groups at the masters and doctoral levels in engineering, science, and medicine. Furthermore, Meharry's Center for the Study of Social Determinants of Health aims to identify and research social conditions that create barriers to achieving healthy and prosperous lifestyles. This research, which intends to leverage *Lifeworks* facilities and resources, can be used to create actionable impact programs that will start a positive pendulum of change to reduce barriers to healthcare, enhance treatment engagement, and ultimately improve health and quality of life for underserved communities. The Coalition has also engaged several local economic development groups focused on underserved communities, including the Nashville Black Chamber of Commerce and Urban League.

As the most diverse community college system in the region, Nashville State has committed to align its resources and programs in support of the Coalition's efforts. They have existing programs for students that parallel the proposed programming. They also have existing programs with Metro Nashville Public Schools and the Nashville Chamber of Commerce, both of whom are partners, focusing on career and college readiness for underrepresented youth. Their seven campuses are all located within the Economic Development District contemplated in the proposal. This includes Humphreys County, which is currently dealing with the dual misfortunes of disastrous flooding and a closing coal plant. Importantly, they are aware of the need for wrap-around services for many students, including transportation, childcare, and healthy meals. They have offered their existing connections to support the Coalition's efforts, as well.

The Coalition is also committed to helping address the employment issues facing military veterans and their families. Tennessee is home to over 400,000 veterans (8.3% of adults), with



some of the highest concentrations in the Greater Nashville Regional counties.<sup>1</sup> This is due in large part to the proximity of Fort Campbell, the second largest employer in Tennessee. In addition to the existing veterans in the area, between 4,000 and 5,000 leave Fort Campbell each year with 85% seeking immediate employment. While 27% are able to remain in the area, data suggests a larger portion would do so if suitable opportunities were available to them.<sup>2</sup> The Coalition recognizes the untapped potential for these veterans, as well as spouses of active military and national guard members.

The Frist Center for Autism and Innovation at the Vanderbilt University School of Engineering brings engineers, business scholars, and disabilities researchers together with experts in neuroscience and education to understand, maximize, and promote neurodiverse talent. The Frist Center aims to engineer technologies inspired by neurodiversity that have the potential to transform the workplace environment. From a strengths-based – as opposed to deficit-based – understanding of autism and neurodiversity, the Center sees opportunities for innovation in technology and in workplace practices to expand the Coalition’s EDI initiatives to include neurodiverse populations.

The Tennessee Valley Authority (TVA) announced in April 2021 that it plans to retire the remainder of its coal-fired power fleet by 2035, including the Cumberland plant in Stewart County of Middle TN.<sup>3</sup> Since the natural gas plants that will replace them require fewer workers to operate, there is a growing need to provide retraining and other workforce development opportunities to these hard-working locals. The Coalition has engaged government executives, heads of economic development, and industry leaders in these coal communities to explore the best ways for this proposal’s activities to support their communities during this transition.

The Coalition is excited to create the opportunity to bring all of these players to the table to help equitably shape the landscape of our region’s economy through the proposed activities. This proposal has been met with great enthusiasm, as evidenced by the letters of support accompanying the appendices.

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<sup>1</sup> “Supporting Veterans in TN” *Veterans Data*. <http://www.veteransdata.info/states/2470000/TENNESSEE.pdf>

<sup>2</sup> *Nashville Chamber of Commerce*. <https://www.nashvillechamber.com/blog/2020/nashville-chamber-board-members-meet-with-fort-campbell-leadership-discuss-job-opportunities-for-transitioning-soldiers>

<sup>3</sup> Gardner T & Disavino S (2021 May 03). Tennessee Valley Authority plans to shut coal plants by 2035. *Reuters*. <https://www.reuters.com/business/energy/tennessee-valley-authority-plans-shut-coal-plants-by-2035-2021-05-03/>

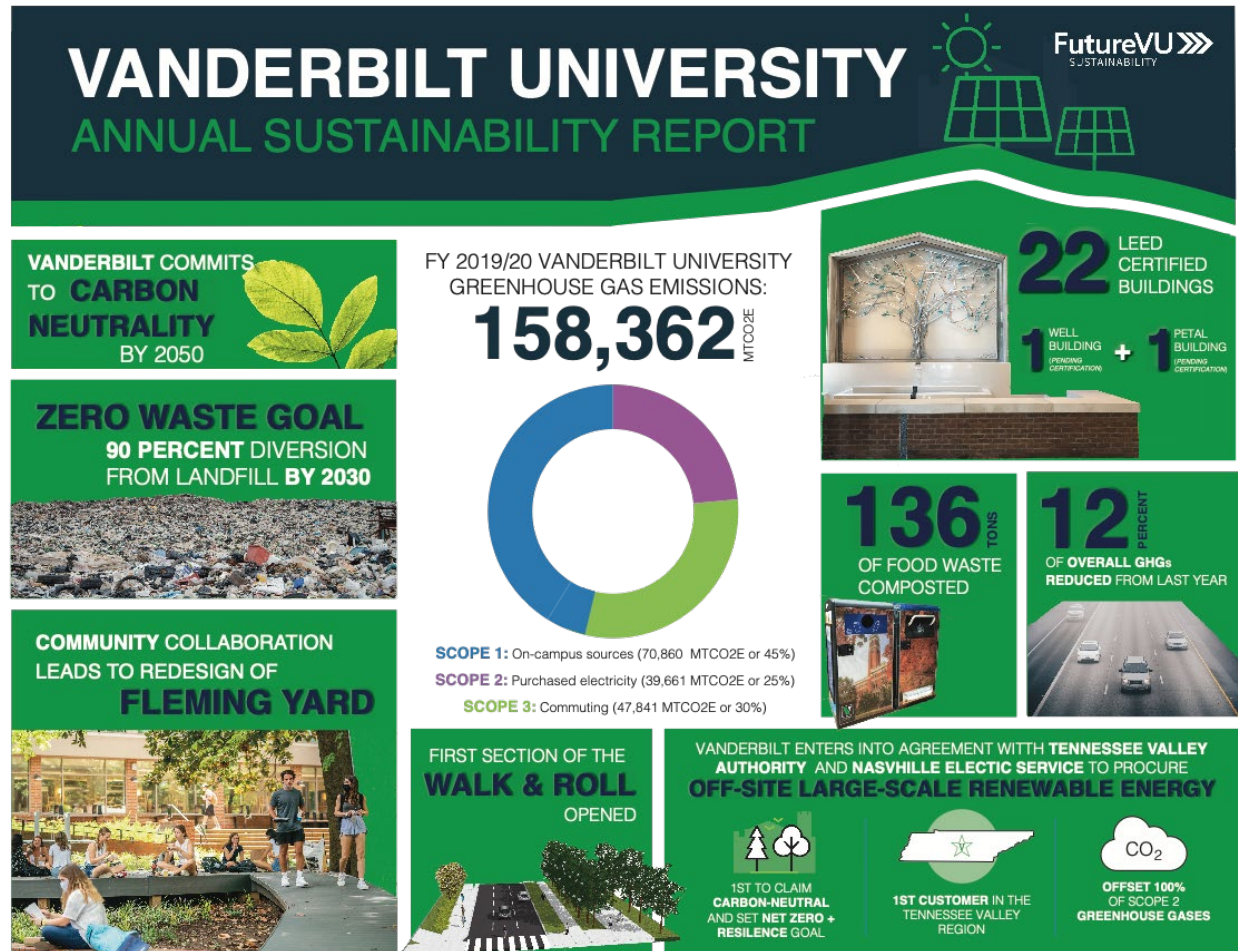
As the economy goes through natural rises and falls, sustainable funding is key to success. The Coalition's strong leadership in a research institution like Vanderbilt University, with an endowment of approximately \$7 billion, annual operating budget of \$1.4 billion, and thousands of engaged alumni, is unparalleled. The leadership in life and data sciences stemming from Vanderbilt University Medical Center and Meharry Medical College, both Coalition Members with a history of collaboration, is world class. Through the Global Action Platform, a longstanding consortium created by Vanderbilt jointly with eleven other universities in 2012, the Coalition incorporates participation and resources from all regional universities. Through these examples and others, this proposal builds almost entirely from existing programs and institutions in the region that have stable funding track records. The Nashville Metro Government and Mayor's administration have long been committed to developing human capital and expanding economic opportunity to all neighborhoods. They have further committed to continue efforts to grow the local economy while also ensuring that more residents and communities within Nashville are able to participate in the growth and prosperity of the city and beyond. They will continue to recruit and retain businesses that will create new, high-quality jobs for residents, and they view the interest this initiative has generated within the business community, specifically in the healthcare industry, as an incredible asset that can guide the Coalition's mission into the future. The engagement and support of the regional Economic Development District (Greater Nashville Regional Council) and local Chambers of Commerce further illustrate the region's support to sustain Middle Tennessee Lifeworks beyond the funding and project period contemplated in this proposal. The Coalition will be able to provide the 20% matching contributions for the Phase 2 Build Back Better proposal, should it be awarded to the Middle TN Coalition, with Vanderbilt leading the way.

Vanderbilt will lead the way in other sustainability efforts, as well. On Earth Day 2019, Vanderbilt University unveiled a comprehensive long-term strategy to significantly reduce its environmental footprint in part by powering its campus entirely through renewable energy, putting the university on track to be carbon neutral by 2050.

Vanderbilt also has a long history of building with sustainable and green features, which are more efficient and last longer. The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System is the nationally accepted benchmark for the design, construction, and operation of high-performance sustainable buildings. This third-party certification is recognized as confirmation that a building is environmentally responsible. LEED projects earn points across nine categories: integrative process, location and transportation, sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation, and regional priority. Vanderbilt University has a total of 23 LEED certified projects and was the first university in Tennessee to earn LEED certification.

Vanderbilt was honored with a 2020 Leadership Award from the U.S. Green Building Council for the institution's achievements in green building and its commitment to creating a healthy,

sustainable future. The council noted in its award announcement that Vanderbilt places a high priority on incorporating sustainability into the university's construction and renovation projects. Vanderbilt will bring all this knowledge and more to all new construction and other activities undertaken by the Middle TN Coalition.



Nashville's booming healthcare industry, which boasts an annual economic impact of \$66.9 billion,<sup>1</sup> is vital to the regional economy. Vanderbilt alone was responsible for an annual economic impact of approximately \$12 billion.<sup>2</sup> Vanderbilt is also the largest employer in the region, employing over 27,000 people.<sup>3</sup> These impressive resources relate directly to the Middle Tennessee life- and data-science industries that are budding in the region, and Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities and expertise, thereby advancing economic development within Nashville and the surrounding communities. Industry leaders are enthusiastic to engage with the Coalition to align and bolster our collective resources in the region. The Coalition's private sector engagement strategy focuses on three key elements: i) engaging local venture capital firms to support accelerator companies, ii) consulting with subject matter experts to prioritize equipment and capabilities within the new *Lifeworks* biomaking and computational facilities, iii) collaborating closely with local companies to shape workforce development curricula to ensure the talent pipeline meets their industry's needs, and iv) working in concert with industry leaders and workforce development bodies (e.g., Chambers of Commerce, Urban League of Middle TN, Economic Development District, local government ECD offices, etc.) to match talent graduating from the pipeline to high-quality jobs.

- **Ambitna** – Ambitna is a global technology company driving digital health and education innovation. Their approach to accelerating innovation starts with clinical research and reaching people where they are. Their vision is to improve health equity in clinical research thus reducing health disparities, which aligns with the vision of the Coalition Members. Ambitna will support the cluster by providing guidance to accelerator companies, helping identify and address cluster gaps, bringing other strategic partners and investors to the region, and recruiting from the new life- and data-science tech and talent stemming from this initiative.
- **Appello Pharmaceuticals** – Appello Pharmaceuticals is a neurology therapeutics company focused on identifying and developing innovative early-stage drugs for patients living with disorders of the central nervous system. Based in Nashville, Tennessee, their team has a proven ability to translate ground-breaking academic discoveries into drug development programs that can quickly advance into and through clinical development. They have a strong collaborative relationship with Vanderbilt University's Warren Center for Neuroscience Drug Discovery (WCNDD), where their drug development programs originated. Appello anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.

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<sup>1</sup> Arik M (2021 Sep). *Health Care Industry Nashville MSA 2019*. Nashville Healthcare Council.

<sup>2</sup> Garner M (2019 Dec). Study: This institution has a nearly \$12B impact on Tennessee. *Nashville Business Journal*. <https://www.bizjournals.com/nashville/news/2019/12/12/study-this-institution-has-a-nearly-12-impact-on.html>

<sup>3</sup> Nashville Chamber of Commerce (2021). *Major Employers*. <https://www.nashvillechamber.com/explore/work/major-employers>

- **Asurion** – Asurion is a Nashville-based tech care company with over 19,000 employees worldwide. Their longstanding challenge of filling high-demand tech jobs at corporate offices mirrors the challenge that other growing regional companies continue to experience. As the tech sector expands in middle Tennessee, there will continue to be a growing demand in this the region. The development of life science and data science industry ecosystems in middle Tennessee will help build the region’s talent pipeline with an eye toward long-term growth in filling high-demand positions in tech.
- **August Bioservices** – Headquartered in Nashville, Tennessee, August Bioservices is a high-tech, growth-focused, and innovative Biotechnology CDMO that plays a crucial role in the global pharmaceutical industry supply chain. For the biotech and pharma companies it serves, August is a unique and valuable US-based outsourcing partner with deep drug discovery, development, and manufacturing expertise. August Bioservices provides a wide array of services that help accelerate the advancement of novel therapeutics along the complex drug development pathway, from the laboratory to the bedside of patients who need them. August Bioservices will support the cluster by recruiting talent graduating from the workforce development pipelines, and it will possible co-locate new R&D facilities in the budding innovation district.
- **Cumberland Pharmaceuticals** – Cumberland Pharmaceuticals is the largest independent pharmaceutical company founded and headquartered in middle Tennessee. Our sister company, Cumberland Emerging Technologies (CET), identifies innovative product candidates to advance them from the laboratory to the marketplace. CET also manages a Life Sciences Center to support the growth of the biomedical industry with the Tennessee region, and it has provided a letter of support that can be found in Appendix 1. Cumberland anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- **CUREX Capital Advisors, LLC** – CUREX is an independent investment manager to a long/short equity fund focused on growth-oriented opportunities among publicly traded life science companies. The firm’s mission is to generate exceptional portfolio returns for clients by following a highly focused, fundamental research-based strategy within biopharmaceutical and medical technology industry groups. CUREX will support the cluster by evaluating, considering, and investing in companies graduating from the accelerator.
- **Desktop Metal** – Desktop Metal manufactures 3D printing solutions for all scales of production — from complex prototypes and on-demand tooling to the rapid manufacture of thousands of metal parts, to the use of advanced biocompatible materials across polymers, ceramics and metals. Our business is all about additive manufacturing, Industry 4.0, and the profound changes that these technological shifts will bring to the world of health sciences and manufacturing. As such, it is vital to our success to partner with organizations that are at the forefront of innovation in life sciences and data sciences. Desktop will advise the Coalition on both the capital equipment purchases for the new facilities, as well as the requisite training modules for that equipment.

- **EnvisionTEC** – EnvisionTEC is a privately held global company that develops, manufactures and sells more than 40 configurations of desktop and production 3D printers based on seven several distinct process technologies that build objects from digital design files. EnvisionTEC will advise the Coalition on both the capital equipment purchases for the new facilities, as well as the requisite training modules for that equipment.
- **InFocus** – InFocus Clinical was born out of the visible disconnect between large, traditional CROs and their clients. They have worked for and with large and small biotech and pharma sponsors as well as CROs large and small. InFocus Clinical was founded with the centennial mission of coalescing the best and brightest clinical research professionals and proven leaders in retina vitreous development to advance ophthalmology therapeutic development. InFocus anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- **Jumpstart Foundry** – Jumpstart is one of Tennessee’s most active healthcare venture capital firms that specializes in funding seed-stage healthcare innovation companies. It is a healthcare innovation fund driven by a mission to make something better. Jumpstart connects companies with strong industry stakeholders, consults them on strategic marketing plans and advises around talent and growth. Jumpstart will support the cluster by evaluating and considering *Lifeworks* Accelerator startup investments.
- **Lasting Machine Ventures** – Lasting Machine Ventures is focused on building a thriving entrepreneurial ecosystem in the US southeast and is dedicated to educate, mentor, and invest in people developing technologies that can make a lasting impact to humanity. Lasting Machine will support the cluster by collaborating with other local resources to build out the entrepreneurial programming, including the generous offer of \$50,000 in-kind services for a pilot project co-sponsored by Vanderbilt.
- **Lynch Biologics** – Lynch Biologics (LBIO) is a regenerative medicine and tissue engineering company supplying advanced biotechnology products that promote healing and tissue regenerations. They are the inventors of GEM 21S® and other widely used regenerative products for orthopedic, periodontal, and oral and maxillofacial indications. Their products have been used to help millions of patients regenerate lost bone and soft tissues and continue to be among the most popular grafting products with dental and orthopedic surgical colleagues. Dr. Lynch was also the first to introduce dentists in N. America, S. America, and much of Asia to osteoconductive natural bone mineral (Bio-Oss®) and resorbable collagen membranes (Bio-Gide®) for bone and tissue regeneration and invented and developed the rhPDGF-BB products GEM 21S®, Augment® and Augment Injectable® Bone Grafts as alternatives to autogenous bone grafts for oral/dental surgery and orthopedic indications, respectively. LBIO anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- **Merge Med** – Merge is a medical device studio that pairs engineering and business development services with talent and capital formation services to guides early-stage medical device companies from concept to clinical use. They advance technologies to

advanced development, manufacturing, and funding. They aim to support the effective and efficient development and foster commercialization of game-changing technology with a focus on furthering technology and talent in Tennessee and the southeast. Merge Med will support the cluster by advising local entrepreneurs on regulatory processes (e.g., FDA).

- Mountain Group Capital – Mountain Group is a 20-year-old Nashville-based venture capital firm that invests in early-stage companies in the life sciences, animal health and technology sectors. The firm brings over 70 years of combined operational experience and have investments in more than 60 companies. Mountain Group will support the life science cluster by evaluating, considering, and investing in companies graduating from the accelerator.
- Nashville Biosciences – Nashville Biosciences is a clinical big data & genomics company accelerating the R&D activity of partners in the biopharmaceutical, diagnostics, and AI industries. They were created to commercially leverage unique real-world datasets first developed at Vanderbilt. Nashville Biosciences anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- Pendant Biosciences – Based in Nashville, TN, Pendant Biosciences is an advanced materials company developing innovative surface coating and drug delivery technologies using a unique, polymer-based platform. The company is initially focused on applications within the orthopedic market, and its lead product candidate is a surface modification intended to reduce the risk of infection associated with certain orthopedic implants. The platform also serves as a product engine with broad utility in multiple therapeutic areas. Pendant anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- Perception Health – Perception Health is a disease prediction company whose precise data sets add an actionable, and previously inaccessible, predictive dimension for healthcare providers; enabling the early detection of disease in the communities in which they seek to compete and serve. They have indicated how important it is to have the right human talent to advance healthcare in innovative and leading ways, and they anticipates benefiting from the new life- and data-science tech and talent stemming from this initiative.
- Portal Innovations – Portal invests in therapeutics, med tech, and bioinformatics startups with strong leadership teams. Their differentiated mix of crafted capital drives companies from scientific ideation to business creation, helping entrepreneurs translate cutting-edge technology into sustainable, global businesses. Portal will support the life science cluster by evaluating, considering, and investing in companies graduating from the accelerator. Portal is also exploring an expansion of their enterprise into Nashville, where they may advise the coalition on construction activities, co-locate facilities, and help staff the shared facilities.
- Stratasys – Stratasys is a pioneer in the field of additive manufacturing. When their founder invented one of the first 3D printing technologies over thirty years ago, it was a radical idea. They have since shown industry leaders around the world how to work faster and smarter.

Stratasys will advise the Coalition on both the capital equipment purchases for the new facilities, as well as the requisite training modules for that equipment.



October 13, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

On behalf of Ambitna, I wish to express our strong support for the Middle Tennessee Coalition for the creation of the Lifeworks bio hub.

Specifically, we wish to express our support for the request for a planning grant to engage regional universities, businesses, investors, government, and nonprofits in creating specific plans and targets for the launch of this vital new economic cluster in our region. Key elements of a bio cluster have been in place in our region for many years, but they must be connected and activated in order to create a sustainable economic cluster out of the currently disconnected elements.

As one of the industry partners in the planning grant application, we would work with the Coalition in four ways: i) act as subject matter experts to prioritize equipment and capabilities within the new Lifeworks biomaking and/or cyber facilities, ii) help shape workforce development curricula to ensure the talent pipeline meets industry needs, iii) share information about talent needs for our company that the Lifeworks bio cluster can help us obtain for our future growth, iv) help identify cluster function needs/gaps and contribute to cluster strategy planning for the region, and v) bring economic development opportunities with strategic partners and investors.

In closing, we look forward to working with the Coalition in this important regional planning effort and are excited about the prospects of growing new bio companies that will flesh out a thriving bio cluster for our region.

Sincerely,

A handwritten signature in black ink that reads "Remy Szykier". The signature is written in a cursive, flowing style.

Remy Szykier

Ambitna, Inc.



October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe that what Vanderbilt proposes regarding development of the life science and data science ecosystem in the Nashville region will accelerate the growth of the life science and data science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Our company, Appello Pharmaceuticals, is a neurology-focused, clinical stage pharmaceutical company based in Nashville, TN. We benefit from a strong relationship with Vanderbilt University. They have worked with Appello to grow our development pipeline based on some exciting new drugs that were developed there. This has been a successful endeavor thus far, as we are on track to begin testing our first product in Parkinson's disease patients before the end of the year. While this progress is to be celebrated, in the long run, the company's success will certainly depend on growing the local life science industry. Access to experienced life science professionals is one of our biggest challenges to growing a sustainable Pharmaceutical company in Nashville.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science and data science industries in the region – an industry that we believe will become a very important part of the region's future economy. It will create not only wealth but, as mentioned above, has the capacity to improve the health of people around the world and create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. As the largest concentration of health care services companies in the nation are located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Middle TN coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Brian Laden".

Brian Laden, Ph.D.  
President and CEO

October 14, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe that what Vanderbilt proposes regarding development of the life science and data science ecosystem in the Nashville region will accelerate the growth of the life science and data science enterprises in the region which will generate future economic growth, improve human health, and create jobs.

Asurion is a Nashville-based tech care company with over 19,000 employees worldwide. Our longstanding challenge of filling high-demand tech jobs at our corporate offices mirrors the challenge that other growing regional companies continue to experience. As the tech sector expands in middle Tennessee, there will continue to be a growing demand in this the region. The development of life science and data science industry ecosystems in middle Tennessee will help build the region's talent pipeline with an eye toward long-term growth in filling high-demand positions in tech. It will also aid in preparing and providing the local workforce with high-wage jobs that support future growth in the region.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science and data science industries in the region – an industry that we believe will become a very important part of the region's future economy. It will create not only wealth but, as mentioned above, has the capacity to improve the health of people around the world and create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. As the largest concentration of health care services companies in the nation are located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Thanks,

A handwritten signature in black ink, appearing to read 'Barry Vandevier', with a long horizontal line extending to the right.

Barry Vandevier  
COO, Asurion

To: U.S. Economic Development Administration Build Back Better Regional Challenge  
Grant Application of the Middle, TN Coalition

From: August Bioservices, LLC

On behalf of August Bioservices, I am writing to express our enthusiastic support for the Grant Application of the Middle Tennessee Coalition in response to the U.S. Economic Development Administration's **Build Back Better Regional Challenge**.

Headquartered in Nashville, Tennessee, **August Bioservices** is a high-tech, growth-focused, and innovative Biotechnology CDMO (Contract Development and Manufacturing Organization) that plays a crucial role in the global pharmaceutical industry supply chain. For the biotech and pharma companies we serve, August is a unique and valuable US-based outsourcing partner with deep drug discovery, development, and manufacturing expertise. August provides a wide array of services that help accelerate the advancement of novel therapeutics along the complex drug development pathway, from the laboratory to the bedside of patients who need them.

It is an exciting time at August, as we are in the midst of two parallel growth initiatives that will create more than 180 new jobs over the next several years – with more than 120 of these jobs identified as STEM-driven. We are expanding our current operations and building a new state-of-the-art sterile injectable pharmaceutical manufacturing facility immediately adjacent to our existing facility. We are adding new, cutting-edge technologies and systems that will offer a wide breadth of opportunities and will require a highly skilled workforce. Some of the job titles we envision for STEM candidates include: Formulation Scientists, Manufacturing Engineers, Microbiologists, Validation & Metrology Engineers, Quality Control and Quality Assurance scientists, Principal Scientists for Analytical Development and Extractables and Leachables Testing, Research Scientists and many more.

As you can imagine, August is a big believer in the promise of STEM education, the power of science, and the strength of collaboration to transform entire communities and economies, as well as the individual lives and livelihoods of the people within them.

One of the ways we can make a measurable impact in our area is to focus our efforts on developing the talent pool locally. August and the Middle Tennessee Coalition are interested in contributing to an actionable, "ready to hire" biotech curricula that would help develop the skills and experiences STEM employees will need to thrive in this rapidly expanding industry. We envision a robust, interactive approach that includes training, internships, job shadowing, hands-on knowledge sharing with local students through our subject matter expert scientists and more.

We also imagine a dedicated incubator space, where scientists, researchers and professionals from academia and industry collaborate to solve bioengineering challenges together.



Our vision and plan will meet the present need, but it also is focused on the horizon. We want to prepare students throughout Middle Tennessee for more than a job. We strive to provide the tools and training for a long and successful STEM career, achieved and nurtured through a locally focused, highly collaborative ecosystem designed in support of that goal.

In closing, I believe that the Middle Tennessee Coalition – and Nashville in particular – is uniquely positioned to create the alignment, cooperation, and lasting impact that the **Build Back Better** initiative is striving to achieve.

Nashville has the foundational infrastructure needed to accelerate success. We have exceptionally strong cooperation between academia and industry. We have a richly diverse student population – hailing from urban and rural environments and representing a wide range of socioeconomic groups – that attend high schools, community colleges, technical schools, and universities across the greater Nashville area. Perhaps most importantly, we have the subject matter expertise to drive the desired results.

Thank you for your consideration of the Middle Tennessee Coalition's application.

You have my unwavering support!

Sincerely,

Jenn Adams  
CEO  
August Bioservices



October 8, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal *Build Back Better* grant. We believe that what Vanderbilt proposes regarding development of the life science and data science ecosystem in the Nashville region will accelerate the growth of the life science and data science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Cumberland Pharmaceuticals is the largest independent pharmaceutical company founded and headquartered in middle Tennessee. Our sister company, Cumberland Emerging Technologies (CET), identifies innovative product candidates to advance them from the laboratory to the marketplace. CET also manages a Life Sciences Center to support the growth of the biomedical industry with the Tennessee region.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science and data science industries in the region – an industry that we believe will become a very important part of the region's future economy. It will create not only wealth but, as mentioned above, has the capacity to improve the health of people around the world and create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. With the largest concentration of health care services companies in the nation located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "AJ Kazimi".

AJ Kazimi  
Chief Executive Officer



October 8, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

To Whom It May Concern:

On behalf of CUREX Capital Advisors, I wish to express our strong support for the Middle Tennessee Coalition for the creation of the Lifeworks Bio Hub. Specifically, we wish to express our support for the request for a planning grant to engage regional universities, businesses, investors, government, and nonprofits in creating specific plans and targets for the launch of this vital new economic cluster in our region. Key elements of a bio cluster have been in place in our region for many years, but they must be connected and activated to create a sustainable economic cluster out of the currently disconnected elements.

As one of the industry partners in the planning grant application, we would work with the Coalition in four ways: i) act as subject matter experts to prioritize equipment and capabilities within the new Lifeworks biomaking and/or cyber facilities, ii) help shape workforce development curricula to ensure the talent pipeline meets industry needs, iii) share information about talent needs for our company that the Lifeworks bio cluster can help us obtain for our future growth; and iv) help identify cluster function needs/gaps and contribute to cluster strategy planning for the region.

In closing, we look forward to working with the Coalition in this important regional planning effort and are excited about the prospects of growing new life science companies that will support a thriving bio cluster for our region.

Sincerely,

A handwritten signature in blue ink, reading "Joshua R. Trantum".

Joshua R. Trantum, Ph.D.  
President, Chief Investment Officer, and Principal  
CUREX Capital Advisors, LLC





October 7, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Desktop Metal manufactures 3D printing solutions for all scales of production — from complex prototypes and on-demand tooling, to the rapid manufacture of thousands of metal parts, to the use of advanced biocompatible materials across polymers, ceramics and metals. Our business is all about additive manufacturing, Industry 4.0, and the profound changes that these technological shifts will bring to the world of health sciences and manufacturing. As such, it is vital to our success to partner with organizations that are at the forefront of innovation in life sciences and data sciences.

We believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Sincerely,



Pierre Devaux  
Director, Education Markets  
Desktop Metal

Desktop Metal | 63 3<sup>rd</sup> Ave | Burlington, MA 01803

# envisionTEC

15162 S. Commerce Dr., Dearborn, MI 48120 • (313)436-4300 • EnvisionTEC.com

October 15, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

EnvisionTEC manufactures 3D printing solutions for all scales of production — from complex prototypes and on-demand tooling to the rapid manufacture of thousands of polymer parts, to the use of advanced biocompatible materials across multiple polymers. Our business is all about additive manufacturing, Industry 4.0, and the profound changes that these technological shifts will bring to the world of health sciences and manufacturing. As such, it is vital to our success to partner with organizations that are at the forefront of innovation in life sciences and data sciences.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region — industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,



Daniel P. Monette  
Vice President, Industrial Sales  
EnvisionTEC



14 October 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

***RE: Middle Tennessee Coalition Lifeworks Biohub***

On behalf of InFocus Clinical Research, I wish to express strong support for the Middle Tennessee Coalition for the creation of the Lifeworks bio hub.

Specifically, we support the request for a planning grant to engage regional universities, businesses, investors, government, and nonprofits in creating specific plans and targets for the launch of this vital new economic cluster in our region. Key elements of a bio cluster have been in place in our region for many years, but they must be connected and activated in order to create a sustainable economic cluster out of the currently disconnected elements.

As one of the industry partners in the planning grant application, we would work with the Coalition in four ways: i) act as subject matter experts to prioritize equipment and capabilities within the new Lifeworks biomaking and/or cyber facilities, ii) help shape workforce development curricula to ensure the talent pipeline meets industry needs, iii) share information about talent needs for our company that the Lifeworks bio cluster can help us obtain for our future growth; and iv) help identify cluster function needs/gaps and contribute to cluster strategy planning for the region.

In closing, we look forward to working with the Coalition in this important regional planning effort and are excited about the prospects of growing new bio companies that will flesh out a thriving bio cluster for our region.

Sincerely,

Brad Doerschuk  
President, CEO  
InFocus Clinical Research



October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Jumpstart Foundry is one of Tennessee's most active healthcare venture capital firms and we specialize in funding seed-stage healthcare innovation companies. By selecting this application, we are confident that it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region which will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

At Jumpstart Foundry, we believe we are better together. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. With the existing infrastructure, Nashville being largest concentration of health care services companies in the nation, will assist them to meaningfully engage with the technology, talent, and new venture pipelines. This aligns perfectly with our organizations' goal of making something better in health. We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to contact us if you have any questions.  
I may be reached at [Vic@JSF.co](mailto:Vic@JSF.co) or (615) 478-2188.

Sincerely,

Vic Gatto  
Chief Investment Officer  
Jumpstart Foundry



October 4, 2021

To:

U.S. Economic Development Administration

Build Back Better Regional Challenge Grant

Application of the Vanderbilt Coalition

Dear Sir or Madam,

Lasting Machine Ventures is very happy to offer our support and partnership in the form of virtual entrepreneurial education and mentorship in support of the grant application to the FY 2021 American Rescue Plan Act Build Back Better Regional Challenge of the US Department of Commerce.

Lasting Machine Ventures is focused on building a thriving entrepreneurial ecosystem in the US southeast and is dedicated to educate, mentor and invest in people developing technologies that can make a lasting impact to humanity.

It is with this context that we offer our in-kind services (\$50,000 in value) to integrate and provide entrepreneurial education and to consider seed investment into select startups within The Wond'ry Vanderbilt's Innovation Center. Our in-kind services will be at no cost to the project or your institution and will be performed over the phase I grant period. For audit tracking, we will provide relevant documentation on all in-kind services and work products expended towards this project.

This project is pivotal to growing a strong and sustainable entrepreneurial ecosystem in the US southeast and we are overwhelmingly excited to contribute to this effort. We are truly looking forward to working together on making an impact to the community and the entire region.

Sincerely,

**Axel Strombergsson, M.Sc.**

Co-Founder & Managing Partner

Lasting Machine Ventures

October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe that what Vanderbilt proposes regarding development of the life science and data science ecosystem in the Nashville region will accelerate the growth of the life science and data science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

I am writing this letter of support on behalf of two organizations, each of which I lead:

- 1) Lynch Biologics, LLC, a leading wound healing and regenerative medicine company developing products to improve healing of wounds caused by trauma (gun shot wounds, car accidents, etc) or chronic disease (diabetic foot ulcers, bed sores, etc); and
- 2) BioTN Foundation, a nonprofit 501(c)3 foundation with the mission to improve K-12 STEM education and improve the life science industry ecosystems in Tennessee.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science industry in the region – an industry that we believe is, and will grow to be an ever more important part of the region's future economy. Not only will the life science industry create high paying jobs in Tennessee but we are using it to drive awareness of and improvement in K-12 STEM education in our region.

We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. As the largest concentration of health care services companies in the nation are located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Sincerely,



Samuel E. Lynch D.M.D., D.M.Sc.  
CEO, Lynch Biologics LLC  
Chairman, BioTN Foundation





October 12th, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Merge is a medical device studio that pairs engineering and business development services with talent and capital formation services to guides early-stage medical device companies from concept to clinical use. We advance technologies to advanced development, manufacturing, and funding. We exist to support the effective and efficient development and foster commercialization of game-changing technology. Our focus is furthering technology and talent in Tennessee and the southeast.

If this application is selected by the Economic Development Administration, we believe it will provide the fuel for the expansion of the life-science and data-science economic clusters in the region –It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

A handwritten signature in black ink, appearing to read "Jordan Mykleby".

Jordan Mykleby  
VP, Merge | Medical Device Studio



October 15, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for a federal Build Back Better grant. What is proposed by Vanderbilt will accelerate the growth of the life science and data science enterprises in the region and beyond. There is no doubt that such an investment will generate meaningful economic growth, improve human health, and create jobs across a wide range of socio-economic sectors.

Mountain Group Partners is a venture capital investment firm focused on developing start-up and early-stage entrepreneurs in the life sciences and healthcare technology areas. We employ both capital and management experience in helping these young companies develop sustainable businesses focused on improving quality of life across a wide spectrum of markets.

Over nearly two decades, Mountain Group has invested in many companies. If this application is selected by the Economic Development Administration, we believe it will provide an important stimulus for expanding the life science and data science industries in the region. There is no doubt this expansion will produce improved health and create quality jobs in the local community.


The grant will not only foster greater interdependence among the existing participants but will attract new entries into this area. Clearly, the Nashville region is an attractive place for people to live, work and play. And the quality of life is centered around healthy living. We have an unusual concentration of energy focused on health care service, delivery and innovation in the Nashville region. Boosting this already established base will produce growth and increased opportunities for all citizens in this region as jobs and wages increase.

Vanderbilt and coalition partners have demonstrated capacity to steer this initiative and I know they are keenly interested so to do. We are pleased to work with the Vanderbilt coalition in growing and promoting life and data sciences in this region. And we are committed to help in the process.

We urge the USEDPA to approve this application.

I would be happy to answer any questions you may have,

Sincerely,  
MOUNTAIN GROUP PARTNERS, LLC

  
Joe C. Cook, Jr.





October 13, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are enthusiastically supportive of Vanderbilt University and its coalition partners' application for the federal Build Back Better grant. We believe that Vanderbilt's proposal for developing the life science and data science ecosystem in the Nashville region will accelerate the growth of life science and data science enterprises here in Tennessee and the southeastern United States. In turn, this innovation boost will generate future economic growth and create attractive knowledge-based jobs, while also improving human health.

Nashville Biosciences, LLC is a clinical big data and genomics company accelerating the R&D activity of partners in the biopharma, diagnostics, and broader life sciences industry. We were created to commercially exploit unique real-world data and genomics datasets first developed at Vanderbilt University and Vanderbilt University Medical Center. Since our 2018 launch, we have developed connections with biopharma companies in other US biotech hubs and around the world, but we have worked with only one other Tennessee company because the local biotech ecosystem is relatively immature. Similarly, we have had good success recruiting entry level talent from the region's educational institutions, but we have struggled to locate / attract experienced local mid-level and executive talent. Significantly expanding the local life science and data science ecosystem would synergistically address both issues – greater sales opportunities and a greater talent pool to draw upon.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science and data science industries in the region – an industry that we believe will become a very important part of the region's future economy. It will create not only wealth but, as mentioned above, has the capacity to improve the health of people around the world and create high-paying jobs in the local community.



We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. As the largest concentration of health care services companies in the nation are located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are excited to work with the Middle TN coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Yours truly,

Leeland B. Ekstrom, PhD  
Chief Operating Officer  
Nashville Biosciences, LLC



October 18, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Pendant Biosciences is an early stage biotech startup developing new formulations for better and more effective drug delivery of therapeutics. Our company would immensely benefit from a greater infrastructure, access to wet lab facilities, an increased talent pool of advanced degree work force, and the development of a cluster for both early stage biotech companies and by larger pharma & biotech companies in the Greater Nashville area. We strongly support and endorse the activities taken on by Vanderbilt University and its coalition partners to build a greater and much need life science and data science ecosystem.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.



We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

A handwritten signature in black ink, appearing to read "Shawn H. Gliner", is written over a horizontal line.

Shawn H. Gliner, Founder & CEO  
Pendant Biosciences  
10 Burton Hills Blvd, Suite 400  
Nashville, TN 37215  
(e) [shawn@shawngliner.com](mailto:shawn@shawngliner.com)  
(c) 615.491-3270

October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Perception Health is a disease prediction company whose precise data sets add an actionable, and previously inaccessible, predictive dimension for healthcare providers; enabling the early detection of disease in the communities in which they seek to compete and serve. We know how important it is to have the right human talent to advance healthcare in innovative and leading ways.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

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We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

*Todd R. Charest*

Todd R. Charest  
Chief Product Officer  
Perception Health  
[Todd.Charest@perceptionhealth.com](mailto:Todd.Charest@perceptionhealth.com)



Portal Innovations, LLC  
1375 W Fulton St Chicago IL

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

September 30, 2021

To Whom It May Concern:

Portal Innovations is thrilled to write this letter in support of Vanderbilt Coalition's application for the "Build Back Better Regional Challenge Grant". Portal Innovations recognizes the need within the Nashville life sciences ecosystem to support innovation and entrepreneurship and knows that this EDA grant will positively impact the local economy as it leads to job creation, local scientific talent attraction and retention, and bring more venture capital to the local ecosystem stimulating economic impact within the broader Nashville community.

Vanderbilt University has a strong research focus as evidenced by NIH funding acquired by faculty researchers (over \$117 million just in 2020) and their strong patent portfolio reflecting cutting edge technologies especially in the biotech space (329 biotech patents since 2016 comprising over 83% of their total patent portfolio). Most of these promising technologies do not successfully thrive within the local ecosystem due to several factors including the lack of an infrastructure (including access to wet and dry lab space, financial support, as well as business management) to support and develop entrepreneurs and their companies. Vanderbilt's plan to provide this much needed local infrastructure to support innovation and entrepreneurship is a transformational investment into the region that Portal Innovations is proud to support.

Portal Innovations is a leading global venture development engine with a unique model to bridge the gap between scientific ideation and entrepreneurial realization. We provide seed capital, cutting edge wet lab space and seasoned management expertise to early-stage life sciences companies. Our overall mission is to deliver returns by assembling an abundant ecosystem of entrepreneurs, universities, investors, service providers, political leaders, and large companies in emerging markets in the Central U.S. region. Toward this mission we have successfully launched and established our first location in the Chicago ecosystem in March 2021. The demand has been strong with over 90% of the space already occupied at this site. As a result, we are now poised to open a second location in Chicago in February 2022.

John Flavin, Founder and CEO of Portal Innovations, is a proven leader with a stellar track record of building valuable corporate, academic, and civic enterprises from concept to reality – including 3 NASDAQ IPOs and civic incubators such as University of Chicago Polsky Center for Entrepreneurship & Innovation, MATTER, and Argonne National Labs/Chain Reaction Innovations. John has successfully raised over \$360 million of both private and philanthropic



Portal Innovations, LLC  
1375 W Fulton St Chicago IL

capital to fund the development of these impactful organizations and has a deep understanding and extensive experience working closely with academic institutions, founders, VCs, economic development teams and philanthropists. John's extensive experience building incubators and more recently building Portal Innovations will be invaluable support to Vanderbilt Coalition's Build Back Better plan.

Portal Innovations is now set to bring our working model to other emerging life sciences ecosystems within cities in the Central U.S. including Nashville among others. We are currently in the planning stages to open a Portal lab+office workspace in the local Nashville ecosystem by working with our real estate partners Trammel Crow and our leasing partners CBRE. In addition to our independent facility, Portal is committed to support Vanderbilt's plan for a life science accelerator seeing that this will help launch companies based on technologies emerging from research labs. Portal plans to work synergistically alongside Vanderbilt's team given our shared aim to create an environment that can catalyze and optimize translation of technologies from the research space towards commercialization. We are confident that the Portal platform and partnership with Vanderbilt will be highly productive, impact the local life sciences ecosystem and overall Nashville community.

Sincerely,

John Flavin  
Founder and CEO  
Portal Innovations, LLC  
[www.portalinnovations.com](http://www.portalinnovations.com)



801 E. Campbell Rd. Ste. 680  
Richardson, Texas 75081  
Ph. 612.772.2097  
[www.stratasys.com](http://www.stratasys.com)

Monday, October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its consortium partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Stratasys is a pioneer in the field of additive manufacturing. When our founder invented one of the first 3D printing technologies over thirty years ago, it was a radical idea. Our constant innovation since has shown industry leaders around the world how to work faster and smarter.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its consortium partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care service companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed





801 E. Campbell Rd. Ste. 680  
Richardson, Texas 75081  
Ph. 612.772.2097  
[www.stratasys.com](http://www.stratasys.com)

planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions, contact me at **612-772-2097**.

Sincerely,

*Mike Hayden*

Mike Hayden  
Education Manager  
Stratasys, Inc.

**Project 1 – Life Science Accelerator and Programming**

- Center for Medical Interoperability – Often solutions and innovations developed in the life sciences technology space involve some level of interoperability with EMR systems. C4MI is a 501c3 cooperative research and development lab that was founded by health systems to simplify and advance data sharing among medical technologies and systems. They provide a centralized, vendor-neutral approach that promotes the testing and subsequent adoption of scalable innovations. For accelerator teams, this center will provide access to expertise on systems integration, data management, and data transference.
- \*CONNECT – a comprehensive database of research capabilities of the universities in Middle Tennessee, from APSU in the north, to MTSU in the east, and Tennessee Tech and Oak Ridge Affiliated Universities in the south, along with the universities in Greater Nashville (Belmont, Cumberland, Fisk, Lipscomb, Meharry, Nashville State, TSU, Trevecca, and Vanderbilt). CONNECT is managed by the Global Action Platform, and it will support the cluster via use of its search engine to make it possible for businesses seeking research expertise, labs, and equipment to identify university research partner opportunities.
- Cumberland Emerging Technologies – CET’s life sciences incubator facility is located near downtown Nashville. Services available to small business tenants include leasable wet and dry laboratories with office space and access to critical shared resources, including laboratory equipment in shared laboratory space. Business support services are tailored to the needs of life sciences firms. CET also evaluates promising, early-stage biomedical technologies offered by researchers, universities, and entrepreneurs who seek a corporate partner to assist in developing and commercializing their product candidates. CET will support the life science cluster by providing local graduation space for and potentially providing seed investments.
- Jumpstart Foundry – Jumpstart is one of Tennessee’s most active healthcare venture capital firms that specializes in funding seed-stage healthcare innovation companies. With 93 portfolio companies ranging from Belle, a diabetic foot care solution to Pillsy, a digital assistant for prescription and vitamin management, they support ventures touching all parts of the healthcare system. Having an active source of funding that specializes in healthcare and life science innovation, as well as their team’s expertise in this space will be an asset to assist with the selection process for teams that enter the proposed accelerator and for funding teams graduating from the accelerator. Recently individuals involved with Jumpstart launched a new fund specifically for minority founders. Jumpstart will support the life science cluster by evaluating, considering, and investing in companies graduating from the accelerator.
- \*Launch Tennessee (LaunchTN) – LaunchTN is a public-private partnership with a vision to make Tennessee the most startup-friendly state in the nation. They empower Network Partners and other stakeholders by making resources accessible in order to activate sustainable economic growth in Tennessee. They aim to stimulate the statewide economy by facilitating capital formation, market building, and nurturing Tennessee’s entrepreneurial

ecosystem. LaunchTN will support the cluster by providing networking for accelerator companies and encouraging them to apply for SBIR matching funds and other opportunities. LaunchTN will also help explore state-wide engagement opportunities for new initiatives.

- \*ResilienSEED Incubator – This Meharry Medical College incubator provides an avenue for Black Americans to present business ideas (focusing on STEM and healthcare fields), obtain startup services, receive critical and too often difficult-to-access investment capital, and access the support needed to make their business ideas a success. ResilienSEED will support the cluster by contributing to the entrepreneurial ecosystem of Nashville and providing a model for equity, diversity, and inclusion.
- \*Tennessee Tech Transfer and Economic Cluster Development Council – The Council engages university research and tech transfer leaders, Business CEOs, and heads of area investment funds in planning and implementing cluster economic development in Middle Tennessee with a primary focus on creating a bio hub in Nashville. This work will be aligned with the BBB initiative outlined in this grant.
- \*Tennessee University-Business Showcase – The Showcase is series of educational programs for the community on cluster economics and innovation districts planned and convened with the 12 major universities of the region and Oak Ridge Affiliated Universities.
- \*Wond’ry – The Wond’ry is Vanderbilt’s Innovation Center that catalyzes building and strengthening creativity across campus, fostering innovation in all fields, and forging a stronger “maker” culture on campus and in the region. The Wond’ry offers state-of-the-art makerspaces, virtual reality labs, workshops, training opportunities, and programs designed to support anyone from budding entrepreneurs to community changemakers. The Wond’ry will support the cluster by deploying their programming and other resources in support of the accelerator.
- \*Young American Leaders – Global Action Platform works with Harvard Business School to prepare new regional economic leaders through the Young American Leaders Program--Nashville. The Young American Leaders Program model is designed to help local leaders in urban areas create locally-based solutions for shared prosperity. The Program aims to develop leaders who understand cross-sector collaborations for shared prosperity and, as a result, can implement such collaborations more effectively and spread them more rapidly than in the past. Over time, the Program aims to develop a cadre of leaders across the US who are able and eager to work across traditional boundaries to help their communities thrive. This program will support the cluster by focusing their next cohort on building and sustaining bio-hub innovation districts.

### **Project 2 – Shared Biomaking Facilities**

- \*Life Science Tennessee (LST) – LST is a statewide, non-profit, member organization whose mission is to advance and grow the life science industry in Tennessee through advocacy, partnerships, and alignment with economic and workforce development. Members include companies, universities, research institutions, government and economic development

groups, and other industry associations involved in discovery and application of life sciences products and related services that improve the health and well-being of people throughout the world. LST conducts business and economic development activities; advocates on behalf of the industry; educates the public about the benefits of life sciences research and product development; and provides a network for the exchange of ideas, information, and opportunities. LST will help support the cluster by facilitating activities between the Coalition and private sector partners, advocating for the Coalition in state forums, and advising the Coalition on life science industry needs in our region (e.g., resources, talent).

- New Heights – A group of developers in Nashville is building an innovation district called New Heights. The proposed development will feature co-working space, lab space, entertainment, restaurants, as well as onsite condos and apartment living. The co-working space and life science lab space would be a valuable asset to allow accelerating companies space to grow in a work, live, play community in Nashville without having to leave the area to access needed resources. *Lifeworks* could be a beneficial addition to the shared biomaking facilities included in the proposal, and New Heights will explore this possibility to support the cluster.
- \*Vanderbilt-Incyte Alliance – Incyte first announced a multi-year research support and collaboration agreement with the Vanderbilt-Ingram Cancer Center at Vanderbilt University Medical Center in 2015. The company agreed to fund certain aspects of Vanderbilt's cancer research activities as a way to develop an improved understanding of basic cancer biology, the mechanisms of action of certain Incyte proprietary compounds, and novel approaches to patient selection. Incyte has supported digital fabrication efforts on Vanderbilt's campus through this initiative. Incyte will support the cluster by providing guidance on digital fabrication capabilities in the shared wet lab facility.
- \*Vanderbilt University (VU) and Medical Center (VUMC) Core Facilities and Institutes – VU and VUMC both house world-class core facilities to support life science research for both campus researchers and external users. A list of relevant cores can be found below. These cores will support the cluster by providing complementary and additive capabilities to those in the biomaking facilities.
  - BioVU – BioVU is Vanderbilt's biorepository of DNA extracted from discarded blood collected during routine clinical testing and linked to de-identified medical records in the Synthetic Derivative. The goal of BioVU is to provide a unique resource for studies of genotype-phenotype associations, which has grand implications in the field of personalized medicine.
  - Mass Spectrometry Research Center (MSRC) – MSRC provides instrumentation for structural analysis of biological molecules and qualitative and quantitative assays of chemotherapeutic agents and metabolites in physiological fluids. The instrumentation facilities consist of a variety of mass spectrometric and high-pressure liquid chromatographic systems.

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\*Denotes a Coalition member or member-managed resource(s)

- Vanderbilt Flow Cytometry Shared Resource – This core enjoys state-of-the-art digital instrumentation maintained at the highest standards attainable. This quality control allows researchers to sort cells at high efficiency and purity under the proper conditions or to run analytical experiments with as many as 17 different fluorochromes simultaneously. Both services and training opportunities are possible to ensure the best results attainable for our research scientists and physicians.
- Vanderbilt Institute of Chemical Biology (VICB) Chemical Synthesis – The Chemical Synthesis Core was established within VICB to provide organic and medicinal chemistry support. The primary focus of the core is to facilitate biology-oriented projects by assisting with the chemistry aspect of the project. The core works independently or in collaboration with the VICB High Throughput Screening Center on the synthesis of literature-cited compounds (including patented ones) as well as full scale lead optimization of a compound.
- Vanderbilt Institute of Nanoscale Science and Engineering (VINSE) – VINSE oversees laboratories for nanofabrication and nanocharacterization under the direction of a cadre of nanoscience-oriented faculty. Primary research areas include nanobio/nanomedicine, nano-energy, nanoscale optics, computational nanoscience, and new nanoscale materials. They have developed graduate, undergraduate, and outreach educational programs while growing additional experimental capabilities.
- Vanderbilt Institute for Integrative Biosystems Research and Education (VIIBRE) – VIIBRE's mission is to invent the tools and develop the skills that are required to conduct research in systems biology - in other words, to elucidate the multitude of intracellular metabolic and signaling control mechanisms by which biological systems regulate homeostasis, differentiation, development, growth, repair, and responses to physiological and environmental stimuli. Control of cellular function is ubiquitous among living systems and occurs over spatiotemporal scales that range from rapid local control of transient molecular signaling events to slower regulatory mechanisms governing biological activity throughout an entire organism over its lifespan.
- Vanderbilt Microfabrication Core (VMFC) – The Vanderbilt MicroFabrication Core specializes in the design, fabrication, and production of custom biological microfluidic mechanotronic (BioMicroMech) instruments, with emphasis on hybrid polymeric microfluidic devices with thin-film and optical sensors and computerized fluidic control. Typical products include fluidic networks, cost-effective pumps, various chemotaxis chambers and gradient generators, on-chip valves, multilayer devices, arrays of microfabricated traps and elements for cellular study, implantable devices for in vivo imaging, liquid and gas control systems, biological habitats and environments, 3D scaffolds and microbioreactors, all of which are fully customizable. Consultants are available to discuss specific needs and produce specialized devices and instruments.
- Vanderbilt Technologies for Advanced Genomics (VANTAGE) – VANTAGE is a one-stop genomics research resource, including: Illumina genotyping, DNA extraction and banking, Affymetrix-based genotyping and expression microarrays, Sanger sequencing

and Next Generation Sequencing (NGS) among many other specialized services. Their overall goal is to create a collaborative shared resource that accelerates discovery in genome sciences and personalized medicine, providing state-of-the-art research with shared resource facilities and technology. These activities are now part of an overall structure that takes full advantage of their new physical co-location together with the Flow Cytometry Shared Resource.

### **Project 3 – AI, Data Science, Cybersecurity, and Logistics Facilities**

- \*Greater Nashville Technology Council (NTC) – NTC is the catalyst for creating America's premiere collaborative and inclusive tech community. They are the leading voice and advocate for Middle Tennessee's \$8 billion information technology ecosystem; and the 60,000 technology professionals who design, implement, manage, and safeguard the technology that powers the region's economy. NTC will help support the cluster by facilitating activities between the Coalition and private sector partners and advising the Coalition on data science industry needs in our region.
- \*Meharry Data Science Institute (DSC) – The DSC brings together the major data sources at Meharry into a structured data ecosystem to allow aggregation, integration, and analysis. The data resources draw from more than 25 sources in the schools of medicine, dentistry and graduate studies and research. It has also aggregated the data from the "public health exposome." The exposome database incorporates publicly available health and environmental data at the neighborhood level. The Coalition will explore options to make these resources available to entrepreneurs and other members of the workforce to support the cluster.
- \*TSU Center for Cybersecurity – The Cyber security laboratory has been established to be one of the leading labs in research and education of cyber security and security visualization. This lab offers a unique environment to facilitate joint R&D programs with government agencies, academia, and industry. The main objective of this lab is to enable assurable and usable security and privacy for both a smart and open society by making cyber defense provable, enforceable, measurable, and automated. This lab includes TSU Faculty from various departments and external collaborators who cover wide range cyber security expertise including intrusion detection, anomaly detection, cloud auditing, threat-fault diagnosis, risk management, applied cryptology, privacy, data base security, wireless security, data mining, and visualization. Our research application domains range from data, applications, end-systems, and network security, to critical infrastructure monitoring and protection. The Coalition will explore options to make these resources available to entrepreneurs and other members of the workforce to support the cluster.
- \*Vanderbilt University (VU) and Medical Center (VUMC) Core Facilities and Institutes – VU and VUMC both house world-class core facilities to support life science research for both campus researchers and external users. A list of relevant cores can be found below. These

cores will support the cluster by providing complementary and additive capabilities to those in the data science facilities.

- Advanced Computing Center for Research and Education (ACCRES) – The Advanced Computing Center for Research and Education is comprised of High-Performance Computing services that provide an environment for a wide variety of research projects across Vanderbilt and the Nashville Community. The core also provides services within their Experimental Technologies Program (ACCRESx), including big data analysis tools and virtual environment execution.
- Biostatistics Collaboration Center (BCC) – BCC is a core resource that provides for, enhances, and/or facilitates statistical collaborations involving the design, conduct, analysis, or publication of biomedical research at Vanderbilt University. The Department of Biostatistics comprises biostatisticians who can work with faculty on a variety of projects. It offers a wide range of highly trained experts for almost any collaboration. The department has considerable experience in the design, conduct, and analysis of large-scale clinical trials and research design for basic biomedical research. Consultants with various levels of expertise are available, from master's-level trained biostatisticians to full professors.
- Center for Innovative Technology (CIT) – CIT offers full-service, flexible small molecule omics solutions via cutting-edge global untargeted and targeted ion mobility-mass spectrometry resources. The Center focuses on high-quality and innovative analytics, the development of streamlined workflows, and utilizes a collaborative approach. Potential applications include diagnostics development, nutrient metabolomics, disease mechanism & metabolome, toxicology & exposome, microbiome research, personalized medicine, and drug discovery. Services include consultations, biostatistics, sample preparation, untargeted and targeted metabolomics, lipidomics, data processing and analysis, grant application and manuscript support, and custom method development.
- Clinical Informatics Core – The mission of the Clinical Informatics Core is to enable researchers to design and implement electronic health record (EHR)-related tools, functionalities, and interventions with input and assistance from clinical informatics experts, as well as to gain access to and analyze EHR-based data.
- Computational Structural and Chemistry Biology Core (CSCBC) – CSCBC brings customized structural biology and chemical biology insights to research, facilitating hypothesis generation and guiding experimental design. They offer state-of-the-art molecular visualization, structural analysis, ligand-based modeling, and structure/activity predictions that are designed to accelerate discovery.
- Data Science Institute (DSI) – The Vanderbilt Data Science Institute (DSI) provides a computing platform for building AI solutions with two NVIDIA DGX A100's. These systems allow for the building and training of next-generation AI models to address scientific, societal, and business problems. The DSI provides ongoing consults for businesses looking to start or grow analytics and data science capabilities. They



collaborate with businesses, connecting them with resources, training, and students available for internships or for hire after graduation.

- Institute for Software Integrated Systems (ISIS) – ISIS conducts and supports both basic and applied research in the area of systems and information science and engineering. Applications of ISIS technology span a wide range of software-intensive systems from small embedded devices, through real-time distributed systems, to globally deployed complex systems. Specifically related to this project, ISIS has great expertise in cyber-physical systems and security.
- \*Volunteer Tech Groups/User Groups – Nashville has a very active user group community with over 50 active groups. These volunteer groups connect people to share strategies and best practices around a given product/software. These users are usually from different companies or organizations. Nashville has a strong focus on growing the data analytics community through informal gatherings of the Data Science Meet-Up, Azure Meet-Up, Data Nerds, and AWS Meet-Up. The Nashville Tech Council will facilitate engagement with these groups to support the data-science cluster.

#### **Project 4 – Workforce Development and Certifications**

- Alignment Nashville – Alignment mobilizes strategic partners to challenge and address systemic barriers in order to equitably impact the growth, development and academic achievement of each Metro Nashville Public Schools (MNPS) student. With support from the mayor’s office, Alignment will support the cluster by coordinating workforce development and student exposure activities with the Coalition and MNPS.
- Army Career Skills Program (CSP) – CSP is an opportunity for Army Soldiers to gain valuable civilian work experience through specific industry training, apprenticeships, or internships during the last 180 days of service. CSP connects Soldiers with industry partners in real-world job experiences. For Soldiers, CSP provides an invaluable chance to work and learn in civilian career areas. For industry partners, it is an opportunity to access and leverage the world’s most highly trained and motivated workforce at no cost. CSP will support the cluster by providing a conduit between the military veteran and spouse talent pipeline, Coalition activities, and industry partners. It is not possible for this organization to provide a letter of support given the military affiliation, but the Coalition members are ready to engage their existing ties.
- \*BioTN – BioTN changes lives with science by educating future scientists, developing Tennessee’s workforce, and supporting its most motivated entrepreneurs. They accomplish this through their TN Academic Alliance, a workforce development program offering graduate students, Ph.D. candidates and post-doctoral researchers attending a Tennessee-based academic institution the opportunity to network, career develop, expand skills and knowledge, and idea share through events and programs. They also support a STEM Preparatory Academy, which is dedicated to delivering a rigorous, inquiry-based education with a strategic focus on science, technology, engineering, and mathematics. By cultivating



a community of learning and academic excellence, STEM Prep will bolster the number of underrepresented students who graduate from the most competitive postsecondary programs and universities in the country and lead the discoveries and innovations of the future. BioTN will help support the cluster by leveraging existing initiatives in both K-12 and post-secondary education.

- Boys & Girls Club (BGC) of Middle TN – BGC’s focus is helping all young people succeed through curriculum-based targeted programs and high yield activities designed to help Club Members reach priority outcomes: academic success, healthy lifestyles, and good character and leadership. BGC will help support the cluster by leveraging its entrepreneurial programming, Code Academy and other STEM education to get kids interested, providing a talent pipeline into the workforce development activities of this initiative.
- DOD SkillBridge – SkillBridge is an opportunity for Service members to gain valuable civilian work experience through specific industry training, apprenticeships, or internships during the last 180 days of service. SkillBridge connects Service members with industry partners in real-world job experiences. For Service members, SkillBridge provides an invaluable chance to work and learn in civilian career areas. For industry partners, it is an opportunity to access and leverage the world’s most highly trained and motivated workforce at no cost. SkillBridge will support the cluster by providing a conduit between the military veteran and spouse talent pipeline, Coalition activities, and industry partners. It is not possible for this organization to provide a letter of support given the military affiliation, but the Coalition members are ready to engage their existing ties.
- Engineering 4 Us All (E4USA) – E4USA is an NSF-funded high school engineering program that opens engineering to a new generation of students and educators. It provides a standardized educational curriculum for pre-college students to learn and demonstrate engineering principles, skills and practices. The curriculum incorporates an authentic, design-based experience and affords students the opportunity to earn college credit at participating colleges and universities, including Vanderbilt. E4USA will support the cluster by providing a conduit to K-12 talent and informing certification curricula.
- Fathom – Fathom is a public benefit corporation located in Nashville that offers workforce development programming for youth. What started as a paper-based curriculum designed to empower youth to become change agents in their communities has grown into a digital platform that tokenizes experience/certifications and leads youth on a mission using a project-based learning approach to gain skills and apply them to a career path. One of their earliest corporate clients is Kroger and they also assisted with the Mayor’s Opportunity Now initiative that was developed to put 10K young people to work. This company could be beneficial in providing workforce development certifications.
- \*Frist Center for Autism – The Frist Center at the Vanderbilt University School of Engineering focuses on engineering technologies and transforming the workplace – inspired by neurodiversity – by bringing engineers, business scholars, and disabilities researchers together with experts in neuroscience and education to understand, maximize, and

promote neurodiverse talent. From a strengths-based – as opposed to deficit-based – understanding of autism and neurodiversity, the Center sees opportunities for innovation in technology and in workplace practices. The Frist Center will support the cluster by informing best practices when engaging and programming for neurodiverse populations within *Lifeworks*.

- **GEM Consortium** – The mission of The National GEM Consortium is to enhance the value of the nation’s human capital by increasing the participation of underrepresented groups (African Americans, American Indians, and Hispanic Americans) at the master’s and doctoral levels in engineering and science. GEM recruits high-quality underrepresented students looking to pursue Master’s and Doctoral degrees in applied science and engineering, and matches their specific skills to the specific technical needs of GEM employer members. GEM will support the cluster by advising on best practices to engage underrepresented students in the life and data sciences.
- **\*Learning Incubator: a Vanderbilt Endeavor (LIVE)** – LIVE in intended to be a unique combination of scholars who understand learning across the lifespan and organizational development across contexts (e.g., schools, homes, museums, communities, government agencies, industry, etc.) and computer scientists and engineers who design cutting edge, advanced technologies that transform what is possible and re-imagine current practices. LIVE leverages Vanderbilt’s signature theory of Consequential Learning, innovative design process, and computation thinking to forge new partnerships that: i) incubate digital platforms, tools, and socio-technical solutions; ii) produce new models of computer-mediated teaching and learning; address socially relevant and urgent problems of practice and research, and iv) empower learners, individually and in groups. LIVE will support the cluster by bolstering the coalition’s capabilities to creatively train students and workers in advanced computing concepts leveraging artificial intelligence and machine learning.
- **\*Mobilizing STEM Talent for STEM Education** – This NSF-funded project is a collaboration effort between Vanderbilt University, Fisk University, and Metropolitan Nashville Public Schools to create a sustainable pipeline for STEM teachers. In general, the program is designed to recruit and retain STEM teachers in urban secondary schools. In particular, this is a program for undergraduate and graduate STEM majors at Vanderbilt and Fisk University who are interested in exploring a career in education but may not have started on that pathway initially. The program is committed to improving K-12 science and math education in urban schools. This project will support the cluster by utilizing existing relationships to engage K-12 educators and students in new education initiatives.
- **Nashville Software School** – Nashville Software School prepares adults for careers in software development, UI/UX design, data analytics, and data science. Their model offers scholarships to students for a significant portion of their tuition that are repaid once the student secures a job upon program completion. The student does not repay this part of their tuition until they become employ as a developer. This is a meaningful workforce

development program but also a potential source of talent and project support for the companies in the accelerator and demonstration facilities.

- Nashville State Community College – Nashville State offers over 80 programs at 7 campuses throughout the region to prepare students for a career in the workforce or continuing education. The workforce and community development office provides tailored education and training for professional advancement as well as personal enrichment courses and workshops for the community. WCD has served the local businesses and the greater Nashville community for over 30 years. The Industrial Readiness Training program is a partnership with Nashville State Community College, manufacturers, and the Governor’s Investment in Vocational Education Grant to provide relevant skills training for entry-level manufacturing jobs in Middle Tennessee. Nashville State will support the cluster by working to align and leverage these existing resources with other Coalition workforce development activities. The Coalition will also explore the prospect of the new training facilities to support Nashville State programs.
- \*Nashville Partnership for Education Equity Research (PEER) – PEER is a Research-Practice Partnership (RPP) between Metropolitan Nashville Public Schools (MNPS) and Vanderbilt University aims to address persistent inequities in student opportunities and outcomes by aligning researchers’ expertise with topics that are most pressing for policymakers and educators. This team of MNPS and Vanderbilt researchers and leaders, will help disrupt these patterns of inequity by focusing on eliminating disparities in educational outcomes linked with factors such as race, class, and disability. PEER will support the cluster by ensuring an equity focus on workforce development and leveraging existing relationships to engage K-12 educators and students in new education initiatives.
- Talent Pipeline Management System – The Nashville Area Chamber will provide outcomes from the Talent Pipeline Management System work for the IT Talent Solutions Council to inform the programming provided in high schools in Middle Tennessee. This employer-driven, supply chain approach to building talent pipelines works well alongside this strategy. The Chamber is also the backbone organization for the JP Morgan Chase New Skills Ready investment in Nashville, which means an even deeper level of support for the work in Metro Nashville Public Schools. The Nashville Area Chamber of Commerce supports this grant because it will create long-term relationships between employers and educational institutions to address the deficit of tech job candidates in the local workforce. The additional focus on work-based learning opportunities, including registered apprenticeships and internships, creates a pipeline of homegrown talent.
- USA Transition Assistance Program (TAP) – TAP is the Army’s formal transition program with required participation by every Soldier in the rank of COL (O-6) and below. This program looks for similarities in existing military skills and where those skills can be used in the civilian sector. TAP will support the cluster by partnering with the Coalition and industry leaders to identify fitting jobs for Soldiers. It is not possible for this organization to provide a

letter of support given the military affiliation, but the Coalition members are ready to engage their existing ties.

- \*Vanderbilt Bootcamps – Vanderbilt University Boot Camps prepare students for the field data analytics or cybersecurity through a hands-on environment. These 24-week programs are designed for working adults, students, and busy professionals, allowing personalized schedules from week to week. They empower talented instructors to teach the most in-demand skills and a dedicated support team to provide students with extensive support along the way, including student success and career services teams. These Bootcamps will support the cluster by leveraging existing certification pathways for data analytics and cybersecurity, as well as acting as a model to develop life science certifications.
- \*Vanderbilt Collaborative for STEM Education Outreach (CSEO) – CSEO is dedicated to enhancing literacy in science, technology, engineering, and mathematics (STEM) through the establishment of unique partnerships between university scientists, K-12 educators and students, and the local and global science community. The CSEO has developed and implemented several educational programs in partnership with local and national K-12 classrooms. These efforts, funded through a variety of state and national public and private agencies and donations from private individuals and families, have reached thousands of children, supported teachers in residence on the Vanderbilt campus, hosted summer professional development courses and workshops for teachers, offered summer programs for students, and placed teachers and students in research laboratories. As a national leader in outreach efforts, the CSEO is committed to elevating pre-collegiate STEM expertise and literacy. CSEO will support the cluster by utilizing existing relationships to engage K-12 educators and students in new education initiatives.
- \*Vanderbilt Computational Thinking and Learning Initiative (CTLI) – Computational thinking is the cornerstone of the modern Information Age: the capacity to frame, analyze, disaggregate, and reconfigure problems to best leverage ever-expanding computational capability. Every field and K-16 subject area has different approaches and needs that define their disciplinary knowledge and practices, and thus computational thinking in each discipline is a hybrid creation, connecting general computational methods with specific disciplinary ways of thinking and inquiring in generative ways. This initiative works to develop the institutional capacity necessary to foster innovative disciplinary computational thinking research and education across the university as well as in K-12 education. CTLI will support the cluster by helping to optimize the workforce development curriculum.
- \*Vanderbilt-Tennessee Education Research Alliance (TERA) – TERA bridges the gap between research, policy, and practice. Our partnership-focused approach places research in the hands of education leaders tasked with finding policy and practice solutions. TERA is one of the only research-practice partnerships (RPP) in the country focused on state-level education policy. Through TERA, scholars at Vanderbilt and other leading universities carry out high-quality, practical research that informs state-level policy, impacts the practice in schools and districts across Tennessee, and contributes to national conversations on K-12

education. TERA will support the cluster via its capacity to study the transition of students from K-12 programs into public higher education and the workforce throughout the region. TERA will also help explore state-wide engagement opportunities for new initiatives.

### **Project 5 – Economic Development Planning**

- \*Global Action Platform (GAP) – GAP is a collective impact organization created jointly in 2012 by the region’s universities (starting with Vanderbilt) to facilitate university collaborations and to advance cluster economic development emerging from university research in the area. Working with its university members, GAP has created a collaborative platform to mobilize the world’s foremost experts and executive leaders; target impact investments in innovation and businesses; leverage technology for collaboration and data analytics; and communicate findings locally and globally. GAP’s founding mission includes advancing the creation of an innovation hub in Nashville to provide a physical setting for a university-business-capital ecosystem and dynamo of growth in support of a life and data science economic cluster. GAP is the regional affiliate of Harvard’s Institute for Strategy and Competitiveness (founded by Michael Porter), and GAP has direct experience building both bio-hubs and innovation parks, directing impact investments in the bio sector, and facilitating university-business engagement strategies. GAP will bring together all these capabilities and resources in support of the cluster.
- Chamber of Commerce (Nashville Area) – As a regional member organization that represents the business community in Nashville and Middle Tennessee, the Chamber’s mission is to create economic prosperity by facilitating community leaders. The Chamber will support the cluster by providing in-roads into local businesses relevant to the coalition’s workforce development activities, aiding in the assessment of the economic impact of this initiative in the city, and connecting the coalition to new economic development resources coming to the region.
- \*Greater Nashville Regional Council (GNRC) – The mission of the GNRC is to assist local communities and state agencies in the development of plans and programs that guide growth and development in the most desirable, efficient, and cost-effective manner, while ensuring the continued long-term livability of the region. In carrying out this mission, GNRC convenes elected leadership and local practitioners to brainstorm strategies for improving quality of life; facilitates cooperative policy-making in order to prioritize state and federal investments into area social services and public infrastructure; and provides a public forum for Middle Tennesseans to shape regional decisions. GNRC will support the cluster by both aiding in the planning of *Lifeworks* and assessing the impact to the regional economy.
- Nashville Area Chamber of Commerce – As a regional member organization that represents the business community in Nashville and Middle Tennessee, the Chamber’s mission is to create economic prosperity by facilitating community leaders. The Chamber will support the cluster by providing in-roads into local businesses relevant to the coalition’s workforce development activities, aiding in the assessment of the economic impact of this initiative in

the city, and connecting the coalition to new economic development resources coming to the region.

- \*Nashville Mayor's Office – Mayor John Cooper
  - Economic and Community Development (ECD) Office – This administration is committed to developing human capital and expanding economic opportunity to all Davidson County neighborhoods. We must continue efforts to grow the local economy while also ensuring that more residents and communities within Nashville are able to participate in the growth and prosperity of our city. We will continue to recruit and retain businesses that will create new, high-quality jobs for residents. At the same time, this administration will help connect citizens from every part of the county to programs designed to promote entrepreneurship and small business ownership, including enhancing our creative economy and enhancing economic opportunities for minorities.
  - Metro Nashville Public Schools (MNPS) Academies – Recognized by the White House as a national high school transformation model, the Academies of Nashville provide students with one of the best college and career prep experiences in the nation. Students have a choice of 35 different academies within the largest 12 neighborhood high schools offering a practical, hands-on approach to learning in fields that interest them, with many of them focusing on technology and healthcare. The Academies empower students through career exposure so they can make timely, informed decisions and discover their true passions while earning early college credit and nationally recognized industry certifications. General education content is taught through the lens of their academy, while more than 365 business and community partners provide authentic experiential learning opportunities at every level.
- Other Government Entities
  - Clarksville Mayor – Mayor Joe Pitts
  - Clarkesville-Montgomery County Economic Development Council – President Buck Delinger
  - Humphreys County Economic Development Council – Executive Director Ted Moore
  - Humphreys County Executive – Mr. Jessie Wallace
  - Montgomery County Mayor – Mayor Jim Durrett
  - TN Dept of Labor and Workforce – Commissioner Jeff McCord
  - US House of Representatives – Congressman Jim Cooper
- Urban League of Middle Tennessee – The Urban League of Middle Tennessee is a historic civil rights organization dedicated to economic empowerment, equality, and social justice. Founded in 1968 and headquartered in Nashville, the Urban League collaborates at the local level with community leaders, policymakers and corporate partners across Middle Tennessee to elevate standards of living for African Americans and other historically underserved groups. The Urban League spearheads the development of social programs

and authoritative public policy research, and advocate for policies and services that close the equality gap.





## CENTER *for* MEDICAL INTEROPERABILITY

October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe developing the life sciences ecosystem in the Nashville region will accelerate the growth of industry in the region that will play a significant role in the economic growth.

At Center for Medical Interoperability, we offer solutions and innovations developed in the life sciences technology to simplify and advance data sharing among medical technologies and systems. We believe in embracing and applauding the efforts of others to advance interoperability, and we plan to collaborate with others across the healthcare marketplace to accelerate solutions. We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Ed Cantwell  
President & CEO  
Center for Medical Interoperability  
C. 615.730.0088



U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Sir/Madam,

I write this letter in strong support of the EDA proposal entitled “Middle TN Lifeworks” developed with coalition partner Vanderbilt University.

At Cumberland Emerging Technologies, our focus is twofold. First, we manage a life sciences incubator facility is located near downtown Nashville. Services available to small business tenants include leasable wet and dry laboratories with office space and access to critical shared resources, including laboratory equipment in shared laboratory space. Business support services are tailored to the needs of life sciences firms.

Second, we directly invest in a portfolio of biopharmaceutical and medical device products that range in development stage from preclinical to Phase II human clinical trials. In particular, we focus on technologies that are often past the drug discovery phase or prototype phase and more focused on drug development, product development and clinical trials to support FDA clearance or approval as needed. Many of these groundbreaking technologies are discovered in academic research labs throughout our region, and we are excited to partner further with them to create opportunities for everyone in the medical technology industry. Our expertise will complement the facilities and resources that will be available to the middle Tennessee community as part of the EDA proposal.

We look forward to continuing our commitment to the middle Tennessee region through our facilities and expertise in bringing products from the lab to the clinic.

Best regards,



James Stefansic, PhD MBA  
Director of Corporate Development



October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Jumpstart Foundry is one of Tennessee's most active healthcare venture capital firms and we specialize in funding seed-stage healthcare innovation companies. By selecting this application, we are confident that it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region which will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

At Jumpstart Foundry, we believe we are better together. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. With the existing infrastructure, Nashville being largest concentration of health care services companies in the nation, will assist them to meaningfully engage with the technology, talent, and new venture pipelines. This aligns perfectly with our organizations' goal of making something better in health. We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to contact us if you have any questions.  
I may be reached at [Vic@JSF.co](mailto:Vic@JSF.co) or (615) 478-2188.

Sincerely,

Vic Gatto  
Chief Investment Officer  
Jumpstart Foundry



October 13, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

LaunchTN empowers Tennessee's bustling entrepreneurial ecosystem by facilitating capital formation, market building and resource connection through our Network Partners that span the state and industry verticals. LaunchTN is proud to be a Coalition member with Vanderbilt and join its partner's federal Build Back Better grant proposal.

One of the biggest concerns of Tennessee-based startups and our technology-based economic development initiatives is having an adequate and well-trained workforce as we grow into the new decade and beyond. We believe the proposed activities regarding development of the life-science ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

By directly addressing these issues at the local level in industries that can become integral parts of the region's future economy, this unique set of projects provides solutions to our workforce needs. Not only will it create wealth, but it also has the capacity to improve the health of people around the world and create high-paying jobs in the local community with a focus on those who have historically been left out of these industries.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. Together, we can grow the life-science and data-science economic clusters in the middle-TN region and the entire region will benefit.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. The largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

Please let this letter stand as our support as a partner in this application for the Build Back Better Challenge submitted by Vanderbilt and its partners.

Sincerely,

A handwritten signature in black ink, appearing to read "Abby Trotter", written in a cursive style.

Abby Trotter  
Interim CEO



JAMES E.K. HILDRETH, Ph.D., M.D.  
*President & Chief Executive Officer*

October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

To Whom It May Concern:

I am pleased to commit to the collaboration and support of Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). I believe that Meharry is uniquely positioned to support entrepreneurs and new ventures through our life-and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

As President and CEO, I have expanded the research facilities and institutions of Meharry Medical College in support of my vision to build upon the vast wealth of experience we have gained over our 150 years to build capacity in the communities we serve. My team has been involved in developing the Coalition's application. I have recommended the tailored list of Meharry assets outlined in Appendix 1, and I am enthusiastic about making these assets accessible to the Coalition's efforts.

If our Coalition is selected, I believe this grant will advance the life-and data-science sectors, promoting additional development of technology businesses in the region. Additionally, I believe that regional investment will act as a conduit by linking untapped talent within demographics that have often been overlooked in the community - such as military veterans, their spouses, communities of color, and other underrepresented populations - to high-paying jobs within these sectors. This will provide unique opportunities for recruitment, which will result in diversification of the talent, new venture, and technology pipelines.

We are eager to be a member of the Middle TN Coalition and advance life and data sciences in the region. We are dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve our application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "James EK Hildreth", with a stylized flourish at the end.

James EK Hildreth, PhD, MD  
President & CEO

1005 DR. D.B. TODD JR. BOULEVARD  
NASHVILLE, TENNESSEE 37208-3599

T:615.327.6904 | F:615.327.6540 | www.mmc.edu

# the WOND'RY

Innovation Center at Vanderbilt University  
2414 Highland Avenue, Suite 102, Nashville, TN 37212  
thewondry.com · 615-343-1501 · @thewondry

October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear EDA Grant Application Evaluation Team:

We are excited to voice our support for Vanderbilt University and its coalition partner's application for the federal *Build Back Better* grant. We believe the activities proposed to support development of the life sciences ecosystem in the greater Nashville region have the potential to accelerate the growth of the life-science and data-science enterprises in the region in a way that will generate future economic growth, improve human health, and create jobs.

The Wond'ry is Vanderbilt University's innovation center and our mission is to support innovation efforts in the regional ecosystem. We are confident that the approach outlined will drive the creation and expansion of life-science and data-science economic clusters in the region; this will create not only new career paths for our graduates, generate new resources for life science entrepreneurs in the local community, and ultimately, drive innovation that can improve the health of the people around the world.

At the Wond'ry, we believe we are better together. Based on data we have collected on the past 5 years on local startups, we have found that the vast majority of life science and data science-based ideas, projects, or startups were either abandoned or moved to other areas of the country where support in the form of equipment, space, capital, and workforce expertise was more readily available. We believe the effort outlined in the Middle Tennessee Lifeworks proposal has the potential to change this pattern and build upon Tennessee's legacy as a healthcare innovator and on the unique data assets now available through the Vanderbilt University Medical System and other partners.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. Using existing infrastructure - Nashville has the largest concentration of health care services companies in the nation - this coalition can meaningfully engage with the technology, talent, and new venture pipelines. This aligns with the Wond'ry's goal of supporting efforts to transform healthcare through applied innovation. We are excited at the prospect of working with the Middle Tennessee Lifeworks coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to reach out if there is any question whatsoever about our deep commitment to the success of this proposal.

Sincerely,



David A. Owens, PhD, PE - **Evans Family Executive Director of The Wond'ry**  
2021 Alexander Heard Professor of Distinguished Service  
Professor for the Practice of Innovation Management at  
Owen Graduate School of Management, Vanderbilt School of Engineering  
Peabody College of Education, and Vanderbilt School of Medicine



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Hospital

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EDP Biotech

October 15, 2021

**U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition**

To whom it may concern:

We are pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate future economic growth, improve human health, and create jobs.

Life Science Tennessee (LST) is a member-based industry association advocating for the advancement of the life science industry. Our focus is on creating a quality environment for life science companies to thrive in Tennessee. We stake advocacy positions that promote improved regulatory policies allowing safe and effective delivery of new life science technologies, as well as enhancing the state's ecosystem to best support life science technology innovation.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region—industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,



**Paul Fitzpatrick**  
Chairman of the Board  
Life Science Tennessee

October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

We at The Mainland Companies are building an innovation district called New Heights District in Nashville. The proposed development will be the bustling natural heart of Nashville's new urban life and is planning to offer co-working space, lab space, entertainment, restaurants, townhomes and condominiums, art studios and apartments. This type of live, work, play community for innovators, scientists, and creatives will help ensure the availability of space resources to keep ventures and the people behind them in Nashville.

If this application is selected by the Economic Development Administration, it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts.

We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. Our co-working space and life science lab space would complement the proposed infrastructure and allow accelerating companies space to grow in a work, live, play community in Nashville without having to leave the area to access needed resources.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Very truly yours,

The Mainland Companies, LLC



Kenneth M. Larish  
Manager



*Padma Raghavan, Ph.D.  
Vice Provost for Research  
Professor of Computer Science and Computer Engineering*

Padma Raghavan  
PMB 407772  
2201 West End Avenue  
121 Kirkland Hall  
Nashville, Tennessee 3 7240-7800

October 7<sup>th</sup>, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear U.S. Economic Development Administration,

I am pleased to support the *Middle Tennessee Lifeworks* Coalition as part of the Build Back Better Regional Challenge (BBB) to advance economic development through life sciences powered by information technologies in the greater Nashville region. Vanderbilt University is uniquely positioned to support entrepreneurs, innovators and new ventures through our biotechnology and information technology research facilities. We are committed to providing the expertise and infrastructure to enable the integration of wet-lab work with artificial intelligence and supercomputing to turn promising ideas into commercially viable products.

The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity via workforce development and entrepreneurship, with a particular focus on integrating disadvantaged communities. The accelerated advancement of life sciences and information technologies in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

As the Vice Provost for Research responsible for overseeing the research core facilities, institutes and technology development at Vanderbilt University, my team has been deeply involved in developing the Coalition's application. I have recommended the tailored list of Vanderbilt's assets in Appendix 1, and I am enthusiastic about making these assets accessible to the Coalition's efforts.

If our Coalition is selected, I believe this grant will advance the life science and information technology sectors by promoting additional development of high-tech businesses in the region. Additionally, I believe that regional investment will act as a conduit for growth in these sectors by linking untapped talent from underrepresented communities – such as military veterans, their spouses, communities of color, and other

PMB 407772  
2201 West End Avenue  
121 Kirkland Hall  
Nashville, Tennessee 3 7240-7800  
[www.vanderbilt.edu](http://www.vanderbilt.edu)





*Padma Raghavan, Ph.D.  
Vice Provost for Research  
Professor of Computer Science and Computer Engineering*

disadvantaged populations, including local coal communities – to higher-paying jobs. This will provide a unique opportunity for recruitment in these demographics, which will result in diversification of talent, technology pipelines, and new ventures.

We are dedicated to supporting the *Middle Tennessee Lifeworks* Coalition in advancing life science and information technologies in the region through our proposed initiatives. We urge the federal government to approve our application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Padma Raghavan".

Padma Raghavan, Ph.D.  
Vice Provost for Research  
Professor of Computer Science and Computer Engineering

PMB 407772  
2201 West End Avenue  
121 Kirkland Hall  
Nashville, Tennessee 37240-7800  
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*Jennifer A. Pietenpol, Ph.D.  
Executive Vice President for Research  
Vanderbilt University Medical Center  
Director, Vanderbilt-Ingram Cancer Center  
Brock Family Directorship in Career Development  
B.F. Byrd Jr. Professor of Oncology  
Professor of Biochemistry*

October 11<sup>th</sup>, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

I am pleased to commit to the collaboration and support of Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). I believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the Economic Development Administration's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers through both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

As the Executive Vice President for Research responsible for overseeing the research enterprise, shared resources, core facilities, and research centers and institutes of Vanderbilt University Medical Center, my team has been closely involved in developing the Coalition's application. I have provided the tailored list of VUMC assets in Appendix 1, and I am enthusiastic about making these assets accessible to the Coalition's efforts.

If our Coalition is selected, I believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, I think that regional investment will act as a conduit by linking untapped talent within demographics that have often been overlooked in the community - such as military veterans, their spouses, communities of color, those living in rural areas of middle TN, and other underrepresented populations – to high-paying jobs within these sectors. Our focused goals will provide a unique opportunity for recruitment in these demographics, which will result in diversification of the talent, new venture, and technology pipelines.



*Jennifer A. Pietenpol, Ph.D.  
Executive Vice President for Research  
Vanderbilt University Medical Center  
Director, Vanderbilt-Ingram Cancer Center  
Brock Family Directorship in Career Development  
B.F. Byrd Jr. Professor of Oncology  
Professor of Biochemistry*

We are eager to support the Middle TN Coalition in advancing life and data sciences in the region, and we are dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve our application.

Please do not hesitate to call us if you have any questions.

Sincerely,

Jennifer A. Pietenpol, Ph.D.



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October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

I am pleased to commit to the collaboration and support of Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). We believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

The Greater Nashville Technology Council is the leading voice and advocate for Middle Tennessee's \$8 billion technology ecosystem; and the 60,000 technology professionals who design, implement, manage, and safeguard the technology that powers our region's economy. A significant part of our efforts to grow the Nashville area tech sector is through the creation of a strong regional tech talent pipeline to help meet the needs of our tech employers and to provide opportunities for local, underemployed workers to transition to higher paying tech jobs.

If the Coalition is selected, we believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, we believe that regional investment will act as a conduit by linking untapped talent within a demographic that has often been overlooked in the community - such as military veterans, their spouses, communities of color, and underrepresented populations - to high-paying jobs within these sectors. This will provide a unique opportunity for recruitment in these demographics, which will result in diversification of the talent, new venture, and technology pipelines.

We are eager to work with the Middle TN Coalition in advancing life and data sciences. We are dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Moyer".

Brian Moyer, CEO  
Greater Nashville Technology Council

October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
RE: Application of the Vanderbilt Coalition

To Whom It May Concern:

Alignment Nashville is pleased to submit this letter of support for the Vanderbilt Coalition's application for the Build Back Better Regional Challenge Grant. We believe that this coalition is perfectly positioned to make significant contributions to the ability of our region to thrive and prosper for generations to come.

Alignment Nashville (AN) is a 501c3 not-for-profit organization that was founded in 2005 to support Metro Nashville Public Schools (MNPS) by aligning our community's resources. As a collective impact backbone organization, we coordinate collaborative efforts among more than 150 community partners each year.

We recognize the need to ensure that our young people graduate prepared for high-wage, high-demand careers in our region, particularly in the life- and data-science fields. Our region is experiencing tremendous growth, but we must ensure that our preK-12 education system is preparing our youth for the changing needs of the future workforce.

One successful initiative that can be leveraged to support this effort is the Academies of Nashville. AN played a key role in the startup and implementation of the Academies of Nashville, a district-wide high school transformation initiative that offers MNPS students a choice of 35 different academies in fields that interest them, ranging from engineering to healthcare. Through a practical, hands-on approach to learning in which general education content is taught through the lens of their academy, students are exposed to a myriad of careers and discover their true passions through authentic experiential learning opportunities. As with any transformational initiative, business and community partnerships continue to be critical to the sustainability of the Academies of Nashville, and we are proud to be part of ensuring that students continue to receive these life-changing opportunities.

Vanderbilt has long been a trusted partner of both AN and MNPS, and we value their leadership for the benefit of this region. We will mobilize our network of community partners to support the outcomes of the Vanderbilt coalition, and we welcome any further questions or requests for information regarding our work or our support for this initiative.

Sincerely,



Melissa Jaggers  
President & CEO

October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe that what Vanderbilt proposes regarding development of the life science and data science ecosystem in the Nashville region will accelerate the growth of the life science and data science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

I am writing this letter of support on behalf of two organizations, each of which I lead:

- 1) Lynch Biologics, LLC, a leading wound healing and regenerative medicine company developing products to improve healing of wounds caused by trauma (gun shot wounds, car accidents, etc) or chronic disease (diabetic foot ulcers, bed sores, etc); and
- 2) BioTN Foundation, a nonprofit 501(c)3 foundation with the mission to improve K-12 STEM education and improve the life science industry ecosystems in Tennessee.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life science industry in the region – an industry that we believe is, and will grow to be an ever more important part of the region's future economy. Not only will the life science industry create high paying jobs in Tennessee but we are using it to drive awareness of and improvement in K-12 STEM education in our region.

We also believe that this grant will have derivative benefits in addition to economic diversification. If the community works together to build an infrastructure for the life science and data science industries, it will cause members of the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability, collaborative behavior, and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners have the capacity to drive this initiative and the strong desire to do so. As the largest concentration of health care services companies in the nation are located in the Nashville region, this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Vanderbilt coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement. We urge the federal government to approve their application.

Sincerely,



Samuel E. Lynch D.M.D., D.M.Sc.  
CEO, Lynch Biologics LLC  
Chairman, BioTN Foundation

**U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition**

I am pleased to write a letter of support for the Vanderbilt Coalition, for the U.S. Economic Development Administration “Build Back Better” Regional Challenge Grant to fulfill the potential of Middle Tennessee Lifeworks. We are excited to partner with Vanderbilt and other institutions to provide opportunities for youth to experience various workforce exposure through hands-on opportunities, shadowing, and mentoring through a vast array of industries, as our youth *are* the workforce of tomorrow.

Since 1903, Boys & Girls Clubs of Middle Tennessee (BGCMT), has been in the forefront of youth development, working with young people from disadvantaged economic, social and family circumstances. Our mission is to enable all youth, *especially those who need us most*, to reach their full potential as productive, caring, responsible citizens. Today, more than 4,700 boys and girls are taking advantage of the programs, activities and services provided by BGCMT.

As our mission statement reflects, BGCMT is committed to investing in and enabling all young people to reach their goals; therefore, we are enthusiastic about the consortium of partners working to launch several different projects; including, cementing a pipeline to high-quality jobs for those who need them. As we prepare our youth for an optimistic future, we’re on the front lines of elevating their dreams and programs like the American Rescue Plan, recognize the vitality of preparing our youth today for a brighter, better tomorrow. Access to workforce development opportunities can change lives and BGCMT has relentlessly provided young people with the guidance to be innovative, brave, and confident.

DUB100BY2026 is our five-year strategic plan to DOUBLE youth served by 2026. The “100” represents 100% ready defined by five ways we prepare youth for their Great Futures: Ready to Read, Ready for Class, Ready to Graduate, Ready for Career, and Ready to Serve Community. When striving to reach our measures of success, we rely on our committed partnerships and collaborative, innovative methodology with focus areas to elevate Club experience, grow through digital platforms and elevate youth voices.

As the world becomes more interconnected, it is critical for our young people to develop the skills needed to compete in a global economy. That is why we are thrilled to join Vanderbilt in an effort to support our community’s young people. With the support of the American Rescue Plan, we firmly believe that GREAT FUTURES START HERE. Thank you for considering this request.

Sincerely,

Eric Higgs, President and CEO  
Boys & Girls Clubs of Middle Tennessee

**CLUB SUPPORT CENTER**  
1704 Charlotte Ave. Suite 200  
Nashville, TN 37203  
Tel (615) 983-6836  
Fax (615) 833-4381  
[www.bgcmt.org](http://www.bgcmt.org)

Eric Higgs  
President/CEO

RJ Stillwell  
Board Chairman

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\*Past Chairperson



October 9, 2021

Dear U.S. Economic Development Administration Build Back Better Regional Challenge Grant,

It is with pleasure that I write in support of the application of the Middle TN Coalition's application to the Build Back Better Regional Challenge Grant. I am the co-Director of the NSF-funded Engineering for US All (e4usa.org) program. We seek to demystify and democratize engineering through a high school level introduction to engineering course *for all* students. As one of the three main workforce development programs in engineering sponsored by the NSF nationwide, we are uniquely positioned to support this application. E4usa has a firm footprint in Tennessee, already serving four public high schools in middle TN and eight high schools in the state. Each high school classroom is partnered with a local university liaison creating a firm link between high school students and practicing engineers. In the next year, e4usa will be launching its own 501(c)(3) and growing the number of participating students, teachers, and schools. Our hope is to nurture talent and supply a trained workforce in engineering that represents all people whether they are from urban or rural areas, from high or low socioeconomic status, or a person of color or not. We hope that all students will grow in their engineering literacy.

Sincerely,



Stacy S. Klein-Gardner, Ph.D.  
Adjunct Professor



October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding the development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

Fathom is a social enterprise located in Nashville that offers workforce development curricula and solutions that invest in youth-led innovation towards thriving local communities. We believe in order to address the challenges of the 21st Century, young people must have the agency to create and navigate opportunities to become leaders of sustainable and equitable communities, companies and commodities. We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. Fathom believes in the development of education employment ecosystems driven by cross-sector collaborative efforts to create access and resources necessary for young people to thrive. When the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative but the strong desire to do so as well. As the largest concentration of health care services companies in the nation is located in the Nashville region, and this part of the existing infrastructure will assist them to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Fathom PBC

Representative Name & Title Joseph Adeola - CEO

City, State & Zip Antioch, TN 37013

Signature Joseph Adeola

Date 10.12.21



October 1, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

To Whom it May Concern,

I am pleased to commit the collaboration and support of the Frist Center for Autism & Innovation (FCAI) as part of this Build Back Better proposal.

For context, the Frist Center was founded in 2018, through a generous endowment from the Frist Foundation, with the unique vision of engineering technologies and transforming the workplace – inspired by neurodiversity. The mission of the Center is to bring engineers, business scholars, and disabilities researchers together with experts in neuroscience and education in order to understand, maximize, and promote neurodiverse talent, and to build pipelines to meaningful employment for autistic and other neurodiverse people. From a strengths-based – as opposed to deficit-based – understanding of autism and neurodiversity, the Center sees opportunities for innovation in technology and in workplace practices. The primary areas of focus for the Center’s work include:

- inventing and commercializing new technologies that enable autistic and other neurodiverse people to gain employment, succeed at work, and achieve their full potential;
- studying and understanding neurodiverse capabilities, and inventing and commercializing algorithms and systems that are inspired by those capabilities;
- developing policies, tools, trainings, and workplace practices that recognize and enlist neurodiverse people and talents in the workforce;
- demonstrating, documenting, and disseminating a community-based approach to simultaneously enhance the bottom line for business and the quality of life for neurodiverse people.

The Frist Center can contribute to the proposed project’s goal of maximizing every person’s opportunity to fuel the Middle Tennessee biotech industry and the regional economy, specifically by tapping into communities that have often been left behind in the tech sector — military veterans and spouses, National Guard citizen Soldiers, underrepresented communities, and neurodiverse individuals. Indeed, these groups are often overlapping; for example, military families have a higher prevalence than the general public of loved ones on the autism spectrum who would benefit from and who could advance workforce development. Similarly, the virtual-reality based technologies we have developed for people with autism could be helpful for supporting veterans who are seeking employment through the SkillBridge program, since many active duty Soldiers are out of practice interviewing for employment opportunities. We also have partnerships with, and can leverage, the numerous certificate programs in the region in data analytics such as those offered by Vanderbilt University, MTSU, and other institutions. Supporting the enrollment of autistic and other neurodiverse people in such a certificate program could credential neurodiverse individuals in a way that facilitates their employment in the biotech industry.

I look forward to collaborating on this project and fulfilling the important mission of maximizing every person’s opportunities to fuel the Middle Tennessee biotech industry and the regional economy.

Sincerely,

Keivan Guadalupe Stassun, Ph.D.  
Stevenson Endowed Professor of Physics & Astronomy and Professor of Computer Science  
Director, Frist Center for Autism & Innovation  
Elected Fellow, AAS, APS, AAAS



U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

October 14, 2021

Dear Administrators:

On behalf of the National GEM Consortium, I am writing to express my commitment to join the regional coalition led by Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). We believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

The National GEM Consortium has a mission to enhance the value of the nation's human capital by increasing the participation of underrepresented groups (African Americans, American Indians, and Hispanic Americans) at the master's and doctoral levels in engineering and science. If the Coalition is selected, we believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, we believe that regional investment will act as a conduit by linking untapped talent within a demographic that has often been overlooked in the community - such as military veterans, their spouses, communities of color, and underrepresented populations - to high-paying jobs within these sectors. This will provide a unique opportunity for recruitment in these demographics, which will result in diversification of the talent, new venture, and technology pipelines.

We are eager to work with the Middle TN Coalition in advancing life and data sciences. We are dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve their application.

**LINKING EXCEPTIONAL TALENT WITH EXTRAORDINARY CAREERS**

1430 Duke Street, Alexandria, VA 22314 | T 703.562.3646 | F 202.207.3518 | [www.gemfellowship.org](http://www.gemfellowship.org)





I am pleased to offer the National GEM Consortium's support for this proposal and, personally, look forward to playing a role in advising the planning coalition and seeing great high-impact projects come to life.

Sincerely,

Latane E. Brackett, III  
Principal Manager of Innovation Programming  
The National GEM Consortium

**LINKING EXCEPTIONAL TALENT WITH EXTRAORDINARY CAREERS**

1430 Duke Street, Alexandria, VA 22314 | T 703.562.3646 | F 202.207.3518 | [www.gemfellowship.org](http://www.gemfellowship.org)

October 12, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

To Whom It May Concern:

I am pleased to offer collaboration and support for Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through its life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal well-being.

As dean of Vanderbilt's Peabody College of education and human development, I can assure you my team has been intimately involved in developing the Coalition's application. Peabody is home to a number of initiatives that address important questions of diversity and inclusion in the development of our region's workforce and economy, including efforts to strengthen local schools, recommend effective local and statewide policies, and leverage technology to advance STEM learning and achievement. Our faculty works effectively with peers across the university on these challenges. Our efforts are detailed in Appendix 1, and I am enthusiastic about making these assets available to the Coalition's efforts.

If selected, I believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, I believe that regional investment will act as a conduit for linking untapped pools of talent that have often been overlooked in our community. These include military veterans, their spouses, communities of color, and other underrepresented populations who will benefit from greater access to high-paying jobs in these sectors. This grant will provide a unique opportunity for recruitment in these demographics and will diversify talent, new ventures, and technology pipelines.

We are eager to lead the Middle TN Coalition in advancing life and data sciences in the region, and we are dedicated to supporting the proposed initiatives through our involvement. I heartily encourage your approval of this application.

Sincerely,



Camilla P. Benbow  
Patricia and Rodes Hart Dean of Education and Human Development

October 11, 2021



U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

Dear Economic Development Administration:

We are very pleased to support the application of Vanderbilt University and its coalition partners for the federal Build Back Better grant. We believe the proposed activities regarding development of the life sciences ecosystem in the Nashville region will accelerate the growth of the life-science and data-science enterprises in the region that will generate future economic growth, improve human health, and create jobs.

At Nashville Software School, we focus on training job-ready tech talent and helping them launch their career in Middle Tennessee. By training to meet the needs of local employers, 90% of our graduates stay in Middle Tennessee after graduation and have been hired by 300+ local employers. We are community focused and our curriculum is designed in collaboration with local employers to meet local needs. We are anxious to work with the Middle Tennessee Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our involvement.

If this application is selected by the Economic Development Administration, we believe it will provide the impetus for the expansion of the life-science and data-science economic clusters in the region – industries that can become integral parts of the region's future economy. It will create not only wealth, but it also has the capacity to improve the health of the people around the world and to create high-paying jobs in the local community.

We also believe that this grant will have derivative benefits. If the community works together to build an infrastructure for these industry clusters, it will cause the community to behave in a more intentional and collaborative manner that will inure to the benefit of other economic development efforts. We believe this is a very important capability for all communities to learn as the pace of economic change continues to accelerate. Adaptability and creativity should be key consequences of this effort.

Importantly, Vanderbilt and its coalition partners not only have the capacity to drive this initiative, but the strong desire to do so as well. We urge the federal government to approve their application.

Best,

A handwritten signature in black ink that reads "Amy Henderson".

Amy Henderson  
President & COO | Nashville Software School  
amy.henderson@nashvillesoftwareschool.com



October 13, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

I am pleased to commit Nashville State Community College to the Middle Tennessee Lifeworks collaboration being led by Vanderbilt University and the other Coalition Members as part of the Build Back Better Regional Challenge (BBB). The Coalition's objective is to promote the EDA's vision through employment diversification and inclusive economic prosperity. The accelerated advancement of life-science and data-science operations in the region will not only stimulate economic growth and job creation, it will also improve societal well-being.

As the most diverse community college in Tennessee, Nashville State stands ready to align its resources and programs in support of the Coalition's efforts. We have existing programs in cybersecurity and logistics and are launching a new data analytics program in Fall 2022. We believe this coalition will support our efforts to create new programs in the life sciences, such as biotech lab technicians, to meet the growing demand.

Nashville State serves a seven-county region. Our seven campuses are all located within the Economic Development District contemplated in the proposal. This includes Humphreys County, which is currently dealing with the dual misfortunes of disastrous flooding and a closing coal plant. We also have strong partnerships with our area K-12 districts. As Metro Nashville Public Schools (MNPS) largest feeder, we have entered into a joint venture called *Better Together* to improve college and career readiness. We are also partners with MNPS and the Nashville Chamber of Commerce in developing strong career pathways for high-demand, high-wage jobs. Our work is focused on increasing educational attainment and economic mobility for underrepresented youth. We also partner with the Nashville Chamber in a Talent Hub that focuses on increasing attainment and mobility for adults in the Federally designated Promise Zone in Davidson County.

Therefore, we are intimately aware of the need for wrap-around services for many of our students, including transportation, childcare, and healthy meals. We are excited to bring together our existing connections and others we know in the community to support the Coalition's efforts as well.

**Office of the President**



If our Coalition is selected, I believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, I believe that regional investment will act as a conduit by linking untapped talent within demographics that have often been overlooked in the community to high-paying jobs within these sectors. This will provide a unique opportunity for recruitment in these demographics, which will result in diversification of the talent, new ventures, and technology pipelines.

We are eager to work with the Middle TN Coalition to advance life and data sciences in the region, and we urge the federal government to approve our application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads 'Shanna L. Jackson'. The signature is fluid and cursive, with the first name 'Shanna' being more prominent.

Dr. Shanna L. Jackson  
President

**Office of the President**

120 White Bridge Road • Nashville, TN 37209-4515 • 615-353-3236 • 1-800-272-7363 fax • [www.nsc.edu](http://www.nsc.edu)  
A Tennessee Board of Regents College



October 12, 2021

To: United States Economic Development Administration

Re: Build Back Better Regional Challenge Grant – Application of Middle Tennessee Coalition

I am pleased to show my support for the Middle Tennessee Coalition's application for the Build Back Better Regional Challenge Grant. This effort is being led by Vanderbilt University, but has the potential to reach far beyond the Nashville Metro area and into many of Middle Tennessee's rural counties where economic development and job growth is much needed.

I am the former (retired) Plant Manager of the Chemours Titanium Dioxide manufacturing plant in New Johnsonville, TN (Humphreys County). Until 2015 this facility was part of E.I. DuPont de Nemours & Co. Inc. and at one time was the largest titanium dioxide plant in the world. We employed approximately 1000 people, and considering that Humphreys County has a population of ~18,000 people, we were a significant contributor to the local economy.

I mention this because Humphreys County is in a unique position to partner with Vanderbilt and other Middle TN resources to make this life/data science program a success. In 2013 I was part of a team that developed a nationally recognized Industrial Maintenance work–study program with Nashville State Community College. At the time of graduation from the Associate's Degree program, each Industrial Maintenance student will have achieved their degree, done 18 months of paid internship at a local manufacturing facility, and received their nationally accredited NCCER certification in at least one construction/maintenance trade. Graduation rates and job placement from this program are 3-4x typical community college programs and it has been featured in NCCER's national magazine. We have been recognized numerous times by the State of TN as a model for internship/co-op programs, and we are currently drawing students from as many as 6 counties and have industrial partnerships in as many as 4 counties.

I believe that the Middle TN Coalition can utilize this existing internship model to effectively implement and expand into the life/data science space with this grant. Nashville and Middle TN is a fast growing area that is attracting many large technology companies (Amazon, Oracle) and has a highly desirable quality of life. We have already demonstrated with programs like the Nashville State internship program that the counties surrounding Nashville are engaged, energized, and interested in further growing the region and we are willing to partner as one region to make it happen.

Thank you for your consideration.



Gregory A. Martz  
Plant Manager (retired)  
The Chemours Company  
New Johnsonville, TN



October 14<sup>th</sup>, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

We are pleased to commit to the collaboration and support of Vanderbilt and its Coalition Members as part of the Build Back Better Regional Challenge (BBB). We believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and workforce development. The accelerated advancement of life-science and data-science operations in the region will generate revenue, facilitate job creation, and improve societal wellbeing.

We have been accelerating workforce development through Vanderbilt Boot Camps. Vanderbilt University Boot Camps prepare students for the field of data analytics or cybersecurity through a hands-on environment. These 24-week programs are designed for working adults, students, and busy professionals, allowing personalized schedules from week to week. Currently, we have 1107 all-time enrolled students (824 completed cohorts / 283 future cohorts). Our students have directly grown the workforce, with over 90% of our students who have become employer ready gaining new employment with companies, such as: Nissan, Bridgestone, Cigna Healthcare, eviCore and Smile Direct Club. We currently have a 77% graduation rate for the students from our cohorts and our students have seen an average salary increase of almost \$16,000.

As the deans of the School of Engineering and the Owen Graduate School of Management at Vanderbilt University, our teams have been intimately involved in developing the Coalition's application. We have recommended Vanderbilt Bootcamps in Appendix 1, and we are enthusiastic about making these assets accessible to the Coalition's efforts.

If our Coalition is selected, we believe this grant will advance the life- and data-science sectors, promoting additional development of technology businesses in the region. Additionally, we believe that regional investment will act as a conduit by linking untapped talent within demographics that have often been overlooked in the community - such as military veterans, their spouses, communities of color, and other underrepresented populations – to high-paying jobs within these sectors. This will provide a unique opportunity for recruitment in these demographics, which will result in diversification of the talent, new venture, and technology pipelines.

We are eager to lead the Middle TN Coalition in advancing life and data sciences in the region. We are dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve our application.

Please do not hesitate to call us if you have any questions.

Sincerely,



-----  
Philippe M. Fauchet  
Bruce and Bridgitt Evans Dean of Engineering



-----  
M. Eric Johnson  
Ralph Owen Dean and Bruce D. Henderson Professor of Strategy



October 11, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

On behalf of Global Action Platform, I wish to confirm and express strong support for the Middle Tennessee Coalition for the creation of the Lifeworks bio hub. As a university-business alliance created to facilitate collaboration among the 12 major research universities in the region, along with the 122 universities in the Oak Ridge Affiliated Universities network, we are eager to lend our services and relationships to this important regional effort.

Specifically, we want to support the request for a planning grant to engage regional universities, businesses, investors, government, and nonprofits in creating work plans and targets for the launch of a bio economic cluster in our region. As the affiliate of Michael Porter's Institute for Strategy and Competitiveness, Harvard Business School for this region, Global Action Platform has documented key elements of a bio cluster in Middle Tennessee. Our research and analysis also demonstrate that these assets have not coalesced in a strong economic cluster yet for lack of strategic engagement and a shared regional plan.

As one of the academic partners in the planning grant application, we would work with the Coalition in four ways: i) convene and facilitate engagement of the 12 research universities and ORAU in support of the Coalition, identifying assets from the academic coalition and integrating them into the final plan; ii) provide official economic cluster expertise and data in direct relationship with Porter's Institute iii) align the university coalition's existing assets (Tennessee Tech Transfer and Cluster Economic Development Council, Tennessee University-Business Showcase, and CONNECT) with the planning process and final plans; and iv) help identify cluster function needs/gaps and contribute to cluster strategy planning for the region.

In closing, we look forward to working with the Coalition in this important regional planning effort. With its strategic geographic location, university assets, extensive pool of young talent, and economic growth, Nashville offers an exceptional opportunity for a global bio hub. To find market attractors of comparable scale, one must look to Chicago in the north, Miami to the South, Washington in the East, and Denver in the West. Global Action Platform is excited to participate in the Coalition to mobilize universities in the creation of a global bio economic cluster and a more inclusive, resilient, and expanding prosperity in the middle of the nation.

Sincerely,

Dr. Scott T. Massey  
Chairman and CEO

Global Action Platform Massey College of Business, Box 5035 Belmont University Nashville, Tennessee 37212



October 13, 2021

The Honorable Alejandro Y. Castillo  
U.S. Assistant Secretary of Commerce for Economic Development  
U.S. Economic Development Administration

**Subject: Build Back Better Regional Challenge Grant Application of the Middle Tennessee Coalition (Funding Opportunity EDA-HDQ-2021-2006976)**

Dear Hon. Alejandro Y. Castillo,

The Greater Nashville Regional Council (GNRC), northern Middle Tennessee's Economic Development District, is proud to support the Middle Tennessee Coalition, led by Vanderbilt University, in their bid to be awarded funds under the Build Back Better Regional Challenge. GNRC has been involved in the plan development alongside Vanderbilt for weeks to further the biotechnology industry in our region. Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities.

The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and more traditional workforce development. The accelerated advancement of life- and data-science operations in the region will equitably generate revenue, facilitate job creation, and improve societal wellbeing through cluster economics.

GNRC staff have reviewed the proposal drafted for the Build Back Better initiative and fully support the work detailed within. GNRC is excited to work with its member governments and local partners to help facilitate the Phase I planning including:

- Convening the Middle Tennessee Coalition's Steering Committee and Subcommittees to ensure projects recommended for Phase II align with regional economic development goals.
- Engaging Middle Tennessee's diverse populations through the Coalition members like Meharry Medical College and other partners like the Nashville Partnership for Education Research.
- Support outreach for our military veterans, military spouses, and civilian national guard members to engage the significant number of exiting service members who wish to remain in the region.

**Connecting Communities. Empowering People.**

220 Athens Way, Suite 200 • Nashville, TN 37228 • [GNRC.org](http://GNRC.org)

- Target workforce retraining opportunities in our regional coal communities in Humphreys, Stewart, and Montgomery counties to transition these hard workers into other high-value sectors.

GNRC looks forward to continuing its strong relationship with the Economic Development Administration by preparing our region for new, high-tech jobs for people from all backgrounds. Please do not hesitate to reach out to me at [mskipper@gnrc.org](mailto:mskipper@gnrc.org) should you have any questions.

Sincerely,



Michael Skipper, AICP  
Executive Director

Cc: Andrew Berke, Vanderbilt University  
George Wilson, New Ventures Officer, Vanderbilt University





500 11th Avenue North, Suite 200  
Nashville, Tennessee 37203  
615.743.3000

[nashvillechamber.com](http://nashvillechamber.com)

Date: October 19<sup>th</sup>, 2021

To: U.S. Department of Commerce, Economic Development Administration

Re: Build Back Better Regional Challenge  
Application of the Middle Tennessee Coalition

This letter of support is submitted by the Nashville Area Chamber of Commerce in support of the Middle TN Coalition's application for the Build Back Better Regional Challenge (BBB). We believe the life- and data-science facilities, in combination with the proposed entrepreneurial support and workforce development, will accelerate and incentivize economic activity among researchers, foster entrepreneurship and business startups, accelerate the development of a regional infrastructure to support entrepreneurs and new businesses, and facilitate future job creation and economic growth as envisioned by EDA.

The Nashville Chamber is a trade organization made up of businesses who are its members. The Nashville Chamber's purpose is to create economic prosperity by facilitating community leadership. We support businesses in the community and promote the economic health of the region. One of the most important factors in promoting economic health is to assist in the growth and diversification of the economy – especially in the growth of sectors that will be vibrant and create wealth to be equitably shared with our community. One of the smartest ways to do that is to align and leverage resources that exist in the community. Vanderbilt has done very well to bring those resources together in the Coalition.

The BBB proposal will promote the life- and data-science sectors, sectors that we think will promote the further growth of technology businesses in the region. Furthermore, we believe the investments and alignment of local resources in this proposal will act to mature these sectors into strong economic growth clusters. This will provide a unique opportunity for our local companies in these two sectors, as well as the largest concentration of health care services companies in the nation, to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are committed to work with the Middle TN Coalition in growing and promoting life and data sciences. This is a primary component of our strategic plan for equitable and stable development of economic prosperity. We are dedicated to supporting the proposed planning activities through our own involvement as well as the involvement of our members. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ralph Schulz'.

Ralph Schulz  
President & CEO



## METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

JOHN COOPER  
MAYOR

OFFICE OF THE MAYOR  
METROPOLITAN COURTHOUSE  
NASHVILLE, TENNESSEE 37201  
PHONE: (615) 862-6000  
EMAIL: [mayor@nashville.gov](mailto:mayor@nashville.gov)

Date: October 13<sup>th</sup>, 2021

To: U.S. Department of Commerce, Economic Development Administration

Re: Build Back Better Regional Challenge  
Application of the Middle TN Coalition

This letter of support is submitted by *the Nashville Mayor's Office* in support of the Middle TN Coalition's application for the Build Back Better Regional Challenge (BBB). We believe the life- and data-science facilities, in combination with the proposed entrepreneurial support and workforce development, will accelerate and incentivize economic activity among researchers, foster entrepreneurship and business startups, accelerate the development of a regional infrastructure to support entrepreneurs and new businesses, and facilitate future job creation and economic growth as envisioned by EDA.

This administration is committed to developing human capital and expanding economic opportunity to all Davidson County neighborhoods. We must continue efforts to grow the local economy while also ensuring that more residents and communities within Nashville are able to participate in the growth and prosperity of our city. We will continue to recruit and retain businesses that will create new, high-quality jobs for residents. At the same time, this administration will help connect citizens from every part of the county to programs designed to promote entrepreneurship and small business ownership, including enhancing our creative economy and enhancing economic opportunities for minorities.

The BBB proposal will promote the life- and data-science sectors, sectors that we think will promote the further growth of technology businesses in the region. Furthermore, we believe the investments and alignment of local resources in this proposal will act to mature these sectors into strong economic growth clusters. This will provide a unique opportunity for our local companies in these two sectors, as well as the largest concentration of health care services companies in the nation, to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Middle TN Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities





## **METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY**

**JOHN COOPER  
MAYOR**

**OFFICE OF THE MAYOR**  
METROPOLITAN COURTHOUSE  
NASHVILLE, TENNESSEE 37201  
PHONE: (615) 862-6000  
EMAIL: [mayor@nashville.gov](mailto:mayor@nashville.gov)

through our own involvement as well as the involvement of our members. We urge the federal government to approve their application.

Please do not hesitate to call us if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "CDP", is written over a horizontal line.

Courtney D. Pogue, CEcD, CRE  
Director of Economic and Community Development  
Office of Mayor John Cooper  
Metropolitan Government of Nashville and Davidson County



# METRO NASHVILLE PUBLIC SCHOOLS

October 15, 2021

To Whom It May Concern:

Metro Nashville Public Schools (MNPS) enthusiastically submits this letter of support for the Middle Tennessee Lifeworks application for the Build Back Better Regional Challenge Grant. We are excited about the near-term and long-term impact the Build Back Better partnership and life science and data science clusters will have on our students and region.

Metro Nashville Public Schools serves more than 80,000 students in the Metropolitan-Davidson County area through more than 160 schools including traditional, magnet and charter schools. As a part of Nashville-Davidson County Metropolitan Government, we work closely with the Mayor and Metro Council and key partners on challenges and opportunities impacting students and families including economic development and talent pipeline opportunities and challenges. Our goal is every student known, inspired, and connected to a pathway of success.

MNPS has a strong history of partnering to improve outcomes for students and families in our community. We collaborate to provide real-world learning opportunities for students throughout their K-12 experience, and we recognize and own our role in connecting students to thriving wage career paths in our region. Through the Academies of Nashville, we partner with higher education, business, and community-based organizations to provide authentic exposure to careers and postsecondary opportunities. We also partner with the Nashville Area of Chamber of Commerce on talent pipeline initiatives such as New Skills Ready which we are using to build systems and structures that prepare students for high-wage, in-demand jobs. Life science and data science pathways are key areas of need, and creation of regional clusters would provide much needed opportunity for our students and community. MNPS and the coalition are well-positioned to act on the vision and goals of the Build Back Better challenge and proposal.

MNPS has long-standing relationships and partnerships with Vanderbilt University. Our strong history of working together to benefit our students and community will not only support the consortium but help supercharge its work and impact.

We are excited to engage with the Coalition's activities and are fully committed to doing our part to realize the promise and potential for our students and community.

Sincerely,

Dr. Keri Randolph  
Chief Strategy Officer



## CITY OF CLARKSVILLE

**MAYOR JOE PITTS**

City Hall  
One Public Square  
Clarksville, TN 37040

OFFICE 931.645.7444  
FAX 931.552.7479  
joe.pitts@cityofclarksville.com

October 11, 2021

US Economic Development Administration  
Build Back Better Regional Challenge Grant  
*Application of the Vanderbilt University Coalition*

Dear Sir/Madam:

I am pleased to offer my highest recommendation of the enclosed application by the Vanderbilt University Coalition to create a regionally focused strategy and framework to revitalize the region's economy and reinforce resiliency by expanding new economic drivers throughout our state.

The brand of Vanderbilt University is well deserved, long established and highly regarded throughout the nation and globally. The institution's pioneering work in health care, engineering, technology and education gives the United States a firm hold on innovation and entrepreneurship. The Coalition established by the University for this grant program reaches across multiple business disciplines, county borders, and reinforces a stated interest in working with other regional colleges and universities that are well established in the cities and counties that are part of the regional coalition.

The City of Clarksville stands ready to assist in this effort to support the Coalition's goals that are consistent with the Comprehensive Economic Development Strategy. Our proximity and strong relationship with Fort Campbell, KY, home to the 101st Airborne Division (Air Assault) and other important tenant units will serve as an important linkage to the growing technology focus of the US Department of Defense.

The application of the Vanderbilt University Coalition will set a new and higher standard for the Build Back Better initiative envisioned by President Joe Biden. I trust you will give this request full and earnest consideration.

Sincerely,

Joe Pitts  
Mayor



MONTGOMERY COUNTY, TN  
ECONOMIC DEVELOPMENT COUNCIL

Clarksville-Montgomery County Convention & Visitors Bureau • Clarksville Area Chamber of Commerce  
Clarksville-Montgomery County Industrial Development Board

October 14, 2021

US Economic Development Administration  
Build Back Better Regional Challenge Grant  
*Application of the Vanderbilt University Coalition*

Dear Grant Review Committee,

I offer my full support for the application provided by the Vanderbilt University Coalition to craft a regional focused framework to prepare our workforce for the challenges and opportunities that are emerging across our wide-ranging community.

Vanderbilt is a national standard bearer as an academic university. In addition, the University is a leader in developing processes and training that positively impact the degree and certificate producing institutions in our region. Always thinking strategically ahead, Vanderbilt stays on the leading edge of what industry is requiring from its workforce.

For economic recruitment, a leading University system with strategic vision is vital to prove to a business partner that our region is a location to build, expand and achieve their goals. Vanderbilt has been a regional leader and this grant will assist them in adapting our healthcare, engineering/ technology, and business-related workforce for these evolving sectors.

The Comprehensive Economic Development Strategy for our Region is focused on workforce development and this grant with the vision from Vanderbilt University will prepare our community for the next generation of job creation. In addition to our exceptional university system, our community is endowed with a great public school system and a substantial number of Soldiers that end their military service from Fort Campbell every year. This grant will provide the resources and vision to transition these students and former Soldiers into opportunities that will propel them and the community to new careers that will support them and their Families.

The Economic Development Council for Clarksville-Montgomery County stands in strong support and future alliance with the Vanderbilt Coalition for this grant application and achieving the grants objectives. If I can be of any further assistance through additional support, please do not hesitate to reach out to me at [buckd@clarksville.tn.us](mailto:buckd@clarksville.tn.us) or my office phone of (931) 245-4333.

Sincerely,

A handwritten signature in blue ink, appearing to read "Buck Dellinger".

Buck Dellinger  
CEO/President  
Clarksville-Montgomery County  
Economic Development Council





October 11, 2021

To: U.S. Economic Development Administration  
Re: Build Back Better Regional Challenge Grant  
Application of the Middle Tennessee Coalition

I am pleased to express my support of the Middle Tennessee Coalition, led by Vanderbilt University, in their bid to be awarded funds under the Build Back Better Regional Challenge. I believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life-and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and more traditional workforce development. The accelerated advancement of life-and data-science operations in the region will equitably generate revenue, facilitate job creation, and improve societal wellbeing through cluster economics.

The equity considerations highlighted by the Coalition are high priorities for Tennessee. There is a clear focus on engaging Middle Tennessee's diverse populations, as evidenced by the EDI initiatives of the Coalition members like Meharry Medical College and other partners like the Nashville Partnership for Education Research. The inclusion of opportunities for our military veterans, military spouses, and civilian national guard members is a priority for our state as well and represents a great prospect to engage the significant number of exiting service members who wish to remain in the

region. The targeted focus of workforce retraining opportunities in our regional coal communities in Humphreys, Stewart, and Montgomery counties will be a valuable asset in transitioning these hard workers into other high-value sectors. The Coalition's intentionality in this regard will provide a unique opportunity for recruitment in these demographics, which will result in the diversification and strengthening of our talent, new venture, and technology pipelines in the region.

I am eager to work with the Middle TN Coalition in advancing life and data sciences, and I am dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve their application.

A handwritten signature in cursive script that reads "Ted Moore".

Ted Moore, Executive Director  
Humphreys County Economic Development Council  
101 West Main Street  
P. O. Box 218  
Waverly, Tennessee 37185  
731-439-2042  
director@humphreyscountytncdc.com





# HUMPHREYS COUNTY

Jessie R. Wallace, County Executive  
Room 1, Rawlings Building  
102 Thompson Street  
Waverly, Tennessee 37185

Office: 931-296-7795  
Home: 931-535-3300  
Fax: 931-296-5011  
Email: [jwallace@humphreystn.com](mailto:jwallace@humphreystn.com)

October , 2021

To: U.S. Economic Development Administration  
Re: Build Back Better Regional Challenge Grant  
Application of the Middle TN Coalition

I am pleased to express my support of the Middle Tennessee Coalition, led by Vanderbilt University, in their bid to be awarded funds under the Build Back Better Regional Challenge. I believe that Vanderbilt is uniquely positioned to support entrepreneurs and new ventures through their life- and data-science facilities, thereby advancing economic development within Nashville and the surrounding communities. The Coalition's objective is to promote the EDA's vision through employment diversification and economic prosperity. Expansion of life sciences will stimulate economic growth among researchers via both entrepreneurship and more traditional workforce development. The accelerated advancement of life- and data-science operations in the region will equitably generate revenue, facilitate job creation, and improve societal wellbeing through cluster economics.

The equity considerations highlighted by the Coalition are high priorities for Tennessee. There is a clear focus on engaging Middle Tennessee's diverse populations, as evidenced by the EDI initiatives of the Coalition members like Meharry Medical College and other partners like the Nashville Partnership for Education Research. The inclusion of opportunities for our military veterans, military spouses, and civilian national guard members is a priority for our state as well and represents a great prospect to engage the significant number of exiting service members who wish to remain in the region. The targeted focus of workforce retraining opportunities in our regional coal communities in Humphreys, Stewart, and Montgomery counties will be a valuable asset in transitioning these hard workers into other high-value sectors. The Coalition's intentionality in this regard will provide a unique opportunity for recruitment in these demographics, which will result in the diversification and strengthening of our talent, new venture, and technology pipelines in the region.



I am eager to work with the Middle TN Coalition in advancing life and data sciences, and I am dedicated to supporting the proposed initiatives through our involvement. We urge the federal government to approve their application.

Please do not hesitate to call if you have any questions.

Sincerely,



Jessie R. Wallace  
Humphreys County Executive



## *Montgomery County Government*

Jim Durrett  
County Mayor

1 Millennium Plaza, Suite 205  
P.O. Box 368  
Clarksville, Tennessee 37041-0368

Phone: (931) 648-5787  
Fax: (931) 553-5177  
mayordurrett@mcgtn.net

October 15, 2021

U.S. Economic Development Administration  
Build Back Better Regional Challenge Grant  
Application of the Vanderbilt Coalition

To Whom It May Concern:

I want to take this opportunity to offer my full and complete support to the Vanderbilt Coalition's Build Back Better Regional Grant application. The collaborative nature of Vanderbilt's approach to this opportunity is sure to create a significant positive impact for not only Montgomery County, but the greater Middle Tennessee area.

Over many years, Vanderbilt has demonstrated an unparalleled ability to create positive impacts in their classrooms and in communities, especially within Middle Tennessee. This proven track record places Vanderbilt in an unparalleled position to establish the needed partners to create the conditions for growth within this region.

As the Vanderbilt Coalition looks at the development of Biotechnology opportunities, it does so at a time of growing economic development in the state of Tennessee. This will bring a diversity to the current economic landscape, which will serve to add stability to the regional economy.

This effort also looks to capitalize upon the potential benefits that can be gained from the strong presence of military veterans separating from active-duty military service from Fort Campbell, as well as the active-duty military spouse population. For years, Montgomery County has prided itself on our inclusion of these populations in our community and we strongly believe that with expanded employment opportunities more of these families will chose to remain in Montgomery County and Middle Tennessee after their time in uniform is completed. That continued presence will complement the existing labor force and strengthen our community in many other ways.

Montgomery County is confident in the path to development that is being built within this Coalition and we stand ready and willing to assist in any way possible as it will certainly result in the betterment of our community.

Sincerely,

Jim Durrett  
Montgomery County Mayor



STATE OF TENNESSEE  
DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

220 French Landing Drive  
Nashville, TN 37243

(615) 741-6642

Bill Lee  
GOVERNOR

Jeff McCord  
COMMISSIONER

Date: October 19<sup>th</sup>, 2021

To: U.S. Department of Commerce, Economic Development Administration

From: Jeff McCord, Commissioner

A handwritten signature in blue ink, appearing to read "JDM", is written over the name "Jeff McCord" in the "From:" line.

Re: Build Back Better Regional Challenge  
Application of the Middle TN Coalition

This letter of support is submitted by the Tennessee Department of Labor and Workforce Development in support of the Middle Tennessee Coalition's application for the Build Back Better Regional Challenge (BBB). While life and data science facilities are needed in the region, we are most excited by the proposed entrepreneurial support and workforce development activities, especially with the focus on some of our state's most vulnerable and underserved communities.

The equity considerations highlighted by the Coalition are high priorities for Tennessee. There is a clear focus on engaging metro Nashville's diverse populations, as evidenced by the EDI initiatives of the Coalition members and other partners. The inclusion of opportunities for our military veterans, military spouses, and civilian national guard members is a priority for our department and represents a great prospect to engage the significant number of exiting service members who wish to remain in the region. The targeted focus of workforce retraining opportunities in our regional coal communities in Humphreys, Stewart, and Montgomery counties will be a valuable asset to transition these hard workers into other sectors.

The Tennessee Department of Labor and Workforce Development has a number of different divisions and programs that provide a vast array of services while combining to support jobs and workforce development in Tennessee. We anticipate the Workforce Services Division and Adult Education Division will interface frequently with the Coalition's proposed activities, ensuring Tennesseans have access to quality, high income positions.

We are looking forward to working with the Middle Tennessee Coalition in growing and promoting growth in jobs, wages, and participation in the life and data science cluster. We are committed to supporting the proposed activities, and we recommend the federal government approve this application.

JIM COOPER  
5TH DISTRICT, TENNESSEE  
HOUSE ARMED SERVICES COMMITTEE  
SUBCOMMITTEE ON STRATEGIC FORCES –  
CHAIRMAN  
SUBCOMMITTEE ON INTELLIGENCE, EMERGING  
THREATS AND CAPABILITIES  
SUBCOMMITTEE ON SEAPOWERS AND PROJECTION  
FORCES  
COMMITTEE ON OVERSIGHT  
AND REFORM  
SUBCOMMITTEE ON NATIONAL SECURITY  
COMMITTEE ON THE BUDGET

**Congress of the United States**  
**House of Representatives**  
Washington, DC 20515

**PLEASE MAIL TO NASHVILLE OFFICE:**  
605 CHURCH STREET  
NASHVILLE, TN 37219-2314  
(615) 736-5295  
FAX: (615) 736-7479  
  
WASHINGTON OFFICE:  
(202) 225-4311  
FAX: (202) 226-1035  
  
WEBSITE: cooper.house.gov

October 15, 2021

Mr. H. Philip Paradise, Jr.  
Regional Director, Atlanta Regional Office  
U.S. Economic Development Administration  
401 West Peachtree Street, NW  
Suite 1820  
Atlanta, GA 30308-3510

**RE: Middle TN Coalition's Build Back Better Regional Challenge Grant Application**

Dear Mr. Paradise,

I am writing to enthusiastically support the Middle Tennessee Coalition's Build Back Better Regional Challenge application.

Nashville is the health care capital of the country. This grant will allow the Middle Tennessee Coalition to draw from local expertise to create an incubator that will help boost the potential of growing biotech, life sciences, and data sciences sectors in the region.

The Coalition's proposal prioritizes 1) supporting entrepreneurs in areas such as biotech, life sciences, and data sciences; 2) creating a jobs pipeline with an emphasis on underserved communities; and 3) developing a long-term plan to grow the number of biotech companies and high-quality jobs.

The Middle Tennessee Coalition, led by Vanderbilt University, is composed of dozens of partners, including universities, nonprofits, local governments, and industry leaders. The impressive list of partners includes some of Tennessee's very best like Meharry Medical College, the largest private historically black institution in the United States solely dedicated to educating healthcare professionals and scientists, and Launch Tennessee, a public-private partnership with a vision to make Tennessee the most startup-friendly state in the nation, as well as dozens of other members and other partners.

The Coalition's expertise in life and data science make it uniquely positioned to lead this effort, support the EDA's mission, and grow an existing biotech cluster into a diverse business and development powerhouse for Middle Tennessee.

Thank you for your consideration of this proposal. Please contact me if you have any questions.

Sincerely,



Jim Cooper  
Member of Congress



Date: October 19<sup>th</sup>, 2021

To: U.S. Department of Commerce, Economic Development Administration

Re: Build Back Better Regional Challenge  
Application of the Middle TN Coalition

This letter of support is submitted by *the Nashville Area Chamber of Commerce* in support of the Middle TN Coalition's application for the Build Back Better Regional Challenge (BBB). We believe the life- and data-science facilities, in combination with the proposed entrepreneurial support and workforce development, will accelerate and incentivize economic activity among researchers, foster entrepreneurship and business startups, accelerate the development of a regional infrastructure to support entrepreneurs and new businesses, and facilitate future job creation and economic growth as envisioned by EDA.

*Urban League of Middle Tennessee (ULMT) is a historic civil rights organization dedicated to economic empowerment, equality, and social justice. The League promotes economic empowerment through education and job training, housing and community development, workforce development, entrepreneurship, health, and quality of life. UMLT is a strategic, influential community partner spearheading education equity, workforce development, economic empowerment, and affordable housing. The Urban League can support an ecosystem that helps African-Americans and others in underserved communities achieve their highest true social parity, economic self-reliance, power, and civil rights by empowering communities and changing lives.*

The BBB proposal will promote the life- and data-science sectors, sectors that we think will promote the further growth of technology businesses in the region. Furthermore, we believe the investments and alignment of local resources in this proposal will act to mature these sectors into strong economic growth clusters. This will provide a unique opportunity for our local companies in these two sectors, as well as the largest concentration of health care services companies in the nation, to meaningfully engage with the technology, talent, and new venture pipelines this initiative will create.

We are anxious to work with the Middle TN Coalition in growing and promoting life and data sciences, and we are committed to supporting the proposed planning activities through our own involvement as well as the involvement of our members. We urge the federal government to approve their application.

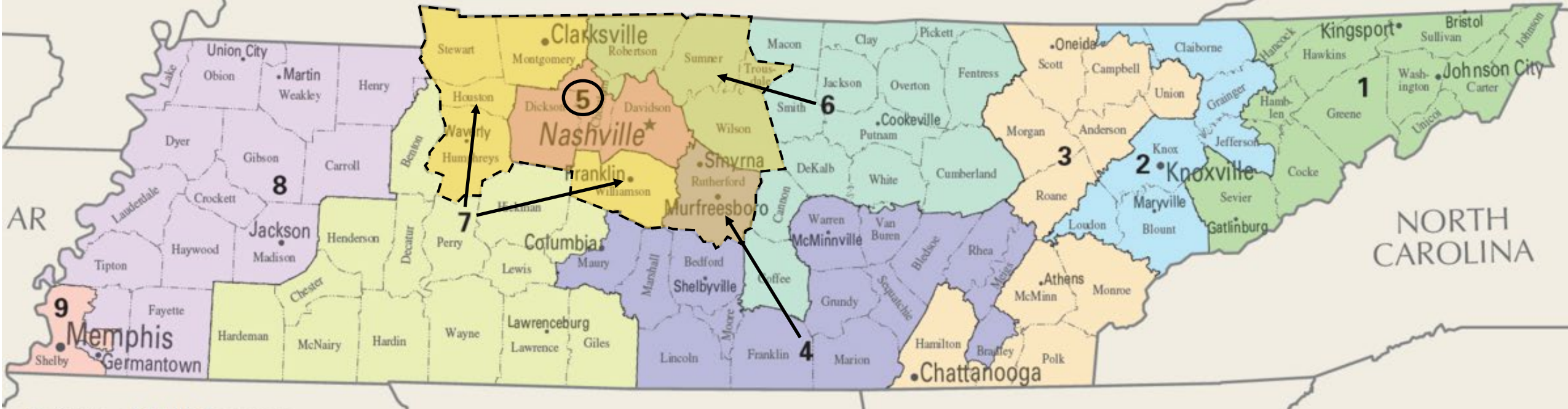
Please do not hesitate to call us if you have any questions.

Sincerely,

Clifton E. Harris  
President and CEO







Personnel - Cost as shown on the Staffing Plan. This will autofill from what is entered on the Staffing Plan tab.				
Total Personnel Costs				\$88,710.75

Fringe - Associated fringe costs for the personnel listed in the staffing plan. This will autofill from what is entered on the Staffing Plan tab.				
Total Fringe Costs				\$21,024.45

Travel - Requirements for travel costs can be found in 2 CFR 200.475.				
Event	Travelers	Purpose		Cost
				\$ -
				\$ -
				\$ -
				\$ -
Total Travel Costs				\$ -

Equipment - Typically exceeds \$5000 per unit cost and has a useful life greater than 1 year. See the definition of equipment at 2 CFR 200.1.				
Equipment	Cost per Unit & Quantity	Purpose		Cost
				\$ -
				\$ -
Total Equipment Costs				\$ -

Supplies - Supplies must be itemized and must correlate to the purpose of the award. Miscellaneous is not sufficient. See the definition of supplies at 2 CFR 200.1.				
Supplies	Cost per Unit & Quantity	Purpose		Cost
				\$ -
				\$ -
				\$ -
				\$ -
Total Supply Costs				\$ -

Contractual - Contractors are subject to procurement standards in 2 CFR 200.317 - 200.327. All Subawards to eligible recipients should be noted under this line item as well. Please denote in the second column if this line item applies to a "subaward" or "contractor". For guidance on these two distinct roles, see 2 CFR 200.331. (Please note, this section will not autopopulate from the subawardees tab, but please also fill out the subawardees time for subawards - not for contractual).				
Organization Name (if applicable)	Subaward or Contractor?	Details of services being provided		Cost
Greater Nashville Regional Council	Subaward	Steering Committee business coordination assistance, grant writing support		\$ 35,000.00
LaunchTN	Subaward	Project 1 lead planning and support		\$ 10,000.00
Meharry Medical College	Subaward	Project 2 co-lead planning		\$ 25,000.00
VUMC	Subaward	Project 2 co-lead planning		\$ 25,000.00
Life Science TN	Subaward	Project 2 support		\$ 10,000.00
Nashville Tech Council	Subaward	Project 3 lead planning and support		\$ 15,000.00
Nashville State	Subaward	Project 4 lead planning		\$ 25,000.00
BioTN	Subaward	Project 4 support		\$ 10,000.00
Global Action Platform	Subaward	Project 5 cluster and economic impact analysis		\$ 25,000.00
GEM Consortium	Subaward	EDI best practice planning		\$ 15,000.00
To Be Determined	Contractor	Economic development consultants		\$ 25,000.00
To Be Determined	Contractor	Additional grant writing consultants		\$ 25,000.00
Total Contractual Costs				\$ 245,000.00

Construction - Not an allowable expense under the Build Back Better Regional Challenge NOFO. Please see other EDA funding opportunities for construction-related expenses.				
Construction	Quantity	Purpose		Cost
	N/A	N/A		\$ -
Total Construction Costs				\$ -

Other - any other costs that do not fit in previous categories.				
Other	Quantity	Purpose		Cost
Steering Committee Meetings	3	Meeting space reservations for committee meetings		\$ 9,000.00
				\$ -
				\$ -
				\$ -
Total Other Costs				\$ 9,000.00



## Project Narrative File(s)

---

**\* Mandatory Project Narrative File Filename:**

---

To add more Project Narrative File attachments, please use the attachment buttons below.

## Application for Federal Assistance SF-424

\* 1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

\* 2. Type of Application:

- ☒ New  
☐ Continuation  
☐ Revision

\* If Revision, select appropriate letter(s):

\* Other (Specify):

\* 3. Date Received:

10/19/2021

4. Applicant Identifier:

Vanderbilt University

5a. Federal Entity Identifier:

GTNBNWXJ12D5

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

### 8. APPLICANT INFORMATION:

\* a. Legal Name:

Vanderbilt University

\* b. Employer/Taxpayer Identification Number (EIN/TIN):

62-0476822

\* c. Organizational DUNS:

9657171430000

### d. Address:

\* Street1:

1207 17th Ave S

Street2:

Suite 105

\* City:

Nashville

County/Parish:

Davidson

\* State:

TN: Tennessee

Province:

\* Country:

USA: UNITED STATES

\* Zip / Postal Code:

37212-2102

### e. Organizational Unit:

Department Name:

Office of Research

Division Name:

CTTC

### f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Mr.

\* First Name:

George

Middle Name:

Henry

\* Last Name:

Wilson

Suffix:

III

Title:

New Ventures Officer

Organizational Affiliation:

Staff

\* Telephone Number:

615-322-5477

Fax Number:

\* Email:

george.wilson@vanderbilt.edu

## Application for Federal Assistance SF-424

### \* 9. Type of Applicant 1: Select Applicant Type:

O: Private Institution of Higher Education

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

### \* 10. Name of Federal Agency:

Department of Commerce

### 11. Catalog of Federal Domestic Assistance Number:

11.307

CFDA Title:

Economic Adjustment Assistance

### \* 12. Funding Opportunity Number:

EDA-HDQ-ARPBBS-2021-2006976

\* Title:

FY 2021 American Rescue Plan Act Build Back Better Regional Challenge

### 13. Competition Identification Number:

2996511

Title:

EDA-2021-ARPABBSRC - Phase 1

### 14. Areas Affected by Project (Cities, Counties, States, etc.):

1237-Middle TN Districts for BBB.pdf

Add Attachment

Delete Attachment

View Attachment

### \* 15. Descriptive Title of Applicant's Project:

Middle Tennessee Lifeworks Facilities

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

**Application for Federal Assistance SF-424****16. Congressional Districts Of:**\* a. Applicant \* b. Program/Project 

Attach an additional list of Program/Project Congressional Districts if needed.

**17. Proposed Project:**\* a. Start Date: \* b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="482,236.49"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="482,236.49"/>

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ \*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title: \* Telephone Number:  Fax Number: \* Email: \* Signature of Authorized Representative:  \* Date Signed:

## Budget Narrative File(s)

---

\* **Mandatory Budget Narrative Filename:** 1234-6\_BBB\_Middle TN\_Budget Narrative - Final.pdf

Add Mandatory Budget Narrative

Delete Mandatory Budget Narrative

View Mandatory Budget Narrative

---

To add more Budget Narrative attachments, please use the attachment buttons below.

Add Optional Budget Narrative

Delete Optional Budget Narrative

View Optional Budget Narrative

# DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013

Expiration Date: 02/28/2022

<b>1. * Type of Federal Action:</b> <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. * Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. * Report Type:</b> <input checked="" type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change
--	--	--

**4. Name and Address of Reporting Entity:**  
☒ Prime    ☐ SubAwardee  
 \* Name   
 \* Street 1     Street 2   
 \* City     State     Zip   
 Congressional District, if known:

**5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:**

<b>6. * Federal Department/Agency:</b> <input style="width: 150px;" type="text" value="Dept of Commerce"/>	<b>7. * Federal Program Name/Description:</b> <input style="width: 150px;" type="text" value="Economic Adjustment Assistance"/>  CFDA Number, if applicable: <input style="width: 80px;" type="text" value="11.307"/>
---	--

<b>8. Federal Action Number, if known:</b> <input style="width: 150px;" type="text"/>	<b>9. Award Amount, if known:</b> \$ <input style="width: 100px;" type="text"/>
--	--

**10. a. Name and Address of Lobbying Registrant:**  
 Prefix  \* First Name  Middle Name   
 \* Last Name  Suffix   
 \* Street 1  Street 2   
 \* City  State  Zip

**b. Individual Performing Services** (including address if different from No. 10a)  
 Prefix  \* First Name  Middle Name   
 \* Last Name  Suffix   
 \* Street 1  Street 2   
 \* City  State  Zip

**11.** Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

**\* Signature:**   
**\*Name:** Prefix  \* First Name  Middle Name   
 \* Last Name  Suffix   
**Title:**     **Telephone No.:**     **Date:**

**Federal Use Only:**

Authorized for Local Reproduction  
 Standard Form - LLL (Rev. 7-97)

## AUTHORIZED STAFFING PLAN

Staffing Plan - Budget					
<u>Name</u>	<u>Annual Salary/Rate</u>	<u>% of Annual Hours for project</u>	<u>Annual \$ from Award</u>	<u>Number of Years</u>	<u>Total Cost by Employee</u>
George Wilson	\$96,900	60%	\$58,140	0.50	\$29,070.00
Economic Officer hire	\$200,000	75%	\$150,000	0.30	\$45,000.00
Daniel Culbreath	\$184,000	15%	\$27,600	0.30	\$8,280.00
Marcy Singer Gabella	\$141,350	15%	\$21,203	0.30	\$6,360.75
<b>Total Personnel Costs</b>					<b>\$88,710.75</b>
<b>Total Fringe Costs (Please Provide the Basis for Fringe Calculations)</b>				23.70%	<b>\$21,024.45</b>

Staffing Plan - Narrative		
<u>Name</u>	<u>Title</u>	<u>Project Responsibilities</u>
George Wilson	New Ventures Officer	Project Manager
Economic Officer hire	Regional Economic Competitiveness Officer	Central coordinator of new and existing resources in the region and proposal lead
Daniel Culbreath	Assistant Vice Chancellor for Government Relations	Community point of contact for many member institutions outside of the Coalition
Marcy Singer Gabella	Professor in the Practice of Teaching	Education and workforce training expert



