St. Louis Tech Triangle: Build Back Better Regional Challenge, Phase 2 Coalition Lead: Greater St. Louis, Inc.

SYNOPSIS

After decades of economic underperformance, population stagnation, and racial inequity, St. Louis civic leaders have coalesced to set a strong vision for the region's future. With the *STL 2030 Jobs Plan* as the foundation, St. Louis leaders are committed to creating jobs, diversifying the economy, closing racial and locational disparities, and transforming our region into a national model for inclusive economic growth. This vision leverages existing strengths in bioscience and geospatial clusters to re-orient traditional manufacturing and production strengths toward advanced manufacturing of the future and advancing resiliency and long-term regional recovery. Our regional biosciences, geospatial, and advanced manufacturing clusters comprise the "St. Louis Tech Triangle".

Our Tech Triangle proposal, years in the making, recognizes the importance of converging three of our region's leading industry clusters – biosciences, geospatial, and advanced manufacturing. Leveraging their strengths with a laser focus on technology, innovation, talent, and production will yield transformative results, especially knowledge synergies that will drive productivity growth across our entire economy. Overlaying the Tech Triangle growth clusters will be direct and indirect partners that will prepare the workforce to meet the needs of next-generation industries and employers and sustainable systems that link training with career paths; grow entrepreneurial ecosystems; and catalyze development in disinvested communities that promotes broad-based prosperity by supporting innovation and emerging technologies.

These goals and actions support multiple economic development strategies across 15 bi-state counties, the metro-scale *STL 2030 Jobs Plan*, and the St. Louis City and St. Louis County Comprehensive Economic Development Strategy (CEDS). The *STL 2030 Jobs Plan*, funded by the business community and authored by renowned economic development expert Bruce Katz, was released in 2021 after extensive stakeholder interviews, qualitative research, and a quantitative diagnostic of the metro's economy. The *STL 2030 Jobs Plan* sets inclusive economic growth as a "north star" for the region's development and calls for making the St. Louis metro a hub for next generation industries and technologies. Greater St. Louis, Inc., lead applicant described below, has accountability to steward the *STL 2030 Jobs Plan*.

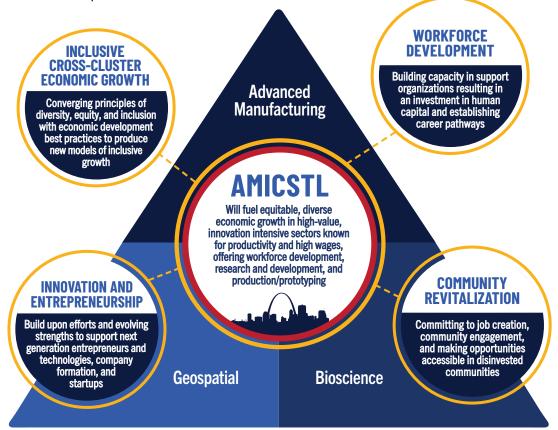
The St. Louis City and County CEDS goals furthered through the Tech Triangle include, but are not limited to: 2.2 Continue providing resources to nurture high growth startups and technology firms in the region; 2.4 Expand opportunities for minority and women owned businesses; 3.1 Support and/or target business retention and expansion activities; 4.1 Develop and expand workforce development programs that focus on technical education, especially for individuals living in disadvantaged communities; 4.3 Develop systems and partnerships that better link educational resources with employment opportunities; 4.6 Develop comprehensive STEM and early education resources and curricula to create a prosperous and highly adaptable workforce. Additionally, these Southwestern Illinois CEDS goals will be advanced: 3a Improve quality and availability of training and retraining programs from areas schools and public service providers in order to foster skill development; 3h Diversify the job market by increased marketing of workforce programs, developing affordable housing, and improving accessibility to jobs and training. Alignment with numerous EDA priorities is also furthered, especially equity and recovery and resilience by placing critical assets in disinvested neighborhoods that will contribute to long-term economic opportunities for historically excluded populations.

In alignment with these economic development plans, the Tech Triangle will leverage BBBRC funds to accelerate the full potential of three leading industry clusters. Energizing collaboration across the clusters through a hub-and-spoke model will drive inclusive economic growth and resiliency, especially in historically excluded communities (HECs). Collectively, the hub and spokes will provide strong anchors for the region and will result in accelerated metro job and wealth creation and business formation.

Led by public-private partners Greater St. Louis, Inc. (GSL) and the St. Louis Economic Development Partnership (SLEDP), and inclusive of bi-state coalition members and cluster partners, the Tech Triangle will leverage existing backbone organizations and complementary initiatives BioSTL, the Regional Advanced Manufacturing Partnership (RAMP), and the GeoFutures Coalition to add capacity to the region's ability to attract funding, promote economic growth, help anchor recovery, and work towards long-term sustainability.

BioSTL, created over 20 years ago, serves as the 'muscle memory' of transformative change and has advanced the metro's urban and rural leadership and innovative economic growth in the biosciences. RAMP is the unified voice of advanced manufacturers in the 15-county metro. GeoFutures is an initiative to bolster the metro's evolving geospatial sector. These organizations and their members will be cluster partners, innovators, supporters, and employers to sustain cross-cluster governance and implementation.

In addition to BioSTL, RAMP, and GeoFutures, complementary initiatives and organizations driving metrowide economy shaping include Arch Grants, LaunchCode, the MIT Regional Entrepreneurship Acceleration Program, Ranken Technical College, strong aerospace and automotive manufacturing presence (The Boeing Company, GM, and others), and the \$1.7 billion National Geospatial-Intelligence Agency (NGA) West headquarters. The metro is home to the Federal Reserve Bank of St. Louis and eight Fortune 500 companies. The Tech Triangle is supported by and will leverage strong infrastructure regional assets, including: the nation's third-largest inland port; four toll-free interstate highways and the nexus of north-south and east-west interstate systems; six Class 1 railroads; an international airport and a host of regional airports; and access to reliable and cost-effective energy. Within or near the metro are 45 institutions of higher education offering engineering and related technical degrees. The region's cultural, recreational, sports, music, arts, and other amenities combined with affordable housing and low cost of living make the region desirable for entrepreneurs and businesses to flourish.



The geographic and programmatic hub of the Tech Triangle is the *Advanced Manufacturing Innovation Center St. Louis (AMICSTL)*. *AMICSTL* will serve as a regional innovation hub fueling inclusive economic growth in high-value, innovation-intensive Tech Triangle clusters known for cutting edge R&D, productivity, and high wages. It will be located in an historically excluded community (HEC). Its shovel ready construction site is provided by Ranken; The Boeing Company has committed \$5 million of the \$13 million in matching funds. Its construction will be complete in 42-44 months from award date. Upfront commitments validate the interest in and support of AMICSTL, contributing to sustainability.

Connected to AMICSTL as the hub are component spokes of activity that reach across the metro geography to promote **Inclusive Cross-Cluster Coordination**, **Workforce Development**, **Innovation and Entrepreneurship**, and Community Revitalization.

GSL and SLEDP will co-lead *Inclusive Cross-Cluster Economic Growth and Coordination* aligning current and future Tech Triangle partners over the life of the grant period and beyond. Cluster development will foster inclusive opportunities for Black, Brown, and women-owned companies; provide inclusive and equitable networking opportunities including for students, workforce training participants, and others throughout the region, including more rural MSA counties; and support entrepreneurship acceleration and investor matching. Cluster development will be driven with partners throughout the region, including counties of St. Charles, St. Clair, and Jefferson. GSL and SLEDP will lead the coalition governance efforts by driving strategy development, equitable engagement, and evaluation across Tech Triangle Partners and linking cluster backbone organizations to advance cross-cluster collaboration.

Our Workforce Development spoke has several partners to ensure workers have up-to-date skills to meet Tech Triangle cluster demands. All partners have a minimum 20% match for requested EDA funds to support 'spoke' efforts and numerous employers will partner to offer participants internships, apprenticeships, and employment opportunities. Rung for Women's four-year performance period will use BBBRC funds to identify talent gaps for advanced manufacturing careers; build training and credentialing programs with higher education partners to fill gaps; and recruit, prepare, and place women (70% women of color) in jobs with local cluster employers. St. Louis Community College and Southwestern Illinois College will begin construction of new training facilities and BBBRC funding will support new equipment to ensure relevant training as they each expand existing programming and create new programs to provide quick credentials that support the Tech Triangle clusters. With ongoing project construction, equipment will be acquired as available over the life of the grant. Gateway Global's 14-month performance period will train youth and adult participants in new and next generation technology skills at a new campus in North St. Louis, an HEC neighborhood at the center of the burgeoning geospatial industry hub. EDA funds will be used to renovate a building to provide classrooms and apprenticeship workspaces where participants will earn industry recognized credentials and college credits; prep for employability and security clearance; gain hands-on experience through registered apprenticeships; and match with industry employers.

Over a three-year performance period, four co-applicants -- <u>BioSTL</u>, <u>WEPOWER</u>, <u>HBCU Harris-Stowe State University</u>, and <u>Small Business Empowerment Center</u> -- will lead the *Innovation and Entrepreneurship* 'spoke' by expanding entrepreneurial and business development services linked to the region's advanced manufacturing and bioscience growth clusters with a focus on firms owned by historically excluded populations. EDA funds and local match will be used to help build networks with advisors, investors, and customers and executing proof of concept projects. To further build upon the bioscience cluster and grow the advanced manufacturing cluster, the Active Pharmaceutical Ingredient Innovation Center (APIIC) @ Cortex over a three-year performance period will leverage EDA funds to

address critical gaps in essential medicine supply chain by fostering coordination among a transdisciplinary network of companies, academic and research institutions, and startups and driving projects that enable the commercialization of advanced continuous flow manufacturing technology. APIIC will also partner with others to provide critical workforce development programming to prepare diverse candidates for equitable opportunities in the biomanufacturing active pharmaceutical ingredient supply chain.

St. Louis Development Corporation, through construction of the MLK Innovation Center will contribute to the Community Revitalization 'spoke' with its location in an HEC adjacent to the NGA development and AMICSTL. Over a 32-month performance period and beyond, the Center will provide below market-rate rent space for Tech Triangle clusters' entrepreneurs and small businesses emerging from incubator and accelerator programs. St. Louis City has committed \$5 million to leverage with the EDA funding to this building renovation. This neighborhood transforming and locational equity placemaking effort, adjacent to AMICSTL and near NGA West, will fill an identified gap in collaborative office space. It will also shift the innovation ecosystem northward into disinvested parts of the city and further regional cooperation by building a geographically wider network.

The component partners and regional leaders will develop a shared method by which partners establish, monitor, and share results and progress of the Tech Triangle. Overall, Tech Triangle metrics will include the level of civic and industry involvement and growth of the three clusters; diversity of the workforce and creation of new jobs; new startups; investment in M/WBEs; and regional population and GDP. In addition, each component has identified in submissions additional measures and metrics and further timeline details.

LOCATION/REGION

The Tech Triangle spans the St. Louis, MO-IL metropolitan statistical area (MSA): St. Louis City (29510), Franklin (29071), Jefferson (29099), Lincoln (29113), St. Charles (29183), St. Louis (29189), and Warren (29219) Counties in Missouri, and Bond (17005), Calhoun (17013), Clinton (17027), Jersey (17083), Macoupin (17117), Madison (17119), Monroe (17133), and St. Clair (17163) Counties in Illinois.

While it has many rich assets, the St. Louis metro area is an older industrial economy where long-term distress has been exacerbated by COVID-19. As a result of COVID-19, the number of employed persons in the St. Louis region fell by over 166,000. This decline surpassed 23 years of employment growth (154,100). Moody's Analytics forecasts that the St. Louis MSA will not return to 2019 employment levels until 2026, while the U.S. is forecasted to do so by 2022. Moody's 2020-2025 employment forecast ranks the St. Louis MSA 397th out of all 410 U.S. MSAs. Between 2010-2020, the St. Louis MSA population grew by just 0.55%, compared to 6.5% at the national level (13 times faster). See component applications for further details. By any number of indicators, racial disparities continue to have an outsized impact on historically excluded populations and the ability for economic prosperity to be shared broadly. The Tech Triangle efforts aims to reverse this longstanding trend.

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Unemployment Rate		Poverty Rate Families		Poverty Rate All People		Renter-Occupied Housing		Owner-Occupied Housing		Bachelor's Degree +	
Black/African American	White	Black/African American	White	Black/African American	White	Black/African American	White	Black/African American	White	Black/African American	White
7.6%	3.1%	18.5%	4.4%	21.3%	7.1%	61%	22.7%	39%	77.3%	20.1%	38.1%

Private, Public, and Philanthropic Financial Commitments

FINANCIAL	. COMMITMENTS
Ameren	\$500,000 to support AMICSTL
AMICSTL	\$13 million in matching funds (includes a \$5 million commitment from Boeing)
Benjamin F. Edwards	\$10,000 for Harris-Stowe State University entrepreneurship program
BioSTL	\$1,453,392 in matching funds
Greater St. Louis, Inc.	\$600,000 matching funds
CommonFutures	\$500,000 for WEPOWER investment capital
Harris Stowe State University	\$1 million in matching funds
Midland States Bank	\$75,000 for Harris-Stowe State University
	\$1,000,000 in scholarships
Ranken Technical College	Providing construction site for AMICSTL and direct technical support for the fully operational manufacturing/production facility estimated at \$8 million
Rung for Women	\$327,078 in matching funds
Small Business Empowerment Center	\$625,000 in matching funds
Southwest Illinois College	\$4,336,800 in matching funds and separately providing \$15.5 million for facility construction
	\$5 million matching funds to support MLK Innovation District
St. Louis City	\$500,000 in matching funds to support Gateway Global's new campus cluster project
St. Louis Community College	\$1 million matching funds for equipment and separately providing over \$40 million for facility construction
St. Louis Economic Development Partnership	\$200,000 in matching funds
WEPOWER	\$625,532 in matching funds

HIRING COMMITMENTS

Total Titanium
Red Bud Industries, Inc.
Chelar Tool and Die, Inc.
R&S Machining, Inc.
Patterson Mold and Tool, LLC

IN-KIND CONTRIBUTIONS					
Missouri Governor Parson	\$18 million in FY23 budget for complementary project St. Charles Community College's Workforce Technical and Transformation Campus; Fast Track Workforce Incentive Grant Program				
University of Missouri – St. Louis	Co-lead AMICSTL R&D				
Saint Louis University	Co-lead AMICSTL R&D				
Harris Stowe State University	Provide AMICSTL up to 100 hours annually of pro bono consulting and programming valued at \$25,000 per year				
MidAmerica St. Louis Airport	\$7 million plus for airport expansion to facilitate transportation to the MidAmerica St. Louis Aerospace Industrial Park for advanced manufacturing				
Cortex	\$480,000 in-kind match				

SUSTAINABILITY

The Tech Triangle effort has sustainability built into every effort to ensure maximum return on the federal, state, local, private sector, and philanthropic investment of funding and time committed (details provided in partner submissions). Sustainability will ensure long-term inclusive growth that increases the number of quality jobs and reduces racial and spatial disparities in income, health, and wealth that have constrained past economic performance. To ensure Tech Triangle projects' sustainability at the onset, each coapplicant must:

- match a minimum 20% of total project costs
- fill an identified gap resulting in a new asset creation program, training, or facility
- clearly demonstrate ability to leverage existing and build new relationships within and between clusters to build inclusive metro-wide economic growth
- plan for covering annual operations and maintenance costs of finished construction projects

As lead applicant, GSL is committed to success and sustainability. GSL did not request any Phase 1 dollars for activities taken on to lead the Tech Triangle effort, and it provided a cash match and in-kind contribution of staff salaries and fringe benefits for Phase 1 that exceeds the \$500,000 provided by the EDA. GSL will provide a cash match and in-kind contribution to support the long-term *Inclusive Cross-Cluster Economic Growth and Collaboration* spoke that will serve as the foundation for coordination, equitable inclusion, and drive for cluster economic growth.

GSL is a membership-led organization for businesses of all sizes from throughout the metro that are working collaboratively to provide leadership on economic growth. Formed on January 1, 2021, as the combination of five legacy economic development organizations, GSL counts 600 founding members and has the purpose-built capability and accountability to lead. By making collaboration central to the overall effort, GSL and all the partners will be able to improve outcomes, heighten accountability, reduce barriers, and better engage in dialogue with businesses, entrepreneurs, neighborhoods, and other stakeholders to act. These efforts are critical to long-term success and sustainability.

Using data and the *STL 2030 Jobs Plan* to reveal vulnerabilities, strengths, and economic growth priorities, resiliency and sustainability are imbedded in the Tech Triangle core. Through RAMP, and supported by BioSTL and GeoFutures, consistent feedback and regular assessment will occur, and solutions/opportunities identified. Workforce training partners will contribute to a resilient workforce with shared skills that will be able to shift between clusters. Entrepreneurs and businesses will have access to innovation center infrastructure and each other, driving new development and inclusive economic growth. Training partners and businesses will be linked to design pathways to careers for workers, with a focus on underrepresented workers. Entrepreneurial support organizations will serve underrepresented entrepreneurs to build supply chain and industry depth in the region. There exists broad support and recognition that the Tech Triangle connects the region's three leading industry clusters with regional systems that will be agile to respond to change in innovation.

Importantly, the Tech Triangle has been designed to address historic inequities with a civic commitment to inclusion in workforce initiatives and business development as a primary goal. Success of the Tech Triangle will be gauged by job creation, preparation of residents for career pathways, community engagement, and neighborhood-led development that ensures thriving and growing communities.

Finally, the Tech Triangle leverages existing assets and strategically places new physical assets considering locational equity. Over time, an intricate and sustainable infrastructure has evolved and will continue to grow to support the region's Tech Triangle. For example, Ranken Technical College, located next to the proposed AMICSTL site, contributes to a quality technical workforce in the St. Louis region and hosts over 1 million square feet of advanced technology laboratories as well as facilities throughout the region and state. St. Louis Community College's Florissant Valley campus has a 20,000 square-foot Center for Workforce Innovation dedicated to aerospace and manufacturing training to support established defense industry partner Boeing. The NGA is investing close to \$2 billion to build Next NGA West. The Tech Triangle builds toward efficient sustainability by leveraging existing, strategically placing new, and deliberately linking supporting efforts.

CBO ENGAGEMENT/STRONG LABOR STANDARDS/ECONOMIC BENEFITS FOR RESIDENTS

A broad coalition of Community Based Organizations (CBOs) are engaged in the hub and spoke component projects as identified in separate submissions. CBO involvement is critical to having deep community engagement that gives voice and a shared sense of ownership to HECs. The Tech Triangle effort will bring together CBOs and Labor to ensure coordination of effort and leveraging of strengths to maximize outcomes in workforce development, innovation and entrepreneurship, and community revitalization.

Missouri AFL-CIO, St. Louis Building and Construction Trades Council, and the Missouri Works Initiative are committed to involvement with the Tech Triangle and growing opportunities for economic participation from historically underrepresented groups and building partnerships with schools and partners across the region to grow participation in the skilled trades apprenticeship programs and opportunities in advanced manufacturing training.

To ensure strong labor standards and economic benefits for residents, construction projects agree to strive for the following goals:

- All jobs created, including contracted jobs, have career track opportunities, and start at \$15/hour
- Create jobs filled equally across races to match or exceed Black and Brown population levels
- For projects within 0.5 miles of St. Louis' Promise Zone, fill 20% of positions with Zone residents
- Fill 60% of new positions with residents that meet the definition of historically excluded populations, including individuals with disabilities, Black and Brown populations, and women
- Award 40% of construction project contracts prime and subcontracts to M/WBEs
- To choose three additional community benefits from the following list and propose indicators for measuring success:
 - Retail/commercial space set-asides for small and local businesses
 - Adherence to green building requirements
 - Space set-asides for neighborhood organizations, community centers, child-care centers, and other non-profits
 - Funding for community organizations/programs
 - Mitigations of more than those required under state/local law that addresses parking, traffic, increased pollution, and other environmental impacts
 - Streetscape improvements such as repaving, lighting, sidewalk construction repair, renovations to public transit stops
 - Creation of living wage jobs with a right to organize
 - Providing paid apprenticeship opportunities with local workforce agencies

- Commitment to sourcing at least 51% of goods/services from M/WBE
- Coordinate with local schools/youth programs to provide internships or scholarships
- Contribute to a revolving loan fund or grant program for small business development and entrepreneurship
- Create equity investment options for local businesses and residents to experience financial success from the project

EQUITABLE DISTRIBUTION OF BENEFITS

As detailed in the *STL 2030 Jobs Plan* as well as St. Louis City's Equitable Economic plan, the St. Louis region is collaborating in new ways to advance inclusive economic growth. The overall approach weaves equity into each component project and also into the fabric that connects the Tech Triangle clusters.

Locational Equity: The STL 2030 Jobs Plan describes the importance of revitalizing and adding residential and employment density to St. Louis' urban core to advance metropolitan growth. Over several decades. St. Louis City has seen major employers move and population decline. To focus on reviving the urban core and making jobs accessible to groups that disproportionately lost jobs or were historically excluded, a large portion of the Tech Triangle's direct budget will be spent on projects located in the City, with a focus on HECs. The AMICSTL hub – the central component and largest investment – will be in an HEC of North St. Louis City, reinvesting in a region of St. Louis once supported by strong middle-class manufacturing jobs.

Workforce Equity: Our workforce development investments will reach populations traditionally excluded from the cluster sectors. In 1970, nearly half of young, employed Black men worked in manufacturing, compared to a third of young white men. In the 1970s and 1980s, St. Louis lost 20% of its manufacturing jobs. Black male unemployment rose 2.4 times faster than white men of the same age and the percentage of Black men employed in manufacturing decreased at twice the rate of Black men in the rest of the United States. In addition to Black men, targeted populations include women, people with disabilities, people with low-income, people without a bachelor's degree, and Black and Brown workers. Investments are also being made in the broader region – including rural areas – to ensure access to training and inclusive growth regionally. Labor partners are committed to working with education partners to put in place academic supports for minority students and women to enter the skilled trades and related apprenticeships.

Capital Access Equity: The St. Louis region consistently ranks in the top 10 best cities in the nation to create a start-up, but Black and Brown entrepreneurs are less likely to benefit due to the lack of equitable access to capital – loans, equity investments, and personal funds – and technical assistance providers. Black and Brown entrepreneurs are almost as likely as their white peers to start businesses in the region, but Black and Brown business enterprises are less likely to scale, less likely to hire employees, and more likely to close within six years (27% survive past six years). Entrepreneurial support organizations with a history of working effectively with Black and Brown entrepreneurs are Tech Triangle partners that will be able to provide capital and technical assistance to entrepreneurs with Tech Triangle business potential.

The Tech Triangle will leverage the economic power of construction projects to improve equity within the building trades by setting goals around engagement of M/WBEs. Additionally, component projects comprising the entrepreneurship spoke are focused on supporting, preparing, and scaling M/WBEs to position them to compete for Tech Triangle related contracts and others.

Governance/procedural equity: An Equity and Community Engagement MOU will guide implementation of equity as central to sustainability. The Equity and Community Engagement MOU and investments made through the *Inclusive Economic Cross-Cluster Development and Coordination* component will move

partners from a culture of compliance typical of grant projects to one of transformation, stewardship, and collective responsibility for equitable economic development. Key partners – AMICSTL, RAMP, and the community colleges – are proposing to support and engage communities that have been historically excluded from development into their projects' oversight. Education, support, and collaborative action will lead to success in equitable cross-cluster economic growth. These supports, combined with cluster governance provide checks and balances, accountability, and bottom-up and top-down connectivity.

EXPECTED OUTCOMES

Cluster Development						
Goal: Build the capacity of RAMP to mirror the established coalition efforts of BioSTL	Outputs	# of new partners				
and GeoFutures to provide governance, programming, and policy to coordinate activities of the advanced manufacturing and production business cluster and overall Tech Triangle.	Outcomes	Dollars leveraged Growth of advanced manufacturing cluster Growth in biosciences cluster Growth in geospatial cluster				
Workforce Development						
Goal: Connect job seekers with training for indemand career path employment opportunities,	Outputs	Demographics of individuals trained # of trainees hired in cluster related businesses # of companies upskilling workers and # of workers upskilled # of new apprenticeship programs Average wage of workforce development participants in first job				
with a focus on Black/ Brown workers, women, and other historically excluded communities.	Outcomes	Percentage Black, Brown & women that complete a training program and move to employment Percentage of cluster companies stating trainees and new hires meet employer needs Percentage of cluster businesses with fewer unfilled positions after 1 year, 2 years, 4 years				
Innovation and Entrepreneurship						
Goal: Support entrepreneurs and grow businesses that build capacity along the Tech	Outputs	# of new M/WBE startups Dollars leveraged by new start ups				
Triangle manufacturing, logistics, and supply chain services, with a focus on M/WBEs.	Outcomes	% increase in business revenue % increase in employees				
Community Revitalization						
Goal: Make strategic cluster locational equity investments that will spur additional projects	Outputs	# of project related construction jobs created # of new businesses in Promise Zone				
and programs in the surrounding area, creating new places to work, play, and live that meet community and cluster needs.	Outcomes	% of population growth in Promise Zone % of growth in regional GDP				

Additionally, a high-level, long-range evaluation is proposed to assess the impact of the investments over 10 years. GSL and SLEDP will be responsible for tracking the following indicators, all of which are expected to increase because of the component projects, to inform future investments.

- Employment Location Quotients (LQs) of at least 1.30 for Advanced Manufacturing and "related"
 Geospatial Occupations. LQs measure the concentration of an industry or occupation within a region's
 overall employment relative to the national average. An LQ of 1.30 means that St. Louis would have
 30% high than average regional specialization across each of the noted industries.
- Strive to meet national GDP growth. The target sectors offer above-median wages for entry-level positions and as those sectors grow (increase LQ), more people will find employment in higher-wage positions with the help of workforce initiatives sustained well beyond the grant period.
- Beat the Moody's Analytics forecast that the St. Louis MSA will not return to 2019 employment levels until 2026 by surpassing 2019 employment levels by 2025.

WORK COMPLETED AFTER PHASE 1 PROPOSAL

Phase 1 Progress: Identify a Regional Economic Competitiveness Officer (RECO). This position has been filled by Steven Johnson of Greater St. Louis, Inc. He has more than 30 years of experience leading economic development initiatives at the community, region, and statewide level. In his role as the RECO, Johnson will devise and implement strategies to help the St. Louis economy recover from the COVID-19 pandemic and build resilient and globally competitive industries.

Phase 1 Progress: Initial environmental work completed for three construction projects and Preliminary Engineering work completed for two (third had previously been completed).

Phase 1 Change: One of the initial component projects was a Mid-America St. Louis Airport project to support the growing advanced manufacturing efforts. Project is advancing independently of this funding opportunity. The project remains a critical part of the cluster development and regional efforts. Phase 1 Addition: Creation of an Equity and Community Engagement community of practice across the Tech Triangle to solidify equitable opportunities, community engagement, and inclusive growth. Phase 1 Addition: A new effort within cluster development and workforce training that engages labor and high schools to work together to ensure a sustainable pipeline of new talent for the Tech Triangle and career pathways to family-sustaining wages for students choosing a career path over college. Phase 1 Benefit: Through Phase 1 efforts, partnerships in equitable Innovation and Entrepreneurship 'spoke' strengthened, resulting in a multiple co-applicant component submission.

Phase 1 Benefit: Incorporated Saint Louis University capstone graduate students into the Phase 2 planning process and working with co-applicants to foster relationships with next-generation leaders.

Phase 1 Addition: Through Phase 1 work on cluster development, additional partners have stepped forward to support the effort through in-kind contributions, hiring commitments, and financially, including: \$5 million from The Boeing Company; \$5.5 million from the City of St. Louis; support from the Governor of Missouri and Missouri Department of Economic Development; a minimum 20% match from co-applicants; additional financial support from Benjamin F. Edwards, Midland States Bank; Ameren, and more.

CONCLUSION

The Tech Triangle leverages the development of three next generation clusters to advance economic growth in historically disinvested communities of St. Louis, provides education and workforce development to populations that have for far too long suffered the consequences of racial and locational inequity, and helps the region serve as a model for how to advance inclusive economic growth. In meeting these goals, the Tech Triangle will bolster three clusters – bioscience, geospatial, and advanced manufacturing – critical to our country's economy and national security.