GEOFUTURES

Strategic Roadmap and Implementation Plan

2025-2028

GREATER ST. LOUIS INC.

Executive Summary: Why Here; Why Now

St. Louis Geospatial Ecosystem at a Crossroads

St. Louis stands at a pivotal inflection point in its geospatial journey. The region's ecosystem is anchored by the National Geospatial-Intelligence Agency (NGA) West headquarters, a robust academic and research community, and a growing network of startups and established companies. As catalyzed by the selection of the Next NGA West (N2W) campus in North St. Louis City, in 2020 civic and industry leaders across the region came together to develop the *GeoFutures Strategic Roadmap* with the goal of positioning St. Louis as a nationally recognized leader in geospatial innovation. Since its launch in January 2021, Greater St. Louis, Inc. (GSL) has powered the GeoFutures Initiative to convene stakeholders and deliver on the Roadmap.

St. Louis has rapidly emerged as a leading center for geospatial innovation, marked by the establishment of the Taylor Geospatial Institute in 2022 as a research consortium and the Taylor Geospatial Engine in 2023 to commercialize new technologies. The region's talent pipeline is growing through expanded higher education and workforce development programs, and NGA's Moonshot Labs at T-REX fosters collaboration across academic, public, and private sectors. The T-REX, Post, and Globe Buildings have united to form Downtown North, an innovation district for geospatial and fintech industries. Additionally, GeoFutures has elevated St. Louis' profile at national and international geospatial events.

Stakeholder feedback revealed both pride in this progress and urgency for more robust and coordinated action to enable a maturing ecosystem to meet its potential in the face of changing market dynamics, specifically the emergence of geospatial artificial intelligence (GeoAI). In Summer 2025, GSL led an effort to assess progress to date and refresh the ecosystem strategy. The team was charged with the following objectives: 1) Substantiate and revitalize the *GeoFutures Strategic Roadmap*; 2) Create an actionable implementation plan to improve the geospatial ecosystem; and 3) Design an organizational structure to support this implementation plan.

Stakeholder Feedback: Current State Insights

Engaging with stakeholders revealed a set of key findings for the current state of the St. Louis geospatial ecosystem:

- **Clarified Purpose and Direction:** The ecosystem requires an explicit goal to create a shared sense of purpose and an actionable implementation plan to align efforts
- **Limited Coordination:** There is positive momentum across the *GeoFutures Strategic Roadmap* Strategic Priorities although progress has not been effectively coordinated, measured, and reported
- **Lean into North St. Louis:** We must deepen community engagement and development in the neighborhoods in which NGA is locating to ensure communities in those neighborhoods are contributing to and benefiting from the geospatial ecosystem
- **St. Louis is Uniquely Positioned to Lead GeoAI:** GeoAI is a rapidly expanding segment of the geospatial analytics market and is transforming sectors where St. Louis has competitive advantage or mature industry clusters
- **Geospatial is a Cross-Cutting Capability:** Geospatial, similar to AI, cuts across industries. We must understand the unique characteristics of the geospatial industry in the St. Louis market

- **Mature an Ecosystem Center of Gravity:** GeoFutures has an opportunity to mature its center of gravity and serve as a "front door" for St. Louis' geospatial ecosystem
- **Limited Resourcing of the GeoFutures Initiative:** The GeoFutures Initiative to date has been led by a part-time consultant and fractional GSL staffing with no ecosystem governance; this limits capacity for progress
- **Need for a Backbone Organization:** Stakeholders across the ecosystem continue to highlight requirements which are inherent of a "backbone" organization (i.e. strategy setting, wayfinding, advocacy, business and talent attraction)

These engagements led to a rigorous strategy-setting process that included a strengths, weaknesses, opportunities, threats (SWOT) analysis of Roadmap implementation and the GeoFutures Initiative, the development of new Strategic Priorities, and the creation of an action-oriented implementation plan for the ecosystem.

Theory of Change for the Geospatial Ecosystem

The St. Louis geospatial ecosystem, catalyzed by the GeoFutures Initiative, is positioned to become a global leader in geospatial innovation by strategically aligning its assets, talent, and resources to meet evolving market and ecosystem needs. This transformation will be driven by six elements:

- A clear North Star goal to set the purpose of the ecosystem
- An intentional strategy that recognizes St. Louis' Competitive Advantages and Opportunities: North St. Louis, GeoAI, and Clusters of Strength, aligned to a set of focused Strategic Priorities
- An action-oriented implementation plan for the ecosystem, aligned to a lead, support, amplify framework
- A resourced and staffed backbone organization to lead and catalyze the ecosystem
- A center-of-gravity for the ecosystem in intentionally located assets and organizations
- A focus on ecosystem culture and community building

Our Way Forward: An Actionable Strategy for St. Louis

Based on stakeholder feedback, the GeoFutures team has developed a North Star goal articulating the purpose of the ecosystem's work and guiding the strategy and implementation plan.

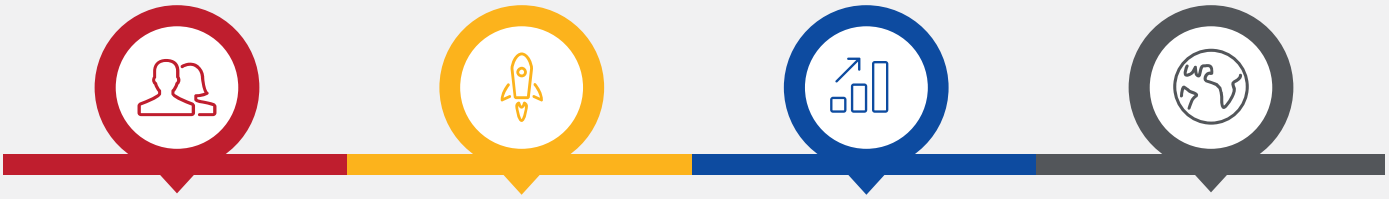
Our North Star

To position metro St. Louis as **a world leader in geospatial innovation** by solving major economic, societal, and national security challenges; growing **business and jobs; fostering a thriving ecosystem** of breakthrough technologies and talent; and ensuring that **economic growth benefits communities** throughout the bi-state region.

Aligned with this North Star goal, the team developed four new Strategic Priorities (adapted from the Roadmap's original five) defining the high-level areas of focus for the ecosystem and aligned objectives, key performance indicators, and actions associated with each.

In addition to the Strategic Priorities, the refreshed strategy presents three Multipliers which serve as competitive advantages and opportunities for St. Louis. The Multipliers justify a "why here; why now" imperative for the ecosystem and orient horizontally across the Strategic Priorities. Together, these Multipliers reinforce the unique value proposition of St. Louis and are rooted in both industry opportunities and community needs. They provide a compelling rationale for investment, partnership, and sustained growth of the St. Louis geospatial ecosystem.

STRATEGIC PRIORITIES



TALENT
Develop Workforce Pathways to Meet Current and Future Geospatial Talent Needs

INNOVATION
Accelerate Innovation through R&D to Drive and Respond to Market Demand

GROWTH
Strengthen Entrepreneurship and Business Growth through Access to Capital, Customers, and Connections

CHAMPION ST. LOUIS
Build, Brand, and Showcase St. Louis as a Global Geospatial Leader

MULTIPLIERS: ST. LOUIS COMPETITIVE ADVANTAGES AND OPPORTUNITIES

North St. Louis: Invest in the community and support development around the NGA site.

GeoAI: Capitalize on the emergence of high-growth geospatial AI technologies and market.

Clusters of Strength: Leverage St. Louis industries: agtech, life sciences, advanced manufacturing, and national security.

Resourcing the Strategy

To accomplish the ambitious strategy, the ecosystem needs dedicated resources beyond what Greater St. Louis, Inc. has provided through its GeoFutures Initiative to date. In response to stakeholder feedback, this report proposes the role of an ecosystem backbone to accelerate progress and provide centralized coordination, shared measurement for accountability, and a unified voice for advocacy and business attraction. To date, the GeoFutures Initiative housed within GSL has had a broad mandate and limited resources and staffing and served as a backbone for the ecosystem. Five years into the Roadmap, the maturing ecosystem requires a backbone with dedicated resourcing and subject matter expertise.

At its core, a backbone entity:

- Convenes and coordinates the efforts of various entities across the industry cluster
- Aligns stakeholders, catalyzes prioritized actions, mobilizes resources, and tracks performance against shared goals
- Focuses on the industry, and provides insight into trends seen across the industry and where the industry is heading
- Brings deep expertise, and is governed by representatives from across the ecosystem
- Acts as the single "front door" for the entire cluster

This report proposes a mission and vision for a backbone aligned to St. Louis' geospatial ecosystem:

- **Mission**: To catalyze the growth of St. Louis' geospatial economy by uniting stakeholders, advancing innovation, supporting business and workforce development, and ensuring opportunity for all communities—leveraging the transformative power of geospatial technologies.
- **Vision**: To position St. Louis as a world leader for geospatial and related artificial intelligence innovation by attracting top talent, entrepreneurs, start-ups, capital, and businesses; and fostering a vibrant, ecosystem of world-class innovators.

St. Louis is ready to seize this moment. By leveraging its unique assets, responding to stakeholder needs, and executing on a bold, collaborative strategy, the region can capture market share, foster growth, and secure its place at the forefront of geospatial innovation.

GEOFUTURES

CURRENT STATE

THE ST. LOUIS GEOSPATIAL ECOSYSTEM TODAY

Transitioning to the Next Chapter of Growth

EVOLVING TO MEET A MATURING ECOSYSTEM

The GeoFutures Initiative, a branded effort within Greater St. Louis, Inc. (GSL), has served to coordinate the development of St. Louis' geospatial industry cluster into a global hub for spatial innovation and technology. Since its inception in 2020 as recommended in the *GeoFutures Strategic Roadmap*, the initiative organized a coalition representing the wider St. Louis geospatial ecosystem, engaged stakeholders through quarterly town-hall style meetings, and effectively marketed St. Louis as a leader in geospatial technology.

While significant progress has been made since launch five years ago—much of which is documented in this report—ecosystem stakeholders expressed that the GeoFutures Initiative and the larger ecosystem are at a critical inflection point in its maturity and requires greater organization and alignment to capitalize on opportunities in the market, such as their emergence of geospatial artificial intelligence (GeoAI). Considering this feedback, in May 2025 GeoFutures embarked on a refresh of its strategy and solicited industry expertise and consulting services from Mark Munsell, the former Chief AI Officer to NGA, and Deloitte Consulting, respectively, to lead this effort. The team was charged with the following objectives:

1) Substantiate and revitalize the *GeoFutures Strategic Roadmap*;
2) Create an actionable implementation plan to improve the geospatial ecosystem; and
3) Design an organizational structure to support this implementation plan.

STAKEHOLDER ENGAGEMENT

In Summer 2025, the GeoFutures team undertook a comprehensive process to re-evaluate the ecosystem's needs and refresh the strategy. This process was rooted in deep stakeholder engagement, including:

- 40+ interviews with cross-sector leaders
- One-on-one meetings with the leadership of BioSTL, 39 North Agtech Innovation District, Downtown North, T-REX, and the Cortex Innovation District to learn from their collective decades of experience with innovation ecosystems
- Direct engagements with St. Louis-based leadership of the National Geospatial-Intelligence Agency (NGA)
- An all-day workshop with 30 ecosystem leaders, representing industry, academia, risk capital, entrepreneurs, economic development, and community groups to refine Strategic Priorities and develop the requirements for an implementation plan and backbone functions
- Three focus groups centered on the implementation plan and backbone
- Stakeholder meetings with partner organizations on implementation plan details (ongoing)

Stakeholder engagement led to a strategy-setting process that included a strengths, weaknesses, opportunities, threats (SWOT) analysis of the ecosystem, the validation of new Strategic Priorities, and the creation of an action-oriented implementation plan for the St. Louis geospatial ecosystem. This report documents the findings and provides a refreshed strategy and path forward.

Background: Overview of the Geospatial Market and the St. Louis Geospatial Ecosystem

THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY AND THE NEXT NGA WEST CAMPUS

The National Geospatial-Intelligence Agency (NGA) has a long history in St. Louis, beginning with the establishment of the St. Louis Arsenal in 1827, which supplied arms to the U.S. Army and played a role during the Civil War. Over time, the site evolved to meet changing national needs, becoming the Aeronautical Chart and Information Center in 1952, where it contributed significantly to World War II efforts through mapping and planning. As the demand for advanced mapping and intelligence grew, the facility transitioned to the Defense Mapping Agency in 1972 and later became part of the National Imagery and Mapping Agency (NIMA) in 1996. In 2003, NIMA was renamed to NGA, reflecting its expanded mission in geospatial intelligence (GEOINT). Throughout these changes, the St. Louis location has remained strategically important due to its central location, robust infrastructure, and skilled workforce. Today, NGA's St. Louis operations are vital to national security, supporting military, intelligence, and humanitarian missions worldwide.[1]

In 2016, NGA officially selected a site for its Next NGA West (N2W) campus in North St. Louis City. This decision followed a multi-year site selection process that evaluated several locations in the St. Louis region and beyond. The choice of the North St. Louis site was announced publicly on April 1, 2016, marking a major milestone for both NGA and the city, and setting the stage for a $1.75 billion federal investment in the project.

Spanning approximately 97 acres in the St. Louis Place neighborhood, N2W was designed to support NGA's mission of providing GEOINT for national security, defense, disaster response, safety of navigation, and the creation and dissemination of foundational geospatial data. Once completed in Fall 2025, the N2W campus will house more than 3,000 employees and serve as a hub for both classified and unclassified geospatial work.[2]

The N2W campus secures NGA's long-term presence in St. Louis and acts as an anchor for regional economic development, workforce training, and innovation. Along with NGA's Moonshot Labs at T-REX, N2W's proximity to Downtown St. Louis and integration with local universities, startups, and community organizations is intended to foster collaboration, attract talent, and ensure that the benefits of geospatial growth are widely shared across the St. Louis metropolitan region.

THE *GEOFUTURES STRATEGIC ROADMAP*

The *GeoFutures Strategic Roadmap* was developed by St. Louis civic leaders in response to the transformative opportunity presented by NGA's decision to build N2W in North St. Louis City. This significant federal investment underscored the region's potential to become a global leader in geospatial technologies and applications. The Roadmap was authored to harness this momentum, providing a strategic framework to guide the development of a robust geospatial ecosystem in St. Louis. A 2019 analysis conducted by TEConomy Partners confirmed that St. Louis possesses competitive advantages as a region to compete for global leadership in the large and fast-growing geospatial market, noting that St. Louis' geospatial industry supports 27,000 direct and indirect jobs, includes over 350 companies and organizations, and produces a nearly $5 billion economic impact.[3]

The Roadmap was shaped by a broad coalition of stakeholders, including industry leaders, academic institutions, government entities, and community organizations.[4] This collaborative effort was designed to produce a strategy which was comprehensive, inclusive, aligned with the region's unique strengths and opportunities, and modeled on a precedent in the market: the Plant and Life Sciences Strategy for St. Louis, authored by Battelle in 2000.[5] The Roadmap reflected a shared vision for leveraging NGA's presence to drive innovation, inclusive economic growth, and community development.

The Roadmap outlined five Strategic Priority areas and three Signature Initiatives to scale and grow the region's geospatial sector to generate greater prosperity and inclusive growth in the community.

STRATEGIC PRIORITIES PROPOSED IN THE 2020 ROADMAP

The *GeoFutures Strategic Roadmap* identified five Strategic Priorities essential for advancing St. Louis as a global center for geospatial development:

- Scale up Talent and Workforce Development to Meet Geospatial Industry Demand
- Raise Innovation Capacity for Advanced Geospatial Technology Applications for Leading Industry and Community Development Drivers
- Accelerate Entrepreneurship and Availability of Risk Capital
- Support the Advancement of Community-led Neighborhood Development in North St. Louis
- Brand and Position St. Louis as a Global Thought Leader in Geospatial-related Development

SIGNATURE INITIATIVES PROPOSED IN THE 2020 ROADMAP

The Roadmap outlined three Signature Initiatives that were designed to have the most significant impact on the region's geospatial development:

- **STL GeoFutures Coalition**: This initiative was designed to serve as the lead and umbrella for all GeoFutures activities. It was designed to act as a catalytic steering, investing, convening, and leadership development organization, overseeing the Roadmap's implementation and enabling a sustained commitment to racial equity and inclusive growth.
- **STL GeoFutures Talent Initiative**: Aimed at supporting and deepening K-16 and adult workforce geospatial-related technical education efforts, this initiative was designed to focus on under-represented communities, particularly Black communities, to build a robust talent pipeline.
- **STL GeoFutures Innovation Collaborative**: This initiative was designed to address the challenge of establishing St. Louis as a leader in advanced technology applications of locational data, driving innovation in national security, commercial, and community sectors.

OVERVIEW OF THE GLOBAL GEOSPATIAL MARKET AND RISE OF GEOAI

Industry trends in the global geospatial market, and specifically the emergence of AI technology, intensified the need for a strategy refresh for the St. Louis geospatial ecosystem. The global geospatial analytics market has an estimated value of approximately $114.3 billion, and is projected to reach $226.5 billion by 2030, with a robust compound annual growth rate (CAGR) of approximately 11%.[6] The US market represents roughly 38-40% of the global geospatial analytics market, according that that same research.[7] This growth is driven by expanding applications across defense, intelligence, urban planning, agriculture, logistics, utilities, and disaster management.

In St. Louis, the geospatial sector is estimated to be worth $4.9 billion according to the initial analysis outlined in the Roadmap. In the region, geospatial technology is responsible for more than 27,000 jobs; where every direct geospatial job creates another 1.55 jobs in the region.[8]

GeoAI is the integration of AI and machine learning with geospatial data, and it is rapidly transforming the landscape. Globally, the GeoAI market is expected to reach $64.6 billion by 2030, with a CAGR of 9.25%.[9] Defense applications remain the primary growth driver, as agencies seek to process vast datasets with greater speed and precision, but applications of this technology are spanning sectors. In late July 2025, Google introduced Google Earth AI, a collection of GeoAI models and datasets to address critical global challenges such as weather predictions, flood forecasting, wildfire protection, and urban mobility.[10] Commercial sectors, including mature clusters of strength in the St. Louis market such as agtech, life sciences, and defense and national security, are increasingly leveraging GeoAI for risk modeling and operational optimization. This adoption represents a strategic opportunity for the St. Louis market to capture market share in the growing GeoAI field. Table 1 outlines the relevancy of GeoAI in sectors where St. Louis has mature clusters of strength and competitive advantage.

TABLE 1. GEOAI MARKET ASSESSMENT BY SECTOR

Sector	Impact of GeoAI
Agtech	• GeoAI is transforming agtech by integrating satellite imagery, drone data, and AI-driven analytics to optimize crop yields, monitor soil health, and predict pest outbreaks • Driven by the demand for precision agriculture, resource optimization, and sustainability • The global precision farming market, which heavily leverages GeoAI, is projected to reach $15.6 billion by 2030, with AI and geospatial analytics as key growth drivers[11]
Construction	• GeoAI is revolutionizing project planning, execution, and asset management in the construction industry; automated feature extraction from aerial and satellite imagery enables rapid identification of building footprints, roads, and vegetation, reducing the time and cost of site surveys • AI vision systems also enhance safety by detecting missing safety gear or hazardous areas on construction sites • For risk management, it processes ground-penetrating radar (GPR) data to predict the location of buried utilities and creates predictive flood models by combining elevation, rainfall, and land cover data for resilient infrastructure design
Defense and National Security	• GeoAI is critical in national security for surveillance, threat detection, and mission planning • NGA is actively integrating GeoAI technologies to enhance its capabilities in processing and analyzing vast amounts of geospatial data. This includes satellite imagery, aerial photography, and other forms of geospatial information. • The global AI in defense and national security market is expected to be worth around $39.1 billion by 2033, from $10.1 Billion in 2023, growing at a CAGR of 14.5% during the forecast period from 2024 to 2033.[13]
Financial Services, Risk Management	• GeoAI is a critical tool in financial services and risk management, enhancing fraud detection, risk assessment, and underwriting • It leverages spatial data to identify patterns of fraudulent behavior, analyze anomalies, and detect risks in real time, vital for banking and insurance uses • GeoAI assesses physical risks by analyzing location-specific data, such as vulnerability to natural disasters for properties and infrastructure, and can forecast climate impacts years in advance
Human Health	• GeoAI supports epidemiology, disease mapping, and environmental health studies. By analyzing spatial patterns of disease outbreaks and environmental exposures, GeoAI enables more effective public health interventions • The COVID-19 pandemic accelerated adoption, with organizations using GeoAI to track virus spread and resource allocation • The global artificial intelligence in life sciences market size reached $2.9 billion in 2024 and is expected to reach $16.7 Billion by 2033, exhibiting a growth rate of 21.5% during 2025-2033[12]
Transportation and Logistics	• GeoAI significantly impacts transportation and logistics by improving efficiency, reducing operational costs, and enhancing supply chain resilience; it is widely used for route optimization, analyzing traffic patterns, road conditions, and delivery schedules to ensure the most efficient routes, leading to cost savings and reduced idle times • GeoAI improves fleet management by predicting demand patterns and streamlining dispatch operations • In supply chain management, GeoAI provides real-time visibility, allowing organizations to monitor shipments and port conditions globally, and simulate the impacts of disruptions to activate contingency plans
Utilities	• GeoAI is transforming infrastructure management, operational efficiency, and service reliability; it enables automated asset inspections using imagery and sensor data, and predicts maintenance needs, infrastructure failures, and outages before they occur, reducing unplanned downtime and repair costs • GeoAI helps manage vegetation-related risks by analyzing imagery to identify encroachment near critical infrastructure like power lines • For water and gas utilities, it supports real-time monitoring of pipelines, leak detection, and efficient resource distribution to minimize wastage and enhance safety

Overview: Geospatial Ecosystems in Selected US Metro Regions

To strategically position St. Louis as a national leader in geospatial innovation and lean into our competitive advantages, we must understand how our region compares to other prominent geospatial hubs across the United States. As part of our strategy refresh, we conducted an initial benchmark analysis of Denver, Huntsville, and Northern Virginia to evaluate their respective ecosystem characteristics, strengths, and opportunities. In doing so, we aim to identify best practices, emerging trends, and actionable opportunities for St. Louis' geospatial ecosystem. This overview provides a foundation for further analysis, informed decision-making, and targeted investment, enabling our ecosystem leaders to capitalize on our regional assets and proactively address areas for growth in the rapidly evolving geospatial landscape.

DENVER

Denver stands out as a national leader in geospatial innovation, leveraging its historic strengths in aerospace, environmental science, and technology. The region is home to a robust cluster of geospatial employers, including Maxar Technologies, Trimble, Lockheed Martin Space, and a vibrant startup scene. The Denver region is also home to significant federal government organizations who utilize geospatial technologies, including the US Geological Survey (USGS) Rocky Mountain Region Office in Denver, the National Renewable Energy Laboratory (NREL) in Golden, and the Department of Defense at Buckley Space Force Base and Peterson Space Force Base. Denver's geospatial workforce is supported by academic programs at the University of Colorado Boulder and Colorado State University. The ecosystem is energized by organizations like the Colorado GIS Association and events such as GIS in the Rockies, which foster collaboration and professional development. Denver's geospatial sector is deeply intertwined with aerospace, defense, energy, agriculture, and climate science, positioning it for continued growth as geospatial technologies become increasingly vital across industries.

HUNTSVILLE

Huntsville, Alabama is a significant hub for defense and aerospace and geospatial technology supports this industry. The city's geospatial workforce is anchored by major federal installations such as NASA's Marshall Space Flight Center and the US Army's Redstone Arsenal and supported by academic institutions like the Geospatial Research and Education Center at Alabama A&M University. Private sector leaders like SAIC, Dynetics, and Teledyne Brown Engineering further reinforce the region's reputation for technical excellence. The geospatial ecosystem is supported by a backbone entity, GeoHuntsville, which guides vision and strategy, supports aligned activities, and builds public will. While Huntsville's geospatial sector is highly specialized and benefits from strong federal investment, but may face challenges related to diversification and reliance on federal contracts. However, the region's growing tech corridor and expanding commercial space activity present significant opportunities for future growth.

NORTHERN VIRGINIA

Northern Virginia, within the Washington, DC metropolitan area, has one of the largest concentration of geospatial professionals in the country. The region's ecosystem is driven by the presence of federal agencies such as the NGA, USGS, and US Census Bureau, as well as major federal contractors like Leidos, Booz Allen Hamilton, Boeing, and Northrop Grumman. Academic institutions, including George Mason University, George Washington University, and the University of Maryland, provide geography, GIS and geospatial degree programs to support the talent pipeline. The area is home to influential organizations like the United States Geospatial Intelligence Foundation (USGIF), and nearby DC-based headquarters of the Association of American Geographers and National Geographic Society. The ecosystem is vibrant, but faces challenges including high living costs, intense competition for federal contracts, and security clearance requirements for employers and employees. Northern Virginia's geospatial sector is integral to defense, intelligence, homeland security, urban planning, and life sciences, making it a critical node in the national geospatial landscape.

The St. Louis Geospatial Ecosystem Today: Current State Findings

BUILDING ON EARLY SUCCESSES

The *GeoFutures Strategic Roadmap* represented a comprehensive and forward-looking plan to position St. Louis as a leader in the geospatial industry. By aligning regional assets, the Roadmap set the direction to capitalize on the N2W investment and drive transformative change across the region, as seen in the following selected successes from 2020-2025:

- The St. Louis Development Corporation (SLDC)-led Project Connect launched, helping to build greater connections between the geospatial sector and the neighborhoods in which NGA's N2W will be located.
- T-REX, the Post Building, and the Globe Building strengthened their relationship, forming Downtown North with the aim of creating a physical innovation district for the geospatial and fintech industries.
- Downtown North is home to more than 30 technology companies with unique and available housing for young entrepeneurs and employees, and a walkable live/work/play district.
- The Globe Building in Downtown North features the only multi-tenant, 705 compliant, NGA accredited SCIF in the Midwest (75,000 sq. ft. with 465 seats) as part of its 725,000 sq. ft. landmark building. The Globe offers high-tech unclassified companion workspaces and amenities, indoor parking, and 150,000 sq. ft. of carrier class data centers. The Globe hosts a tenant community of geospatial, defense, and advanced manufacturing companies including GDIT, Esri, Maxar, T-Kartor, BAE Systems, Westway Services, and Stereotaxis.
- The Post Building in Downtown North is an anchor for spatial finance and a convening space for technology and university partners and is the location of Square and Scale AI.
- T-REX in Downtown North houses Moonshot Labs—NGA's unclassified collaboration facility, geospatial and tech company coworking space, and community and educational programming, much of which is activated through a Partnership Intermediary Agreements with the NGA.
- The Taylor Geospatial Institute was established to be a premier research institution helping to develop new applications for geospatial science.
- The Taylor Geospatial Engine was established to assist in commercializing new geospatial technologies.
- The ecosystem matured talent and workforce capacity through the launch and/or expansion of programming at Gateway Global, University of Missouri-St.Louis Geospatial Collaborative, St. Louis Community College, Southern Illinois University Edwardsville, Lindenwood University, and other institutions.
- Harris-Stowe State University and NGA collaborate on the HBCU Immersion in GEOINT program serving HBCU students across the country.
- NGA and Saint Louis University co-hosted an annual Geo-Resolution conference, which provided a venue for collaboration among geospatial experts and students in government, academia, and industry.
- The geospatial ecosystem shaped and realized a policy win in securing FY25 National Defense Authorization Act (NDAA) funding for workforce development programs in St. Louis aimed at supporting the geospatial industry.
- Greater St. Louis, Inc. (GSL) leveraged the STLMade brand at national and international convenings of the geospatial industry to promote the region as a hub for the industry, especially the GEOINT Symposium, the largest gathering of geospatial intelligence professionals, which was hosted in St. Louis in 2021, 2023, and 2025.
- The ecosystem organized St. Louis presence at Esri User Conferences, Geospatial World Forums, and GeoGov Summits.
- The United States Geospatial Intelligence Foundation (USGIF)'s St. Louis Area Working Group and Community of Interest collaborated to advance the GEOINT talent and workforce pipeline.
- Eight geospatial firms have located and expanded in St. Louis in response to the new NGA St. Louis expansion. These firms are adding over 600 geospatial jobs to the regional ecosystem. In 2025, Scale AI announced the opening of a new AI center at the Post Building in Downtown North, adding 250 St. Louis-based workers. [14]

DOCUMENTED STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS OF THE *GEOFUTURES STRATEGIC ROADMAP*

In June 2025, the GeoFutures project team conducted a SWOT analysis of the *GeoFutures Strategic Roadmap*, assessing the role of the GeoFutures Initiative generally, and the five outlined Strategic Priorities, specifically. The analysis was validated and socialized in stakeholder interview groups and findings were shared at an all-day strategic workshop with ecosystem leaders in July 2025.

Analysis of Strengths

GeoFutures Initiative	• GeoFutures has established itself as a recognized convener and thought leader in the St. Louis geospatial ecosystem • The initiative has successfully brought together diverse stakeholders from government, academia, industry, nonprofits, and economic development organizations • GeoFutures has played a role in shaping regional strategy and aligning resources toward common goals • Stakeholders value the platform for facilitating collaboration, sharing best practices, and driving awareness of geospatial opportunities
Scale up Talent and Workforce Development to Meet Geospatial Industry Demand	• Strong academic partnerships and workforce initiatives have broadened the talent pipeline • Notable achievements include the launch and funding of Gateway Global, UMSL Geospatial Collaborative, and St. Louis Community College programs • Collaboration among academic institutions, government, and industry has led to new training programs, K-12 outreach, and accessible networking opportunities that foster engagement and career entry points • Accessible networking and programming opportunities foster engagement and career entry points • Scholarships (e.g., USGIF) raise visibility and support student pathways • St. Louis stakeholders have a leading role within the USGIF St. Louis Area Community of Interest, emphasizing talent and workforce development on the national level • Serving as an advocate for grants/resources to support educational programs • Helping to communicate talent initiative program successes with one voice
Raise Innovation Capacity for Advanced Geospatial Technology Applications for Leading Industry and Community Development Drivers	• Funded and established a major geospatial research collaborative in the Taylor Geospatial Institute (TGI) • Investments in research at TGI consortium institutions, including faculty and research assets • TGI/TGE institutions have engaged global organizations on focused research and tech leadership • TGE Innovation Bridges Field Boundaries initiative as early proof point of early commercialization opportunity • The region's "horizontal" convening approach connects multiple verticals (agtech, defense, health) and supports innovation
Accelerate Entrepreneurship and Availability of Risk Capital	• Arch Grants, MTC, Cultivation Capital, Capital Innovators, T-REX, Cortex, and the NGA Accelerator have supported 40+ geospatial startups • NGA Accelerator and Arch Grants have piloted business and technology challenges
Support the Advancement of Community-led Neighborhood Development in North St. Louis	• Project Connect Initiative has brought community engagement to the ecosystem • Gateway Global has stood up and scaled as an ecosystem success story • Efforts to connect with neighborhoods surrounding NGA have been recognized as a strength • Community engagement is a visible priority, with a focus on people and neighborhood revitalization
Brand and Position St. Louis as a Global Thought Leader in Geospatial-related Development	• High awareness of St. Louis brand in the federal GEOINT sector, specifically • Branding efforts have positioned St. Louis as a recognized hub for geospatial innovation, gaining national and international attention

Analysis of Weaknesses

GeoFutures Initiative	• Limited dedicated resources and staff capacity constrain GeoFutures' ability to execute on Strategic Priorities (e.g., the Talent Initiative and Innovation Collaborative) which the Roadmap recommended • Limited effectiveness of working groups due to lack of clear focus and ability to resource objectives • Unclear governance and decision-making processes can slow progress or create confusion among partners • Some stakeholders feel that GeoFutures' role and value proposition are not always clearly communicated • There is a perception that GeoFutures' impact is sometimes more visible in convening than in driving tangible outcomes or projects • GeoFutures has not played a role in measuring progress through metrics (and/or communicating progress realized) in the *GeoFutures Strategic Roadmap*
Scale up Talent and Workforce Development to Meet Geospatial Industry Demand	• Capacity for career connections/job posting board is limited; staffing and funding constraints persist • Disconnect between emerging technology programs and geospatial career pathways at the K-12 and higher education levels • Job titles and descriptions often fail to reflect geospatial roles, making talent attraction harder • Signature initiatives from the original Roadmap, including the STL GeoFutures Talent Initiative, have not been fully implemented • Lack of comprehensive K-12 metrics and data collection • Limited outreach beyond St. Louis restricts talent pool growth
Raise Innovation Capacity for Advanced Geospatial Technology Applications for Leading Industry and Community Development Drivers	• Limited engagement of St. Louis industry and community drivers for geospatial applications • Heavy implementation of research, less focus on commercialization • Disjointed regional engagement and lack of coordinated investment into programming • Signature initiatives from the original Roadmap, including the St. Louis GeoFutures Innovation Collaborative, have not been fully implemented
Accelerate Entrepreneurship and Availability of Risk Capital	• Limited early-stage capital and no matching capital development fund as called for in the Roadmap • Failure to extend / adapt the NGA Accelerator to attract and retain more startups and innovators to St. Louis • The region did not fully capitalize on the benefits generated by the NGA Accelerator (i.e. business attraction and retention), despite its clear success for participating startups • Entrepreneurial momentum has slowed, with fewer support programs than in previous years
Support the Advancement of Community-led Neighborhood Development in North St. Louis	• K-12 education and awareness gap persists among stakeholders • Regional challenges (e.g., safety, population decline) may deter talent attraction and retention • Insufficient industry funding for talent development programs and sustained investment • Insufficient site control of real estate and coordinated development in North St. Louis near the NGA site

Analysis of Weaknesses *continued*

Brand and Position St. Louis as a Global Thought Leader in Geospatial-related Development	• Imbalance of marketing resource allocation and overemphasis on branding versus ecosystem building • Product being marketed (the geospatial ecosystem itself) needs work; lack of coordinated messaging • External perceptions about safety and urban challenges impact talent attraction and business investment • Limited marketing focus on new, prioritized goals and broader ecosystem assets • Emphasis on being the "hub" and "leader" even as the St. Louis geospatial ecosystem is still early in its development sometimes seen as a stretch by industry leaders and other regions

Analysis of Opportunities

GeoFutures Initiative	• Clarify and communicate GeoFutures' value proposition (mission, vision, capabilities) to all stakeholders • Leverage GeoFutures' convening power to launch high-impact initiatives • Expand partnerships with non-traditional geospatial players, including private sector and community organizations • Improve collaboration with other cluster-oriented peer organizations in the St. Louis ecosystem (i.e. BioSTL, 39 North AgTech Innovation District, AMICSTL, etc.) • Develop metrics and success stories to demonstrate impact and attract additional funding or support • Expand a role for GeoFutures to promote business attraction, market and access / business development, and ecosystem wayfinding • Expand ability to engage at Federal and state government levels as well as provide support for funding pursuits and capital campaigns for high-priority efforts
Scale up Talent and Workforce Development to Meet Geospatial Industry Demand	• Attraction of talent and business development through proactive policy engagement • Capitalize on the Geospatial Workforce Pilot Program funding which highlights opportunities for workforce development at locations near NGA outside of the National Capital Region. • Strengthen connections between education and industry, investing in dedicated, full-time workforce development roles • Broaden industry engagement beyond government to include private sector and non-traditional employers • Develop clear metrics/KPIs to track workforce progress and celebrate wins • Developing and maintaining a systems-level approach to regional education and training, career awareness, and jobs placement that aligns labor supply with market demand • Strategic and coordinated funding pursuits • Being a consolidator and clearing house for scholarship and internship programs • Convening events to help educate individuals on the value of geospatial, and to inspire people to pursue opportunities within the field

Analysis of Opportunities *continued*

Raise Innovation Capacity for Advanced Geospatial Technology Applications for Leading Industry and Community Development Drivers	• Leverage relationships with key stakeholders and pursue new funding streams to support innovation • Foster a culture of innovation through events, competitions, and targeted outreach • Strengthen university-industry partnerships in applied research
Accelerate Entrepreneurship and Availability of Risk Capital	• Attract new capital and activity centered on emerging technology (i.e. GeoAI, quantum) as related to St. Louis clusters of strength (agtech, human health, transportation and logistics, advanced manufacturing, defense and national security) • Fund and activate a geospatial industry first-customer pilot program to attract and retain founders, innovators, and startups in St. Louis at the intersection of geospatial and key industry verticals • Strengthen other support infrastructure for startups, including office space, access to market, ecosystem assets such as business attraction/retention services, capital, customer opportunities, talent, collaboration opportunities • Foster quick wins and visible successes to maintain momentum and attract investment
Support the Advancement of Community-led Neighborhood Development in North St. Louis	• Further development of Downtown North Innovation District and connect that momentum to the area around NGA • Develop strategies to ensure geospatial investment supports neighborhood development, particularly in North St. Louis • Engage community-based organizations to align geospatial growth with local needs and aspirations • Expand community education and outreach to build public knowledge and buy-in
Brand and Position St. Louis as a Global Thought Leader in Geospatial-related Development	• Focus marketing on new prioritized goals and St. Louis as an important node in a larger national and global network • Enhance storytelling to raise the region's profile nationally and internationally • Develop a comprehensive, real-time catalog and showcase of ecosystem assets and initiatives for clear and efficient wayfinding purposes • Proactively address concerns about safety and regional reputation through success stories and real-world examples • Enhance community building, collaboration, and a culture of trust across the ecosystem • Consider a role for government affairs and policy engagement for GeoFutures

Analysis of Threats

GeoFutures Initiative	• Risk of losing momentum or stakeholder engagement if tangible results are not delivered • Changes in funding or leadership could disrupt continuity and progress • Stakeholder fatigue may set in if meetings and convenings do not translate into actionable outcomes
Scale up Talent and Workforce Development to Meet Geospatial Industry Demand	• Analytics job market disrupted by AI technology; not enough jobs to match demand • K-12 education and awareness gap persists • Overreliance on NGA and defense contracting may limit broader sector growth and resilience. • Regional challenges (e.g., safety, population decline) may deter talent attraction and retention • Insufficient industry funding for talent development • Uncoordinated efforts risk diluting impact
Raise Innovation Capacity for Advanced Geospatial Technology Applications for Leading Industry and Community Development Drivers	• Rapid advancements in AI and quantum technologies require continuous adaptation • Regional fragmentation and competition for funding • Overconcentration on NGA and defense limits broader sector engagement and diversification • Failure to identify and double down on differentiated St. Louis opportunities could erode competitive advantage • Lack of clarity and action on St. Louis' unique innovation strengths risks ecosystem fragmentation and missed opportunities for sector-wide impact
Accelerate Entrepreneurship and Availability of Risk Capital	• Limited entrepreneurship capacity and commercialization support • Broader economic trends and competition from other regions for capital and startups (GeoHuntsville, Denver space ecosystem specifically noted) • Overreliance on federal contracts may limit diversification, entrepreneurship, and resilience
Support the Advancement of Community-led Neighborhood Development in North St. Louis	• Unfulfilled promises and reputational damage to the ecosystem; aside from N2W, have things meaningfully changed in and around neighborhoods? • Lack of trust and regionalism in St. Louis can impede progress • Concerns about safety, urban vitality, and regional population decline impact neighborhood development • Fragmentation and inefficiency may persist due to multiple, sometimes competing, development initiatives for the neighborhood
Brand and Position St. Louis as a Global Thought Leader in Geospatial-related Development	• Power dilution, no physical center of gravity, and loss of trust/inertia • Overpromising and underdelivering risks reputational damage • Competition from other regions and broader economic trends may erode St. Louis' brand position • Failure to deliver on marketing promises can undermine stakeholder trust and future investment • "Bait and switch" sentiment of marketing the St. Louis geospatial ecosystem without fully investing in ecosystem building

Current State Findings from Stakeholder Feedback

Stakeholder feedback on the region's geospatial ecosystem highlighted eight key insights as directly relevant to the GeoFutures Initiative transition, refreshed strategy, and action-oriented implementation plan:

- **Need for Clarified Purpose:** The ecosystem requires an explicit North Star goal to create a shared sense of purpose and an actionable implementation plan to align efforts across the community and foster accountability for priorities, objectives, and actions.

- **Limited Coordination**: The ecosystem has been described as "Programs Rich; Systems Poor." There is positive momentum across the *GeoFutures Strategic Roadmap* Strategic Priorities although progress has not been effectively coordinated, measured, and reported.

- **Lean into North St. Louis**: We must deepen community engagement and development in the neighborhoods in which NGA is locating. North St. Louis presents an opportunity for our ecosystem, and we must support and amplify the work of the City of St. Louis and SLDC to develop the neighborhoods around N2W and ensure communities in those neighborhoods are contributing to and benefiting from the geospatial ecosystem.

- **St. Louis is Uniquely Positioned to Lead GeoAI**: GeoAI is a rapidly expanding segment of the geospatial analytics market and is transforming sectors where St. Louis has competitive advantage or mature industry clusters.

- **Geospatial is a Cross-Cutting Capability**: Geospatial, similar to AI, cuts across industries. GeoFutures needs to understand the unique characteristics of the geospatial industry, the realities of the St. Louis market, and lean into our differentiators (including other clusters of strength such as agtech, life sciences, advanced manufacturing, and defense/national security).

- **Mature an Ecosystem Center of Gravity**: Proximity matters in developing our cluster center-of-gravity. GeoFutures has an opportunity to mature its center of gravity and serve as a "front door" for St. Louis' geospatial ecosystem.

- **Limited Resourcing of the GeoFutures Initiative**: The GeoFutures Initiative to date has been led by a part-time consultant and fractional GSL staff with no ecosystem governance. This contributes to the initiative's inability to scale and unclear accountability.

- **Need for a Backbone Organization**: Stakeholders across the ecosystem continue to highlight requirements which are inherent of a "backbone" organization (i.e. strategy setting, wayfinding, advocacy, business and talent attraction). No other entity in the ecosystem today serves as a true backbone; this is an opportunity for GeoFutures.

GEOFUTURES

OUR WAY FORWARD

AN ACTIONABLE STRATEGY FOR THE ST. LOUIS GEOSPATIAL ECOSYSTEM

Setting an Action-Oriented Strategy, Guided by an Ecosystem "North Star"

The *GeoFutures Strategic Roadmap* prescribed an aspiration for "the St. Louis region to become the global center for geospatial excellence, innovation, and equitable economic growth." This vision statement planted a flag to name St. Louis as the world leader in geospatial technology, talent, and solutions. Reflecting on this aspirational statement, stakeholders noted that a refreshed vision should better connect to a clearer purpose beyond being the best, or being the world leader; and offer clear outcomes of success that are tangible and visible in the region, such as growing jobs and attracting businesses. With this feedback, we developed a North Star aspiration statement to guide the ecosystem:

Our North Star

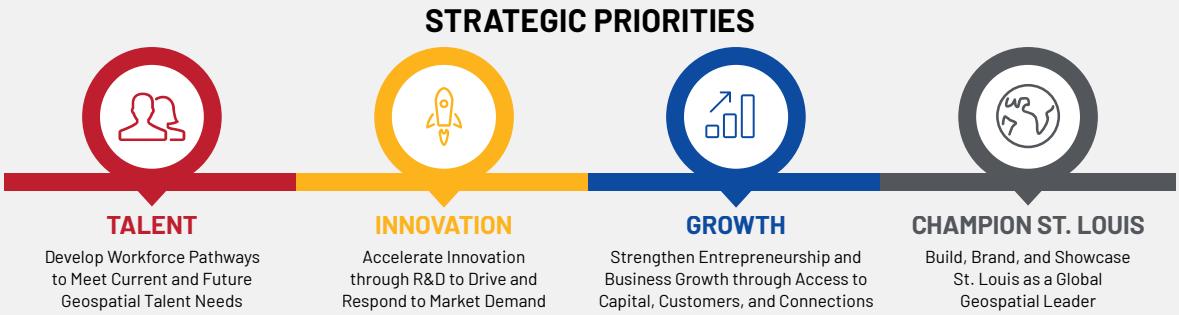
To position metro St. Louis as **a world leader in geospatial innovation** by solving major economic, societal, and national security challenges; growing **business and jobs; fostering a thriving ecosystem** of breakthrough technologies and talent; and ensuring that **economic growth benefits communities** throughout the bi-state region.

This North Star sets the purpose of the ecosystem's work and guides the strategy and implementation plan of the cluster.

REFRESHED STRATEGIC PRIORITIES

Guided by an aspirational North Star, the GeoFutures strategy refresh presents an opportunity to focus a set of four Strategic Priorities for the ecosystem, which evolve from the original five outlined in 2020.

FIGURE 1: GEOSPATIAL ECOSYSTEM STRATEGIC PRIORITIES AND MULTIPLIERS



Multipliers: St. Louis Competitive Advantages and Opportunities

In addition to the Strategic Priorities, the refreshed strategy presents three Multipliers, which serve as competitive advantages and opportunities for St. Louis. The Multipliers justify a "why here; why now" imperative for the ecosystem and orient horizontally across the four strategic priority verticals as shown in shown in Figure 1.

NORTH ST. LOUIS: INVEST IN THE COMMUNITY AND SUPPORT DEVELOPMENT AROUND THE NGA SITE

The transformation of North St. Louis, anchored by the new NGA West headquarters, represents a once-in-a-generation opportunity for community-led development and engagement. By intentionally aligning geospatial industry growth with local priorities, St. Louis can foster broad economic revitalization, create pathways to quality jobs, and ensure that the benefits of innovation are shared by all communities. This Multiplier emphasizes the importance of engaging neighborhoods and communities surrounding NGA through activities to align with community-led neighborhood plans stemming from Project Connect, supporting local organizations, such as Gateway Global and investing in local infrastructure and amenities in the neighborhoods immediately adjacent the site where N2W was built. The result is a thriving, resilient community that serves as a model for place-based economic development and citizen engagement, while also strengthening the region's talent pipeline and innovation capacity.

GEOAI: CAPITALIZE ON THE EMERGENCE OF HIGH-GROWTH GEOSPATIAL AI TECHNOLOGIES AND MARKET

St. Louis is positioned to lead in the rapidly expanding field of GeoAI, the integration of artificial intelligence and machine learning with geospatial data and analytics, through our mature clusters of strength. This Multiplier leverages the region's strengths in research and geospatial technology to drive breakthrough applications, such as NGA's leading role in the adoption and application of GeoAI in national security, the Taylor Geospatial Institute GeoAI initiative, and Taylor Geospatial Engine Field Boundaries initiative. By fostering collaboration among academic institutions, startups, established companies, and government agencies, St. Louis can accelerate the commercialization of GeoAI solutions and attract new investment. The GeoAI Multiplier also supports the development of specialized workforce skills, positioning the region at the forefront of this high-growth subsector so that it can drive and respond nimbly to evolving market demands.

CLUSTERS OF STRENGTH: LEVERAGE STL INDUSTRIES: AGTECH, LIFE SCIENCES, ADVANCED MANUFACTURING, AND NATIONAL SECURITY

The convergence of geospatial capabilities with St. Louis' established industry clusters of agtech, life sciences, advanced manufacturing, and national security creates powerful opportunities for cross-sector innovation and value creation. This Multiplier encourages the integration of geospatial and GeoAI technologies into core regional industries, enhancing their competitiveness and enabling new business models. For example, geospatial analytics can drive precision agriculture decisions, optimize supply chains in manufacturing, support biomedical research, and strengthen mission-critical defense operations. By building bridges across these clusters, St. Louis can unlock innovation, attract diverse talent, and position itself as a national leader in applied geospatial solutions.

Together, these Multipliers reinforce St. Louis' unique value proposition and set an ecosystem ethos which connects community needs and industry opportunities. These Multipliers provide a compelling rationale for investment, partnership, and sustained growth—making the case for "why here; why now" in the global geospatial landscape.

Aligning Strategic Priorities to Objectives and Actions

Stakeholders noted an area of improvement for the ecosystem is to more clearly align objectives and actions to Strategic Priorities in the *GeoFutures Strategic Roadmap*. We developed an implementation plan to more clearly align measurable objectives and concrete actions to Strategic Priorities. The strategy hierarchy outlines the following tiers for the ecosystem implementation plan:

- **Strategic Priorities**: Broad areas of focus for the ecosystem which guide the direction of the cluster and align with the North Star
- **Objectives**: Actionable, time-bound efforts which break down the priority into measurable, manageable parts
- **Key Performance Indicators**: Quantifiable or qualifiable measures used to evaluate the success of the ecosystem in meeting the objective
- **Actions**: Concrete, detailed activity or initiative undertaken to achieve the objective

STRATEGIC PRIORITIES AND OBJECTIVES

Strategic Priority	Objectives
Talent: Develop Workforce Pathways to Meet Current and Future Geospatial Talent Needs	• Map and Publish Geospatial Talent Market Landscape • Increase Investments and Resourcing for Talent Development Initiatives • Develop a K-12 Pipeline • Establish and Promote Geospatial Certificate and Degree Programs • Launch and Promote Ongoing Professional Development & Upskilling Initiatives • Facilitate Career Connections and Job Placement
Innovation: Accelerate Innovation through Research and Development to Drive and Respond to Market Demand	• Set a Strategic Focus for Geospatial Innovation • Attract Top Geospatial Talent • Increase Research and Development Funding and Infrastructure • Strengthen Cross-Sector Innovation Collaboration
Growth: Strengthen Entrepreneurship and Business Growth through Access to Capital, Customers, and Connections	• Serve as a Wayfinder to Support Entrepreneurs, Businesses, and Investors • Promote Geospatial Entrepreneurship Support Programs • Create a Corporate Connect Initiative • Develop Entrepreneurial Alumni Networks • Support Targeted Business Recruitment and Retention • Create a Regional Geospatial and GeoAI Capital Fund
Champion St. Louis: Build, Brand, and Showcase St. Louis as a Geospatial Leader	• Advance Policy Engagement, Advocacy, and Resources Pursuit • Unify the Ecosystem's Digital Presence • Establish a St. Louis Geospatial Ambassadors Program • Showcase Regional Geospatial Assets and Achievements • Create a Center-of-Gravity for the Geospatial Ecosystem

A "Lead, Support, Amplify" Framework to Align the Ecosystem

The GeoFutures team proposes that ecosystem stakeholders organize and align to a "Lead, Support, Amplify" framework to better clarify roles and responsibilities. This framework was originally developed by the 39 North Agtech Innovation District and is being adopted in BioSTL's Bioeconomy Strategy implementation plan framework; it provides a structured approach for aligning stakeholder involvement to specific objectives and actions within the implementation plan.

Lead	Support	Amplify
• Serves as the primary decision-maker and driver of outcomes • Responsible for tracking and reporting metrics • Acts as convener and project manager for the objective or action • Role is core to the organization's mission • Requires a major commitment of time and resources	• Helps inform strategy and shape direction • Regularly engages through meetings, virtual collaboration, and feedback • Participates in measuring outcomes • Role is directly related to the organization's mission • Involves a meaningful commitment of time and resources	• Plays a passive, yet important, role in extending reach • Receives information and messaging and distributes it to broader audiences • Attends major events and milestone activities • Role is mission-related or mission-adjacent • Requires minimal commitment of time and resources

No single organization alone could accomplish the strategy outlined in this report. Similar cluster organizations in the St. Louis region have employed this framework to enable greater ecosystem clarity of roles and responsibilities and accountability for outcomes through defined metrics. The GeoFutures Initiative recommends a similar approach to operationalize the implementation plan outlined in this document and set the conditions for intentional and accountable progress.

The implementation plan is an evolving and flexible document and is held by the GeoFutures team, who intend to finalize roles and responsibilities for objectives, metrics, and actions with ecosystem stakeholders throughout Fall 2025. The following pages contain the draft implementation plan for stakeholder input and prioritization as of late September 2025.

Strategic Priority: **Talent**

DEVELOP WORKFORCE PATHWAYS TO MEET CURRENT AND FUTURE GEOSPATIAL TALENT NEEDS

Objectives	Assessable Metrics	Actions
Map and Publish Geospatial Talent Market Landscape	• Number of geospatial roles mapped and published • Frequency of updates to the talent map • Stakeholder feedback on the usefulness of the talent map • Satisfaction levels of educational institutions and employers with the alignment of training to market needs	Conduct a comprehensive mapping of current and projected geospatial workforce needs in the Bi-State region, including roles that may not be labeled "geospatial" but require such skills (e.g., data scientists, analysts in various sectors)
		Map the talent supply capacity (institutions, programs, curricula) which generate a talent pipeline for the ecosystem
		Publish findings in an interactive public-facing website and update this data on an annual basis to inform both educational institutions and employers, ensuring alignment between training and market needs
Increase Investments and Resourcing for Talent Development Initiatives	• Amount of new funding going towards ecosytem Talent programming	Advocate for resourcing to expand, align, and accelerate the awareness, education, training, and certification of a geospatial workforce in the region
		Enhance coordination between efforts at the regional and state levels around policy, advocacy, standards, programming, and funding (e.g., with the Missouri GIS Advisory Council, MO Office of Geospatial Information, state-level education agencies, colleges and universities, local schools and school districts)
Develop a K-12 Pipeline	• Number of K-12 schools engaged in geospatial education programs • Student participation rates in geospatial activities • Number of educators trained in geospatial curriculum • University entrants from Bi-State region • Feedback from educators on curriculum effectiveness • Student interest and engagement in geospatial topics	Identify gaps in K-12 preparation for geospatial careers, and invest in outreach, curriculum development, and teacher training
		Support and deepen ongoing K-12 geospatial literacy, education, and career awareness efforts, including material support to educators and trainers, with a particular focus on under-represented communities
		Track the proportion of university entrants in geospatial programs coming from schools in the Bi-State region
		Fund a nationally recognized flagship scholarship for geospatial degrees in St. Louis
		Inspire young learners about ways global and societal challenges can be solved through geospatial-oriented solutions (i.e. Science Center, exhibits, field trips)

Strategic Priority: **Talent** *continued*

DEVELOP WORKFORCE PATHWAYS TO MEET CURRENT AND FUTURE GEOSPATIAL TALENT NEEDS

Objectives	Assessable Metrics	Actions
Establish and Promote Geospatial Certificate and Degree Programs	• Enrollment rates in geospatial programs • Graduation rates from geospatial programs • Student and faculty feedback on program relevance and quality • Industry recognition and partnerships with academic institutions	Establish geospatial related certificate and degree programs at local universities and community colleges that meet projected market demand
		Promote these programs to attract both local and global students, and ensure they are recognized by employers and industry
		Seek USGIF/other accreditation for geospatial certifications at St. Louis area colleges and universities
		Pilot and scale successful internship, apprenticeship, and other work-based learning opportunities to facilitate education-to-workforce pathways
		Encourage students in non-geospatial fields to add geospatial skills, increasing the "horizontality" of geospatial expertise in the region
		Work with faculty across departments to integrate geospatial concepts and tools into their curricula
Launch and Promote Ongoing Professional Development & Upskilling Initiatives	• Number of professional development programs launched • Participation rates in training initiatives • Certification of completion rates • Participant feedback on training effectiveness • Employer satisfaction with employee skill enhancements	Partner with training providers to offer reskilling and upskilling programs aligned with in-demand roles
		Create and promote programs for working professionals to gain or deepen geospatial skills such as hackathons, badges, certifications, short courses, and workshops
		Partner with industry to ensure these programs are relevant and accessible, and to encourage upskilling of existing employees
		Develop and pilot co-op and Internship Pathways for prospective employees, looking to enter the geospatial field, especially for underrepresented communities
		Offer professional development trainings and workshops for ecosystem members

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Strategic Priority: **Talent** *continued*

DEVELOP WORKFORCE PATHWAYS TO MEET CURRENT AND FUTURE GEOSPATIAL TALENT NEEDS

Objectives	Assessable Metrics	Actions
Facilitate Career Connections and Job Placement	• Placement rate (% of participants who secure positions) • Time-to-placement (average time to job offer) • Web metrics for Opportunity Hub • Employer satisfaction with partnership and placement process	Launch a digital Opportunity Hub that aggregates job boards, career events, mentorship programs, and resources (including scholarship opportunities) in one accessible platform
		Organize regular career match-making events through the Hub to connect job seekers and employers for networking and recruitment
		Mature formal partnerships with universities to provide recent graduates direct access to job opportunities and career resources in geospatial related fields
		Launch a dedicated effort to ensure retiring or transitioning members of the geospatial workforce are redirected towards opportunities in the St. Louis ecosystem
		Target graduate and post-doc students outside of St. Louis and attract them to the geospatial ecosystem

Stakeholders for this Strategic Priority may include (but are not limited to): Claim Academy; Cortex Innovation District; Gateway Global; Harris-Stowe State University; Illinois State Board of Education; Jefferson College; K-12 schools; LaunchCode; Lindenwood University; Little Bit Foundation; Missouri Department of Elementary and Secondary Education; Missouri GIS Advisory Council; Missouri University of Science and Technology; National Geospatial-Intelligence Agency; Philanthropy; Ranken Tech; Regional Business Council; RUNG for Women; Saint Louis University; Southern Illinois University Edwardsville; Southwestern Illinois College; St. Charles Community College; St. Louis Community College; Taylor Geospatial Institute; TechSTL; T-REX; The Globe Building; The Post Building; The Wedge + SIUE; Unleashing Potential; University of Illinois Urbana-Champaign; University of Missouri; University of Missouri - St. Louis; USGIF and the St. Louis Area Community of Interest (SLAC); Washington University in St. Louis; as well as academia and industry generally. Details will be refined through direct stakeholder engagement.

DRAFT

Strategic Priority: **Innovation**

ACCELERATE INNOVATION THROUGH RESEARCH AND DEVELOPMENT TO DRIVE AND RESPOND TO MARKET DEMAND

Objectives	Assessable Metrics	Actions
Set a Strategic Focus for Geospatial Innovation	• Number of R&D projects initiated, in progress, and completed per year • Percentage of projects delivered on time and within budget • Perceived culture of innovation within R&D teams (via surveys or interviews) • Quality of project documentation and knowledge transfer	Develop the emerging technology focus areas for the ecosystem informed by the Taylor Geospatial R&D roadmap, DARPA, IARPA, America's AI Action Plan, corporate IRAD, and other relevant national, state, and local technology strategies
		Institute a formal geospatial tech transfer and commercialization framework that systematically translates research into business opportunities
Attract Top Geospatial Talent	• Number of top-tier faculty recruited • Support provided to postdocs and graduate students • Faculty and student satisfaction with research opportunities • Recognition of faculty contributions to the geospatial field	Identify and recruit top-tier geospatial faculty to local universities, focusing on those with strong research portfolios and the ability to attract students and funding
		Support postdocs and graduate students, building a pipeline of future leaders and innovators
		Attract new R&D firms (R&D/innovation entities of large companies) or research groups to the region, boosting both the volume and diversity of research
		Leverage the "multiplier effect" of superstar faculty, who bring networks, funding, and reputation
Increase Research and Development Funding and Infrastructure	• Total amount of research funding secured • Number of new R&D firms attracted to the region • Feedback from research institutions on funding adequacy • Impact assessments of funded projects on market readiness	Advocate for state and federal funding and incentives to increase geospatial R&D investment and commercialization (e.g., tax credits, research grants).
		Publicize existing incentives and help companies navigate the application process
		Grow the total amount of research funding (public, private, philanthropic) flowing to local institutions for geospatial R&D
		Track and report on research funding, including small business innovation research (SBIRs), small business technology transfer (STTRs), and other federal/state grants, as well as private investment
		Develop and maintain shared innovation infrastructure, such as a centralized geospatial data lake, open-access labs, common code and model repository, and digital platforms, to support research collaboration and accelerate discovery

Strategic Priority: **Innovation** *continued*

ACCELERATE INNOVATION THROUGH RESEARCH AND DEVELOPMENT TO DRIVE AND RESPOND TO MARKET DEMAND

Objectives	Assessable Metrics	Actions
Strengthen Cross-Sector Innovation Collaboration	• Number of collaborative research projects initiated using shared infrastructure • Number of publications, patents, or grant resulting from shared R&D • Researcher feedback on the impact of shared resources on collaboration and discovery • Case studies of successful collaborative projects enabled by shared infrastructure	Launch hackathons, innovation challenges, and other non-academic R&D activities to spur applied solutions for regional (e.g. crime, disasters) and national challenges and entrepreneurial thinking
		Develop forums, consortia, or working groups that bring together academia, industry, and startups to identify needs and co-create solutions
		Facilitate applied research projects where startups and established firms can access academic expertise and resources
		Support the creation of "innovation fellowships" or residencies for practitioners to work alongside researchers
		Fund a nationally recognized flagship early- to-mid career academic or professional fellowship program for geospatial research in St. Louis
		Recognize and reward breakthrough ideas and impactful research through awards and public showcases

Stakeholders for this Strategic Priority may include (but are not limited to): 39 North Agtech Innovation District; Advanced Manufacturing Innovation Center St. Louis (AMICSTL); Arch Grants; BioSTL; Cortex Innovation District; Donald Danforth Plant Science Center; Downtown North Innovation District; GeoFutures; Harris-Stowe State University; Jackie Joyner-Kersee Food, Agriculture, and Nutrition Innovation Center; Missouri Technology Corporation; Missouri University of Science and Technology; Moonshot Labs; National Geospatial-Intelligence Agency; Saint Louis University; T-REX; Taylor Geospatial Engine; Taylor Geospatial Institute; TechSTL; The Globe Building; The Post Building; University of Illinois Urbana-Champaign; University of Missouri; University of Missouri - St. Louis; University of Southern Illinois Edwardsville; Washington University in St. Louis; as well as academia, industry, the start up community, and risk capital ecosystem generally. Details will be refined through direct stakeholder engagement.

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Strategic Priority: **Growth**

STRENGTHEN ENTREPRENEURSHIP AND BUSINESS GROWTH THROUGH ACCESS TO CAPITAL, CUSTOMERS, AND CONNECTIONS

Objectives	Assessable Metrics	Actions
Serve as a Wayfinder to Support Entrepreneurs, Businesses, and Investors	• Number of entrepreneurs/ businesses served annually • Number of mentorship matches or resource referrals made • Number of partnerships with existing organizations • Stakeholder feedback on coordination of services • Case studies of businesses successfully navigated through the ecosystem	Provide wayfinding, mentorship, and resources for businesses
		Ensure that entrepreneurs can easily find the support they need at every stage
		Coordinate with existing organizations (e.g., T-Rex, BioSTL) to avoid duplication and maximize impact
Promote Geospatial Entrepreneurship Support Programs	• Number of startups accepted into the support program annually • Number of corporate partnerships or pilot programs established through the support program • Participant satisfaction with program services, testimonials • Corporate partner feedback on the quality and readiness of program graduates • Case studies of startup success	Launch a dedicated capital-ready and/or customer-ready entrepreneur support program to connect startups with corporate partners, funding, and first customers
		Focus on horizontal problem-solving and cross-vertical engagement, not just defense/intel but also logistics, agtech, health, etc.
		Provide wraparound services (mentorship, workspace, technical support, and access to data) to retain businesses in the St. Louis region
Create a Corporate Connect Initiative	• Number of pilot programs launched between startups and industry • Number of startup showcase events held • Number of startups securing their first customer via the initiative • Startup and corporate participant feedback on engagement quality and outcomes • Success stories of pilot programs leading to commercial contracts	Structure engagements with leading St. Louis corporate mentors, customers, and funders
		Facilitate formal pilot programs between local startups and established corporations (resulting in first-customer business)
		Organize a startup showcase event to connect startups with regional customers, outside venture capital firms, media

Strategic Priority: **Growth** *continued*

STRENGTHEN ENTREPRENEURSHIP AND BUSINESS GROWTH THROUGH ACCESS TO CAPITAL, CUSTOMERS, AND CONNECTIONS

Objectives	Assessable Metrics	Actions
Develop Entrepreneurial Alumni Networks	• Number of alumni engaged as mentors, investors, or advocates • Number of startups supported by alumni mentors or investors • Amount of angel investment capital contributed by alumni/founders • Alumni and entrepreneur satisfaction with network engagement • Testimonials or case studies highlighting successful alumni-startup collaborations	Engage successful alumni as mentors, investors, and advocates for new entrepreneurs
		Solicit alumni feedback to identify gaps and opportunities in the ecosystem
		Build a culture of "giving back" among successful founders, encouraging angel investments
		Implement a go-to-market mentorship program that pairs startups with experienced marketing and sales executives
Support Targeted Business Recruitment and Retention	• Number of business recruitments and expansions • Amount of investment ($) • Number of jobs and amount of payroll ($)	Develop a business attraction strategy and network mapping initiative to develop new business development opportunities grounded in existing relationships
		Organize St. Louis geospatial immersion trips (or familiarization tours) for curated, high-touch visits for potential business attraction and investor prospects and other stakeholders
		Create customized pitch materials highlighting St. Louis's geospatial assets, incentives, talent pool, and success stories
		Recruit high-growth national and international companies that enrich and expand St. Louis' innovation economy and bring competitive advantage to regional corporations, research institutions, and universities
		Provide targeted resources and streamlined services to help existing businesses thrive in a supportive, business-friendly environment
		Create an incentive program for geospatial companies that (depending on the project) may include benefits such as workforce training grants, real estate tax abatement for establishing operations in target zones, and relocation assistance for skilled talent

DRAFT

Strategic Priority: **Growth** *continued*

STRENGTHEN ENTREPRENEURSHIP AND BUSINESS GROWTH THROUGH ACCESS TO CAPITAL, CUSTOMERS, AND CONNECTIONS

Objectives	Assessable Metrics	Actions
Create a Regional Geospatial and GeoAI Capital Fund	• Total capital raised and deployed by the fund annually • Number of startups and scaleups funded (local and external) • Number of co-investment deals with corporate development offices • Startup and investor feedback on fund accessibility and support • Case studies of commercialization successes enabled by the fund	Understand the landscape of risk capital in St. Louis and what is needed in the market to support business growth
		Provide geospatial technology specific diligence to guide investment criteria
		Establish and/or coordinate an all-stage venture fund and/or private equity to retain and grow companies
		Funding will be intended to commercialize geospatial and GeoAI applications to market and encourage corporate development offices for co-investment and strategic support
		Structure the fund to support both local startups and those attracted from elsewhere

Stakeholders for this Strategic Priority may include (but are not limited to): 39 North Agtech Innovation District; Advanced Manufacturing Innovation Center St. Louis (AMICSTL); Arch Grants; Area colleges and universities; BioSTL; Capital Innovators; Cortex Innovation District; Cultivation Capital; Downtown North Innovation District; GeoFutures; Greater St. Louis, Inc.; Missouri Technology Corporation; Moonshot Labs; OPO Startups; St. Louis Development Corporation; St. Louis Regional Entrepreneurship Educators (STLREE); Stakehouse; T-REX; Taylor Geospatial Engine; Taylor Geospatial Institute; TechSTL; The Wedge + SIUE; as well as academia, industry, the start up community, and risk capital ecosystem generally. Details will be refined through direct stakeholder engagement.

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Strategic Priority: **Champion St. Louis**

BUILD, BRAND, AND SHOWCASE ST. LOUIS AS A GLOBAL GEOSPATIAL LEADER

Objectives	Assessable Metrics	Actions
Advance Policy Engagement, Advocacy, and Resources Pursuit	• Number of policy/position papers developed and submitted annually • Number of meetings or engagements with policymakers at local, state, and national levels • Number of ecosystem participants involved in advocacy activities • Stakeholder feedback on the clarity and relevance of the policy agenda • Policymaker feedback on the effectiveness of advocacy efforts • Amount of federal grant funding secured for ecosystem development	Proactively shape and advocate for policies that support the growth and competitiveness of St. Louis's geospatial ecosystem at the local, state, and national levels
		Mobilize, coordinate, and equip the ecosystem for effective advocacy (e.g., policy agenda setting, policymaker engagement, etc.)
Unify the Ecosystem's Digital Presence	• Website/portal launch and number of unique visitors per month • Number of organizations, events, and assets listed on the portal • Frequency of content updates and news postings • Number of newsletter/email subscribers • User feedback on website usability and comprehensiveness • Stakeholder satisfaction with the portal as a "front door" to the ecosystem	Design and launch a comprehensive website or portal that serves as the digital "front door" for the St. Louis geospatial ecosystem
		Aggregate information on organizations, events, assets, news, and opportunities in one place
		Curate and maintain an inventory of geospatial organizations, companies, research centers, and talent in the region
Establish a St. Louis Geospatial Ambassador Program	• Number of ambassadors recruited and trained • Number of outreach, speaking engagements, and advocacy campaigns led by ambassadors • Ambassador feedback on training and resources provided • Impact stories of increased awareness or partnerships resulting from ambassador activities	Develop a toolkit of talking points, reference material and basic resources for civic ambassadors
		Recruit and train a diverse cohort of civic, business, and community leaders across sectors and industries to serve as geospatial ambassadors
		Equip ambassadors with resources and messaging to promote St. Louis's geospatial strengths locally, nationally, and internationally
		Organize ambassador-led outreach, speaking engagements, and advocacy campaigns to elevate the region's profile

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Strategic Priority: **Champion St. Louis** *cont.*

BUILD, BRAND, AND SHOWCASE ST. LOUIS AS A GLOBAL GEOSPATIAL LEADER

Objectives	Assessable Metrics	Actions
Showcase Regional Geospatial Assets and Achievements	• Number of success stories, innovations, and case studies published • Number of digital platform visitors, media mentions, and event attendees • Annual publication and distribution of the "State of Geospatial in St. Louis" • Stakeholder feedback on the visibility/impact of regional storytelling • Media and public perception of St. Louis's geospatial ecosystem	Develop a coordinated marketing and communications strategy that elevates St. Louis as a globally recognized hub for geospatial innovation and workforce while strengthening regional pride
		Develop a coordinated regional events and conferences strategy for the ecosystem which aligns stakeholders to critical engagements both in St. Louis and outside of St. Louis
		Convene an annual conference with academic institutions and industry to discuss how the geospatial field and industry is evolving; which considers changing market dynamics and technology disruptors (e.g. GeoAI)
		Highlight success stories, innovations, and case studies through digital platforms, media, and events
		Implement initiatives and demonstrations to improve geospatial-related capacity, showcase real-world geospatial-related community impact, and raise geospatial literacy
		Publish an annual "State of Geospatial St. Louis" report to demonstrate progress and impact
Create a Center-of-Gravity for the Geospatial Ecosystem	• Number of events, programs, and networking sessions hosted • Number of attendees and participants in hub activities • Number of ecosystem partners looking to co-locate with backbone • Participant feedback on the value of a center of gravity for collaboration • Business feedback on a center of gravity in the ecosystem (i.e. airport pickup engagements)	Launch a physical and virtual hub ("Center of Gravity") that serves as the focal point for geospatial innovation, collaboration, and visibility in St. Louis
		Develop location needs to co-locate with established companies, research institutions, and government partners to foster synergy and shared identity
		Host regular programming, networking, community building, and other events to reinforce St. Louis' leadership position and strengthen a culture of collaboration
		Support and promote community-led development around the NGA campus in North St. Louis

Selected stakeholders for this Strategic Priority include (but are not limited to): 39 North Agtech Innovation District; AMICSTL; BioSTL; Cortex Innovation District; Downtown North Innovation District; GeoFutures; Greater St. Louis, Inc.; St. Louis Development Corporation; St. Louis Science Center; St. Louis sports teams and stadiums; T-REX; TechSTL; U.S. Geospatial Intelligence Foundation; as well as economic development and industry ecosystems, generally. Details will be refined through direct stakeholder engagement.

GEOFUTURES

CATALYZING THE STRATEGY:

THE PURPOSE AND UTILITY OF A BACKBONE

The Need for an Ecosystem Backbone

In our feedback sessions, stakeholders made clear that many of the core functions traditionally associated with an organizing authority, often referred to as a "backbone organization," are currently absent or under-resourced in the ecosystem. These core functions were designed to be fulfilled by the GeoFutures Initiative, and the requirements of the ecosystem have matured. Stakeholders voiced that to accelerate progress, the ecosystem needs centralized coordination, shared measurement for accountability, and a unified voice backed by industry expertise to drive progress for the ecosystem.

In a July 2025 strategic workshop with ecosystem leaders, participants provided thoughts on what the 2020 *GeoFutures Strategic Roadmap* may be missing, five years since first published. Their sentiments point to capabilities inherent of an organizing authoritative body to catalyze the ecosystem, such as wayfinding, advocacy, convening and coordinating efforts across the ecosystem, and business and talent attraction and retention.

This stakeholder feedback is consistent with a nationally accepted collective impact "backbone" model first introduced when a delegation from St. Louis participated in a Regional Entrepreneurship Acceleration Program (REAP) through the Massachusetts Institute of Technology (MIT) Sloan School of Management in 2023. MIT REAP engages communities around the world to strengthen innovation-driven entrepreneurial ecosystems. A primary recommendation from the St. Louis MIT REAP team was for the ecosystem to "further develop the GeoFutures Initiative's capacity to align metro geospatial stakeholders around shared priorities, catalyze and mobilize resources to achieve cluster development objectives, and act as a port of entry and wayfinding mechanism for organizations interested in engaging with and contributing to the development of the St. Louis geospatial ecosystem."

The Purpose of an Ecosystem Backbone

Even with a "Lead, Support, Amplify" framework in place, the ecosystem needs an entity responsible for stewarding the strategy, fostering collaboration and coordination, and tracking and reporting on progress. In many industry ecosystems, this is referred to as "the ecosystem backbone."

Backbones serve stakeholders in their respective ecosystems, including businesses and entrepreneurs, academic and research institutions, policymakers and government agencies, investors and funders, the ecosystem workforce, community organizations and residents, and economic development and industry cluster partners.

At its core, an industry backbone provides the following the offerings to their customers in the ecosystem:

- Convenes and coordinates the efforts of various entities across the cluster
- Sets the strategy, aligns stakeholders, catalyzes prioritized actions, mobilizes resources, and tracks performance against shared goals
- Focuses on the industry and provides expert perspective on current and future trends
- Engages policymakers, promotes the region's brand, and shares successes to attract investment, talent, and recognition
- Acts as a wayfinder and serves as the "front door" for the cluster
- Attracts and supports business growth for the ecosystem

Benchmark Analysis of Backbone Organizations

The GeoFutures team conducted a benchmark analysis of backbone entities across the country to assess organizational design and governance best practices. The benchmark analysis involved researching and evaluating various backbone organizations of similar size and alignment to relevant industry clusters to understand their organizational structures, missions, visions, and capabilities for delivering products and services and creating impact within their communities. The methodology focused on identifying key elements such as governance, structure, funding, stakeholder engagement, and impact measurement. Two St. Louis-based backbone entities, BioSTL and 39 North Agtech Innovation District, provided overview presentations to leaders in the St. Louis geospatial ecosystem in a July 2025 strategic workshop. These presentations and insights from leaders provided valuable perspectives on best practices and challenges faced by backbone entities.

ASSESSED BACKBONES WERE:

- **39 North Agtech Innovation District** in St. Louis, Missouri – agtech cluster
- **BioForward Wisconsin** in Madison, Wisconsin – biohealth cluster
- **BioNexus KC** in Kansas City, Missouri – life science cluster
- **BioSTL** in St. Louis, Missouri – life sciences cluster
- **Catalyst Campus** in Colorado Springs, Colorado – defense and aerospace cluster
- **Central Indiana Corporate Partnership (CICP)** in Indianapolis, Indiana – corporate and economic partnership, with dedicated initiatives in agtech, life sciences, advanced manufacturing, tech, and talent development
- **MBold** in St. Paul, Minnesota – food and agriculture cluster
- **REACH Central Coast** in the California Central Coast – regional economic development with a specialized focus on Vandenberg Space Force Base

Across the benchmarked backbone organizations, several common themes emerged that are critical to their success and impact:

- Their work centers on cultivating environments that support talent development, entrepreneurship, and economic growth tailored to the unique strengths and opportunities of their regions
- Each entity demonstrates a strong commitment to building collaborative ecosystems by actively engaging diverse stakeholders, including industry leaders, academic institutions, government agencies, and entrepreneurs, to drive innovation within their regional clusters
- Intentional governance structures and dedicated leadership teams underpin their strategic direction and operational effectiveness
- These organizations prioritize sustainable funding models, often blending public, private, and philanthropic resources to ensure long-term viability
- Infrastructure development, whether through physical campuses, shared lab spaces, or innovation districts, is consistently leveraged to foster connectivity and accelerate commercialization
- All backbone entities emphasize measurable impact, using data to track progress, inform decision-making, and communicate value to partners and funders

St. Louis Geospatial Ecosystem Backbone

We propose the creation of a dedicated backbone organization for the St. Louis geospatial ecosystem. This organization will serve to meet the needs articulated by ecosystem stakeholders as the central convener, catalyst, and steward of the region's geospatial strategy, ensuring that innovation, economic growth, and opportunity are accessible to all.

Proposed characteristics of the backbone reflect the unique needs and aspirations of the St. Louis geospatial community, as well as the critical success factors observed in a benchmark analysis of other similar backbones.

MISSION: WHY THE ORGANIZATION EXISTS

The proposed mission statement of the backbone is: To catalyze the growth of St. Louis' geospatial economy by uniting stakeholders, advancing innovation, supporting business and workforce development, and ensuring opportunity for all communities—leveraging the transformative power of geospatial technologies.

VISION: WHAT THE ORGANIZATION ASPIRES TO DO

The proposed vision statement of the backbone is: To position St. Louis as a world leader for geospatial and related artificial intelligence innovation by attracting top talent, entrepreneurs, start-ups, capital, and businesses, and fostering a vibrant ecosystem of world-class innovators.

CUSTOMERS: WHO THE ORGANIZATION SERVES

The backbone organization will serve a diverse set of stakeholders, each critical to the vitality and sustainability of the geospatial ecosystem:

- **Geospatial Startups and Entrepreneurs**: Early-stage companies seeking support, resources, and connections to move to or grow in St. Louis
- **Established Companies**: Both local and national/international firms looking to expand, collaborate, or tap into the region's talent and innovation
- **Academic and Research Institutions**: Universities, colleges, and research centers engaged in geospatial science, technology, and workforce development
- **Government Agencies and Policymakers**: Elected officials and agencies at the federal, state, and local level involved in geospatial data, analysis, and policy
- **Investors and Funders**: Venture capitalists, angel investors, and philanthropic organizations interested in supporting geospatial innovation and economic growth
- **Workforce and Talent**: Students, job seekers, and professionals looking for training, career opportunities, and pathways into the geospatial sector
- **Community Organizations and Residents**: Groups and individuals focused on ensuring that geospatial-driven economic growth benefits all communities in the St. Louis region
- **Economic Development and Peer Industry Cluster Organizations**: Organizations from adjacent industries (e.g., advanced manufacturing, agtech, bio and life sciences, defense and national security) leveraging geospatial technology for innovation as well as economic development organizations in the region

PRODUCTS AND SERVICES: WHAT THE BACKBONE OFFERS TO CUSTOMERS

To fulfill its mission as the central catalyst and convener for the St. Louis geospatial ecosystem, the backbone organization must deliver a suite of products and services designed to meet the evolving needs of stakeholders across the region. These offerings have been carefully prioritized and sequenced, beginning with foundational backbone functions and advancing toward more complex, resource-intensive initiatives as the organization matures.

Each product and service is designed to address specific gaps identified through stakeholder engagement and national benchmarking, while collectively supporting the ecosystem's growth, inclusivity, and global competitiveness. By providing these resources, the backbone will empower ecosystem partners to collaborate, innovate, and thrive.

The following list outlines these products and services in ascending order of complexity and resource intensity, illustrating a clear pathway for the backbone's maturity and impact.

Offering	Description	Value to the Ecosystem
Ecosystem Convening and Facilitation	Brings together diverse stakeholders (startups, corporates, risk capital, academia, government, and community groups) through coalition meetings, events, and working groups to foster collaboration, awareness, and strategic alignment	Builds trust, accelerates partnerships, and ensures coordinated progress across the ecosystem
Strategic Documents	Comprehensive documents outlining the vision, strategy, and progress of the St. Louis geospatial ecosystem. (i.e. Strategic Roadmap, Cluster Implementation Plan, Talent Landscape, Technology and Market Focus Areas, Annual State of Geospatial in St. Louis Report)	Articulates where the industry is going and guides investment, policy, and collaborative action for all stakeholders
Wayfinding Resources	Up-to-date databases or visual maps of geospatial companies, startups, research institutions, and resources; survey of the ecosystem assets, products and services	Makes it easier for stakeholders to find partners, resources, and opportunities
Community Engagement	Designs, and supports community engagement initiatives, builds community partnerships, and conducts outreach to ensure geospatial growth benefits all communities	Promotes broad-based awareness and economic opportunity
Branding and Marketing Assets	Pitch materials which align to regional branding materials, promotional videos, and storytelling content that position St. Louis as a geospatial leader	Attracts investment, talent, and national/global attention
Catalysts for Business Growth	Products to grow business and foster a culture of innovation and entrepreneurship in the ecosystem, as outlined in the Growth Strategic Priority, such as a capital-ready and/or customer-ready entrepreneur support program, a corporate connect initiative, an entrepreneurial alumni network, and oversight or organization for a regional geospatial and/or AI capital fund	Encourages new solutions, startups, and collaborations within the ecosystem
Advocacy and Promotion	Represents the ecosystem to policymakers, promotes the region's geospatial brand, and shares success stories to attract investment, talent, and recognition	Raises the profile of the region, secures supportive policies, and draws new resources to the ecosystem

Offering	Description	Value to the Ecosystem
Business and Startup Support	Provides mentorship, resource navigation, and partnership development to help startups and established companies access expertise, funding, and market opportunities	Lowers barriers to growth, increases business success rates, and stimulates innovation
Business and Talent Attraction and Retention	Recruits new geospatial employees and companies to the region and supports existing businesses to ensure they remain and grow locally	Expands regional cluster, drives job creation and economic growth, strengthens the business environment
Geospatial Innovation Infrastructure	Shared innovation infrastructure available to ecosystem members, such as a geospatial data lake, open-access labs, common code and model repository, digital platforms, and high performance compute	Supports innovation, research, and development by making data more accessible

CAPABILITIES: HOW THE BACKBONE DELIVERS VALUE TO CUSTOMERS IN THE ECOSYSTEM

The backbone organization must be equipped to execute a diverse portfolio of products and services, each tailored to the needs of its stakeholders and aligned with the ecosystem North Star and Strategic Priorities.

The following organizational capabilities are foundational to the backbone's effectiveness; they enable the organization to set a clear direction, foster collaboration, and drive sustained growth. Each capability supports the backbone's role as a trusted convener, facilitator, and champion for the ecosystem.

- **Strategic Planning and Visioning**: Setting direction, aligning stakeholders, and guiding long-term ecosystem growth
- **Stakeholder Engagement and Facilitation**: Building, managing, and leveraging relationships across the ecosystem
- **Marketing, Branding and Communications**: Promoting the region, its assets, and its success stories
- **Community Engagement**: Ensuring broad-based participation and access to opportunities
- **Fundraising and Resource Development**: Securing the financial and in-kind resources necessary to sustain and grow the organization and its initiatives
- **Data Collection, Management and Analysis**: Gathering, maintaining, and interpreting data to inform strategy and operations
- **Program and Project Management**: Designing, implementing, and evaluating initiatives as outlined in the implementation plan objectives and actions
- **Technical Infrastructure and Platform Development**: Creating and maintaining digital and physical tools that enable innovation and collaboration

The proposed mission, vision, customer focus, products and services, and organizational capabilities establish a clear foundation for the backbone's role in advancing the St. Louis geospatial ecosystem. These elements define what the backbone will deliver and inform how it will be structured, governed, and operated. The GeoFutures team will next consider this content to draft a business and launch plan for the backbone.

Backbone Governance and Engagement

A critical component of the backbone's effectiveness will be its governance structure and ability to make decisions at the speed of industry. The board might be comprised of anchor institutions: leading organizations from across the geospatial ecosystem including major employers, research institutions, government agencies, economic development organizations, and community partners. These anchor institutions will play a pivotal role in providing strategic oversight and guidance for the backbone organization, ensuring alignment with regional priorities and upholding accountability, transparency, and broad representation in decision-making.

By engaging anchor institutions at the board level, the backbone will benefit from diverse perspectives, deep expertise, and strong networks. This governance model will reinforce shared ownership of the cluster's vision and outcomes, and help sustain momentum as the ecosystem grows and evolves. The specific composition and responsibilities of the board will be further defined in consultation with stakeholders as the backbone's structure is finalized.

The backbone organization will prioritize robust ecosystem engagement as a core operating principle to translate strategic vision into measurable impact. Drawing on best practices from successful cluster coalitions identified in the benchmark analysis, the GeoFutures team is considering a collaborative model that empowers stakeholders to co-create, implement, and sustain the region's geospatial strategy.

Under consideration is a coalition-based engagement framework designed to foster shared ownership, accountability, and action across the ecosystem. Key components of this approach include:

Coalition Meetings: Similar to the role of the GeoFutures Initiative, the backbone will convene quarterly coalition meetings to bring together key partners and action item leaders. These meetings will serve as targeted gatherings to assess the strategy implementation and advance the business of the ecosystem rather than town-hall style forums. This approach aligns to a model employed by BioSTL, designed to drive shared understanding across the ecosystem and shared accountability for outcomes.

Working Groups: The backbone will convene targeted working groups focused on specific objectives and actions outlined in the implementation plan, as needed. These groups will bring together cross-sector stakeholders to address challenges, advance objectives, and drive and evaluate progress in areas such as talent development, innovation infrastructure, business growth, and community engagement.

Next Steps

This report presents a bold and actionable roadmap for advancing the region's geospatial cluster. Through a collaborative, stakeholder-oriented approach, we have defined the North Star goal, a focused set of Strategic Priorities and Multipliers, measurable objectives, concrete actions, and operational tactics necessary to realize the full potential of the cluster—here and now. This work represents a theory of change for the ecosystem: if St. Louis establishes an independent backbone organization, focuses an ecosystem strategy, and implements an action-oriented plan with clear roles, then the region will catalyze growth in geospatial innovation and technology.

In Fall 2025, we will continue intentional engagements with stakeholders from across the ecosystem to hone our implementation plan; establish lead, support, and amplify roles; finalize key performance indicators for our objectives; set the conditions for accountability and progress for the ecosystem; and develop the business plan for the backbone.

GEOFUTURES

APPENDIX

Appendix A: Engaged Stakeholders in the Refresh of this Strategy, Summer 2025

The GeoFutures team would like to acknowledge and thank the following individuals whose input into the development of this strategy and implementation plan was incredibly valuable. These individuals gave their time to participate in stakeholder interviews, focus groups, strategy workshops, one-on-one discussions, and site visits. This list does not represent the full breadth of the St. Louis geospatial ecosystem or all GeoFutures partners.

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Appendix B: Background Information on Benchmark Analysis Organizations

BioSTL aims to foster collaborative innovation and entrepreneurship in St. Louis by building the infrastructure and ecosystem necessary to advance bioscience and create economic opportunity. Their vision is to establish St. Louis as a globally recognized hub for bioscience innovation, where research, entrepreneurship, and investment drive broad economic growth. BioSTL serves early-stage bioscience startups, academic researchers, investors, venture capital firms, and corporate partners in healthcare, agriculture, and life sciences. They offer services such as startup acceleration, venture funding, entrepreneurial training, and international business attraction. BioSTL's capabilities include deep expertise in bioscience commercialization, a strong network of investors and mentors, and a proven track record in attracting global companies to St. Louis. Their organizational infrastructure is supported by a nonprofit backbone with dedicated staff, partnerships with universities and corporations, and a physical campus with lab, office, and event space.

39 North Agtech Innovation District focuses on agtech innovation, aiming to create a vibrant district in St. Louis that attracts talent and investment. Their mission is to enhance the region's capacity for innovation by providing resources and infrastructure to support startups and established companies. 39 North engages with academic institutions, research organizations, and industry leaders to foster collaboration and drive economic growth. They offer services such as networking events, educational programs, and access to shared facilities. The organization leverages its strategic location and partnerships to facilitate cross-sector collaborations and promote the region as a leader in agtech and bioscience.

REACH Central Coast is a regional economic development organization dedicated to catalyzing sustainable growth across California's Central Coast. A cornerstone of REACH's strategy is its partnership with Vandenberg Space Force Base, leveraging the base's unique assets to position the region as a national hub for commercial space activity. REACH collaborates closely with Vandenberg leadership, local governments, and industry stakeholders to expand the base's role in the rapidly evolving space economy. Their initiatives include advocating for infrastructure improvements, supporting workforce development tailored to aerospace and space launch needs, and attracting private investment to build out the surrounding commercial ecosystem. Through these efforts, REACH aims to transform the Central Coast into a vibrant center for innovation, job creation, and economic resilience anchored by Vandenberg's strategic significance in the global space industry.

Central Indiana Corporate Partnership (CICP) aims to enhance Indiana's economic vitality by fostering collaboration among corporate, academic, and civic leaders. Their mission is to drive innovation and growth across key industries, including technology, life sciences and agtech, and advanced manufacturing. CICP engages with stakeholders to develop strategic initiatives, support workforce development, and promote regional competitiveness. They support branded industry and talent initiatives and offer services such as industry-specific research, policy advocacy, and networking opportunities. CICP's capabilities include a strong network of partners, expertise in economic development, and a commitment to fostering a collaborative ecosystem.

BioNexus KC focuses on bioscience research and innovation in Kansas City. Their mission is to advance the region's capacity for bioscience innovation by supporting research institutions, startups, and established companies. BioNexus KC engages with academic institutions, industry leaders, and government agencies to drive collaboration and economic growth. They offer services such as research funding, networking events, and access to shared facilities. BioNexus KC's capabilities include expertise in bioscience research, a strong network of stakeholders, and a commitment to fostering a collaborative ecosystem.

BioForward Wisconsin is dedicated to bioscience and healthcare innovation in Wisconsin. Their mission is to support the growth and development of the state's bioscience industry by providing resources and infrastructure to startups and established companies. BioForward engages with academic institutions, research organizations, and industry leaders to foster collaboration and drive economic growth. They offer services such as networking events, educational programs, and access to shared facilities. BioForward's capabilities include expertise in bioscience innovation, a strong network of stakeholders, and a commitment to fostering a collaborative ecosystem.

MBold focuses on food and agriculture innovation in Minnesota. Their mission is to enhance the region's capacity for innovation by providing resources and infrastructure to support startups and established companies. MBold engages with academic institutions, research organizations, and industry leaders to foster collaboration and drive economic growth. They offer services such as networking events, educational programs, and access to shared facilities. MBold's capabilities include expertise in food and agriculture innovation, a strong network of stakeholders, and a commitment to fostering a collaborative ecosystem.

Catalyst Campus is dedicated to defense and aerospace innovation in Colorado Springs. Their mission is to support the growth and development of the region's defense and aerospace industry by providing resources and infrastructure to startups and established companies. Catalyst Campus engages with academic institutions, research organizations, and industry leaders to foster collaboration and drive economic growth. They offer services such as networking events, educational programs, and access to shared facilities. Catalyst Campus's capabilities include expertise in defense and aerospace innovation, a strong network of stakeholders, and a commitment to fostering a collaborative ecosystem.

Endnotes

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