

## SIU System Working Group Report

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# ECONOMIC/COMMUNITY IMPACT

JULY 2020



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## **SIU System Working Group: Economic/Community Impact**

### **Introduction**

The campuses of the SIU system have a long and rich history of contributing to the economic health and social well-being of the Southern Illinois region. Economic and community impacts have been recognized in numerous reports as noted in Appendix 1. The Economic/Community Impact Working Group was charged with identifying ways in which the system could pool the resources of the three campuses to address the needs of this region.

Included among these are the effects these recommendations will have on addressing systemic racism, economic inequalities, and the social determinants of health. While certainly not limited to our region, systemic racism contributes to many of the serious challenges that affect our region, such as economic stagnation and inequalities in economic development, health outcomes, and educational attainment. We believe that the campuses of the SIU system have both the capability and the obligation to play a leading role in addressing these regional challenges.

To meet the charge described above, the Working Group engaged in the following activities:

1. Conducted a review of campus activities and resources in the areas of economic impact and community engagement. A listing of useful documents that describe these activities and resources is provided in Appendix 1.
2. Identified general areas of need in our region that could be addressed by a multi-campus approach. These areas are:
  - A. Business and Workforce Development

The SIU system offers significant resources and programs in business and workforce development, including two Small Business Development Centers, entrepreneurial research and commercialization programs, responsive corporate and workforce partnerships, and faculty and staff committed to research and public service in these areas. While opportunities have always existed to leverage our resources and programming to meet the needs of the businesses and workforce that we serve, the COVID-19 pandemic has increased the urgency and impact of these issues. Given record unemployment numbers, a complete transformation in the way many businesses will operate for the foreseeable future, and an uncertain national economic climate, there is a strong need to support local businesses and workforce development, particularly in communities that were facing significant declines prior to the pandemic.

## B. Data Analytics and Geospatial

Data is everywhere in our businesses, communities, and government, but how to use it effectively is a question that many organizations struggle to answer. SIU researchers can take that data and help make sense of it through a combination of math, statistics, computational and machine learning tools. Businesses and surrounding communities can utilize data and shared regional data infrastructure to identify opportunities and problem spots.

Similarly, Geographic Information Systems (GIS), remote sensing, and spatial analysis are powerful technologies impacting sectors across the globe and clustered in the St. Louis Region, with opportunities for direct and indirect jobs in Southern Illinois. Projects may include an agriculture or environmental mapping component, or seek to model commodity movement, optimum service areas, or mapping of assets/infrastructure. Mapping and modeling of goods and services and development of GIS portals and programs to interpret and apply government data can offer businesses or the region a competitive advantage.

## C. Educational Programs and Services

The SIU system with its SIUC School of Education, School of Medicine and SIUE's School of Education, Health and Human Behavior can expand educational programs and services through a collaborative work group integrating learning for everyone in the system's region. Working collaboratively in teams across the campuses will enhance and expand the resources available to rural Illinois residents.

## D. Small Farm Initiative

Agriculture, food, and natural resources are among Illinois's greatest strengths and drivers of workforce and economic development. Southern Illinois is under-represented in Illinois agriculture research given the quality of land. Southern Illinois soil differs from the three-foot deep topsoil found in Central Illinois. Our producers farm smaller, rolling hill parcels that are well-suited to small, human food production. Given the geographic attributes and trends in land ownership in rural America, an opportunity exists for the SIU system to support local, small farms. SIUE connections with the St. Louis agri-science industry also creates the potential for a stronger bridge between SIUE, SIUC, the School of Medicine, and the ag-tech cluster.

## E. Building Local Governments

Illinois has far more units of local government than any other state in the nation. This is often seen as wasteful and a breeding ground for corruption. But these criticisms miss the point that local governments are also the most valued

by citizens. The SIU system, with resources including public administration programs at both SIUC and SIUE plus a School of Law, is well suited to provide training that could improve the efficiency and effectiveness of these units of local government. The system can build effective local governments that are responsive to their citizens.

#### F. Rural Health

The SIU system is poised to be the national leader in rural health education, policy, research, community outreach, and patient care and has the foundational elements needed for a robust public health function that takes advantage of our unique geographic advantage.

The Working Group organized into six subgroups to examine each of these six areas along four dimensions: community needs, campus and system resources, student engagement opportunities, and cost/sustainability. Tables for the six areas that summarize our findings on each dimension are provided in Appendix 2.

3. Developed recommendations from each of the six areas for potential collaborative programs. These recommendations may be evaluated during the formal SIU system strategic planning process that is scheduled to commence during AY 20-21. The recommendations are provided in the next section of the report.

## Recommendations

The Economic/Community Impact Working Group developed the following set of recommendations after creating the matrices shown in Appendix 2. Each recommendation is identified as being achievable in either the short term (less than 1 year) or long term (greater than 1 year). In some cases, the longer-term recommendations may be dependent on the achievement of the shorter-term goals identified within the same category.

### A. Business and Workforce Development

1. Nurture relationships with community and economic development organizations to develop partnerships for collaborative projects and external funding opportunities. [Short-term]
2. Invest in permanent infrastructure to expand system-wide small business development services including compliance, state and federal funding applications, and research opportunities. All programming should be designed to maximize the balance between tight business timelines and opportunities for immersive faculty and student engagement. Potential engagement models include SIUC's [Applied Research Consultants \(ARC\)](#) and SIUE's [E3 Fueling Growth program](#). Additional system and campus resources such as Illinois Small Business Development Centers at SIU, SIUE Office of Regional Economic Analysis, and SIU Office of Innovation and Economic Development are noted in Appendix 2. [Long-term]
3. Provide a complete picture of workforce assets and gaps in Southern Illinois across universities and community colleges through the development of an economic and workforce dashboard as recommended in Section B.

### B. Data Analytics and Geospatial

1. Investigate successful models such as [NIU's Center for Governmental Studies](#) and [UMSL's Community Innovation and Action Center](#) (including its [Regional Data Alliance initiative](#)) for the purpose of using SIU's existing resources to build a centralized, go-to data source for Southern Illinois. [Short-term]
2. Develop an economic and workforce dashboard for the SIU system that downstate communities can access and utilize when working with site selectors, economic developers, or other funders. [Long-term—Dependent on previous recommendation]
3. Create a competitive advantage for the region and its businesses through development of GIS portals and programs to interpret and apply government data including mapping and modeling of goods and services, commodity movement, optimum service areas, or assets/infrastructure. [Long-term]

### C. Educational Programs and Services

1. Create an Educational Coordinating Work Group to catalog existing educational programs and services across the system, identify a coordinating office on each campus, survey school districts to identify needs, evaluate current SIU system capacity to meet their needs, develop and prioritize new programs and services and work collaboratively to develop an annual scope of work for the system's educational growth strategy. [Short-term]
2. Survey regional PreK-Community College administrators and educators to identify persistent systemic educational needs that may be served through collaborative programming. Examine emerging state legislation national trends and emerging needs to consider new or expanded programming for education partners. Examples of programs and services might include K-12 teacher training programs, development of on-line curriculum options, health and education training programs for regional offices of education, an assessment of 2+2 programs, expanding dual credit programs, coordinating education and community leadership training programs, and expanding successful community-based educational programs like SMASH (SIUC), [Charter High Schools](#) (SIUE) and Catch on to Health (SIU SOM). [Long-term—Dependent on previous recommendation]
3. Collaboration across the SIU system is likely to involve online education to provide services across the Southern Illinois region. Governing online education, privacy, professional licensure, and marketing are numerous state and federal regulations which emerge and change regularly to support consumer protection and equity in education. Sharing compliance resources could: provide a team-based approach to interpreting laws; and allow for implementing systems-based recommendations in areas such as campus policy development, research of state regulations and development of web resources. An intentional effort to collectively harness compliance work could provide efficiencies and help the campuses support one another as online education continues to grow. [Long-term]

### D. Small Farm Initiative

1. Create a student-generated, faculty-approved program that can help those who want to be sustainable food farmers connect with the resources they need. Fill the gap that exists in information for soils, landscapes and crops that fit in Southern Illinois. On a short term and small scale, the program could produce a bank of resources similar to the [Western Illinois University grocery store](#) start-up guide. Longer term, collaboration between schools of agriculture, law and business could provide detailed and individualized support to meet the needs of these farmers and would-be farmers. [Short-term]

## E. Building Local Governments

1. Create a student-run training program for citizens who are elected or appointed to public boards to cover topics such as open meetings requirements, freedom of information laws, and required income and asset disclosure. These are core government functions that have no partisan bias. This structure could provide a learning opportunity for students and a much-needed service to local government officials. The operation could be as small as creating a series of training videos, but would be better delivered in person so that students and the local officials could meet and learn from each other. A model for this kind of service on a much larger scale is at the University of North Carolina, where the fees they charge for training help support the service. This project would be a natural fit for the two MPA programs which could collaborate on the delivery of the program. [Short-term]

## F. Rural Health

Opportunity exists for the SIU system to create Centers of Excellence across all three campuses to allow for collaborations on specific projects that benefit health and education throughout the SIU region. Each would include an annual scope of work developed jointly with leadership across the system. Recommendations are listed below.

1. Rural Health Task Force – Convene health leaders from each campus and external partners to create an organizational structure (Center for Rural Public Health), the breadth of educational and research functions, and the data analytics that are necessary for optimal rural health, healthcare and healthcare education. [Short-term, already exists]
2. Center for Equity in Professional Development (Equity, Diversity & Inclusion) – Establish a Center for Equity in Professional Development to include workforce development, health disparities, research, education for business and community organizations, and pipeline programs to create a more equitable and diverse workforce and higher educational system. [Long-term]
3. Center for Biomedical Engineering – Integrate the fields of biology, chemistry, computer science, medicine, engineering, genetics, robotics, and other fields into a Center for Biomedical Engineering that enhances technology transfer and regional economic development. [Long-term]
4. Center for Rural Health Policy – Integrate policy offices, epidemiologists, biostatisticians, health systems sciences, and academic programs to measure the impact of social, biological and behavioral determinants of health, gauge health

disparities and inequities, design population level programs, and develop public policies to improve health outcomes, lower healthcare costs and assure access to care for all. Should be located near the capitol to integrate with state agencies. [Long-term]

5. Center for Rural Health Funding – Create a health funding collaborative office that identifies new funding opportunities, jointly submits, and focuses multidisciplinary services to serve patients and create new learning opportunities across the campuses and region. [Long-term]
6. Telehealth Network – Build a system-wide telehealth network to improve access to all our health care services to better meet the needs of the entire region and train new health professionals across all three campuses on how to provide virtual care. [Short-term]
7. Student Rotations – Create a system-wide plan for student rotations to ensure that we are addressing the needs of the entire region. Identify gaps in service delivery and match our rotation locations to better provide rural experiences in areas with the greatest need for our learners. [Short-term]

## **Conclusion**

As noted throughout this report and summarized in Appendix 2, the Economic/Community Impact Working Group has identified community needs and opportunities where the SIU system could make significant impact. The group also noted numerous campus/system resources that, when united, could better address the needs of the region we serve. Coordination of the system's talent and resources to advance these recommendations would continue to position Southern Illinois University as a strong partner and leader not only in the Southern Illinois region, but throughout the state and beyond.

Although some of the report's recommendations could be realized through the collective impact of the system's talent, resources, and existing partnerships, the Working Group recognizes that most, if not all, recommendations will require new resources to the system or the possibility of a reallocation of existing resources. Identifying and finding support for these initiatives will be necessary for implementation and sustainability. As such, we recommend a coordinated effort under the guidance and responsibility of a centralized office such as the Vice President for Academic Innovation, Planning, and Partnerships. This office will need to have the resources to support personnel focused on preparing, or coordinating the preparation, of grant applications in the recommended areas: Business and Workforce Development, Data Analytics and Geospatial, Education, Small Farm Initiative, Building Local Governments, and Rural Health. Additionally, it is recommended that this office maintain the responsibility for reviewing the ongoing performance of these programs.



## Appendix 1.

### Listing/Links of Important Source Documents

[Association of Public and Land-grant Universities -Commission on Innovation, Competitiveness, and Economic Prosperity - Innovation and Economic Prosperity Universities Designation Program,](#)  
(Carbondale)

[Carnegie Foundation's Classification for Community Engagement](#) (Carbondale)

[Community & Economic Impact Report](#) (School of Medicine)

[Deans' Annual Reports - Community Engagement](#) (School of Medicine)

[Economic Impact Study – 2011](#) (Carbondale)

[Economic Impact Study - 2015](#) (Edwardsville)

[HLC Accreditation Assurance Argument - Final](#) (Carbondale)

[HLC Accreditation Assurance Argument - Final](#) (Edwardsville)

Regional Economic Development Region (EDR) Plans:

[EDR 9 Regional Plan Data Packet](#)

[EDR 9 WIOA Regional Plan](#)

[EDR 8 Regional Plan Data Packet](#)

[EDR 8 WIOA Regional Plan](#)

## **Appendix 2.**

### **Matrices by Area of Need**

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Business and Workforce Development**

Community Need/Opportunities	Campus/System Resources	Student Engagement	Cost/Sustainability
<p>Southern Illinois Business and Economic Development:</p> <ul style="list-style-type: none"> <li>• Missed opportunities for business and economic development, public funding opportunities (grants, loans, foundations)</li> <li>• Lack of shared identity, goals, or accessible data to support economic and business development case to site selectors and funders</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Illinois Small Business Development Center at SIUC</a></li> <li>• <a href="#">Metro East Small Business Development Center at SIUE</a></li> <li>• SIUE Office of Regional Economic Analysis</li> <li>• <a href="#">SIU Office of Innovation and Economic Development</a></li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for internships, applied research and scholarly activities</li> <li>• Graduate Assistantships in the community (SIUE PAPA program)</li> </ul>	<p>Increase collaboration across current internal and external units</p> <p>Resources Needed: System-wide support for identifying and submitting collaborative funding applications</p>
<p>Workforce Alignment:</p> <ul style="list-style-type: none"> <li>• Need for complete picture of workforce assets and gaps in Southern Illinois across Universities and community colleges</li> <li>• Missed opportunities for federal and state workforce funding</li> <li>• Opportunities to share strengths on individual campuses (for example, <a href="#">SIUC capstone programs</a>, SIUE apprenticeships and digital badges)</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">SIUC Center for Workforce Education Development</a></li> <li>• SIUE <a href="#">Office of Online and Education Outreach</a></li> <li>• Local workforce investment areas (LWIAs) and workforce investment boards (WIBs)</li> </ul>	<ul style="list-style-type: none"> <li>• New funding support for nontraditional students</li> <li>• Opportunity to earn competitive, industry-aligned credentials</li> <li>• Opportunities for internships, applied research and scholarly activities</li> <li>• Apprenticeship alignment with undergraduate education</li> </ul>	<p>Increase collaboration across current internal and external units</p> <p>Resources Needed: System-wide support for identifying and submitting collaborative funding applications</p>

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Data Analytics**

Community Need/Opportunities	Campus/System Resources	Student Engagement	Cost/Sustainability
<p>Gap in access to a centralized data dashboard to serve the economic development needs of southern Illinois.</p>	<p>Resources for a system-level 'umbrella group' to draw from.</p> <ul style="list-style-type: none"> <li>• Institutional Research and Studies (<a href="#">Edwardsville</a>) (<a href="#">Carbondale</a>)</li> <li>• <a href="#">The Center for Predictive Analytics (C-PAN)</a> (Edwardsville)</li> <li>• The Laboratory for Applied Spatial Analysis (LASA) (Edwardsville)</li> <li>• Office of Regional Economic Analysis (Edwardsville)</li> <li>• <a href="#">The Pontikes Center for Advanced Analytics and Artificial Intelligence, College of Business and Analytics</a> (Carbondale)</li> <li>• <a href="#">Applied Research Consultants (ARC)</a> (Carbondale)</li> <li>• <a href="#">Office of Innovation and Economic Development</a> (Carbondale)</li> </ul>	<p>All centers and labs listed in the campus/system resources section either provide student learning and engagement opportunities or have opportunity to engage students in their work.</p>	<p>Grant funding, economic development agency contributions, other.</p> <p>Recommendation: Investigate successful models such as <a href="#">NIU's Center for Governmental Studies</a> and <a href="#">UMSL's Community Innovation and Action Center</a> (including its <a href="#">Regional Data Alliance initiative</a>) for the purpose of using SIU's existing resources to build a centralized, go-to data source for southern Illinois.</p>

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Educational Programs and Services**

<b>Community Need/Opportunities</b>	<b>Campus/System Resources</b>	<b>Student Engagement</b>	<b>Cost/Sustainability</b>
Education Coordinating Work Group	Identify a coordinating office, point person, and teams on each campus	Recruitment of educational students Provide experiential learning opportunities for educational students	Utilize existing campus human resources Integrated curriculum design
K-12 Needs Assessment	Develop, distribute, and analyze needs assessment	Integrate student learning into needs assessment tool development	Curriculum redesign Existing faculty resources Distribution of materials
Collaborative review of K-12 needs assessment & Identification of current system capacity	Faculty and staff from each campus to assess educational needs and capacity	Integrate student learning into needs analysis and capacity level of system	Curriculum design Existing faculty Data analyst support
Community College assessment	Identify needs of community colleges and assess current system capacity to meet needs Discuss continuum services from K-12, community colleges & universities	Integrate into student projects and training opportunities Ensure diversity in educational experiences and opportunities	Curriculum design Travel Supplies and materials Student project costs
Development of Annual Educational Collaborative Action Plan	3 coordinating offices and teams to prioritize needs, develop and implement new services	Integrate student learning into plan implementation through community engagement and student projects	Curriculum design Existing faculty & staff Travel Supplies and materials Student project costs
Develop a Compliance Coordinating Work Group	Identify a coordinating office, point person, and teams on each campus	Compliance efforts ensure that students are served in an equitable manner	The group should make recommendations for cost savings by finding efficiencies and sharing compliance work and solutions

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Small Farm Initiative**

Community Need/Opportunities	Campus/System Resources	Student Engagement	Cost/Sustainability
<p>Agriculture is key to the Illinois economy, but it is not uniform throughout the state, Many Southern Illinois farms are smaller, have less rich soil, and are well suited to growing food for humans rather than feed for livestock. With that as a constant, there are several changes that provide opportunity:</p> <ul style="list-style-type: none"> <li>• historical level of generational turnover of land often without a next generation who wants to farm</li> <li>• new interest in farming from those who did not grow up on a farm</li> <li>• increasing interest in local, sustainable foods</li> <li>• few services geared toward smaller food farms</li> <li>• new realizations about food security stemming from the pandemic</li> </ul>	<p><a href="#">University Farms in Carbondale</a> and <a href="#">Belleville Research Center</a>, plus, family and industry farm partners for applied research <a href="#">NCERC</a> , BLI, and <a href="#">Fermentation Science Institute</a> Illinois Small Business Development Centers at <a href="#">Carbondale</a> and <a href="#">Edwardsville</a>. Business schools, ag school, law school, health and life sciences</p>	<p>For small scale, generic services students can produce content with supervision of professors (GIS, data analysis, soil and water analysis) For more direct, individual services students and professors can work with interested persons USDA <a href="#">E3 grant</a> or <a href="#">ARC model</a></p>	<p>Increased collaboration, focus on entrepreneurialism, and applied research. Small scale example: <a href="#">Western Illinois University grocery store kit</a> Larger scale more like SIUC's Small Business Development Center - client centered model</p>

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Building Local Governments**

Community Need/Opportunities	Campus/System Resources	Student Engagement	Cost/Sustainability
<p>Illinois leads the nation in the number of units of local government. Due to the mostly volunteer and/or part-time nature of public service, there is a lack of continued, available training, particularly on legal requirements for open meetings, public records, income and asset disclosure.</p>	<p>Public administration programs on both campuses  <a href="#">SIU School of Law</a>            Springfield campus            Legislative and community relationships</p>	<p>Opportunity for graduate students in PA and law programs to provide training to public servants            These are discrete laws that can be mastered by students            Students will get to see local governments at work, build a passion for service, discover that people from all walks can and do serve</p>	<p>PA programs on both campuses have existing internship programs            On a larger scale, the University of North Carolina runs the School of Government, which serves over 12,000 public officials a year.</p>

**SIU System Economic and Community Impact Working Group**  
Guiding Themes and Framework

**Sub-group: Rural Health**

<b>Community Need/Opportunities</b>	<b>Campus/System Resources</b>	<b>Student Engagement</b>	<b>Cost/Sustainability</b>
Health Professions Training	SIU Schools of Medicine, Dentistry, Nursing, Psychology, Pharmacy, and Public Health. Programs for Physician Assistants, radiology, chiropractic, physical therapy, health care management, physical therapy, occupational therapy, physiology, nutrition & dietetics, speech & language, audiology, and social work. Post graduate programs in public health, medical-law, 21 residencies and 10 fellowships.	Virtual multi-disciplinary curriculum for health teams across campuses working on a common system goal or product Virtual research teams working across disciplines and campuses on a common research project. Experiential learning opportunities Community volunteerism Multi-disciplinary simulations Multi-disciplinary educational sessions for teams of health professionals through the ECHO Hub	Existing staff to rethink design work Travel Housing Simulation labs & equipment Supplies & materials
Health Care Access	SIU School of Medicine, Dental clinics, FQHCs, clinical rotations, <a href="#">Lincoln Scholars Program</a> , <a href="#">We Care Clinic</a>	Clinic rotations Telehealth training Community volunteerism	Equipment/telehealth Supplies & materials Existing clinical funding



Health Care Disparities	<a href="#">SIU System Office of Diversity Initiatives</a> <a href="#">SIU SOM Office of Equity, Diversity and Inclusion</a> <a href="#">SIU Office of Associate Chancellor for Diversity</a> (Carbondale) <a href="#">SIU Office of Institutional Diversity and Inclusion</a> (Edwardsville) <a href="#">SIU Medical/Dental Education Preparatory Program</a> (MEDPREP)	Curriculum integration Community volunteerism Engagement with high schools and community colleges	Human Resource hours to do community work. Work release time, etc. Supplies and Materials Travel Housing Summer camps for health professions Internships for college students
Rural Health Bioengineering	Healthcare Professions Researchers Bioengineering, robotics <a href="#">SIU System Office of Technology Transfer</a> Economic Development professionals	New system curriculum shared across 3 campuses Recruitment of faculty & students Cross discipline Curriculum & Labs Private lab internships	Recruitment of faculty & staff Lab space and equipment Travel Housing Research funding (NIH, DoD) Private sector funding
Rural Health Policy	<a href="#">Department of Population Science and Policy</a> <a href="#">Center for Rural Health &amp; Social Services Development</a> <a href="#">Paul Simon Public Policy Institute</a> <a href="#">Center for Predictive Analytics</a> <a href="#">College of Business &amp; Analytics</a> Offices of equity, diversity and inclusion.	Recruitment for MPH, Health Care Nursing Administration, Advance Practice Providers, and other programs that are focused on public health. Curriculum integration & redesign Multi-disciplinary coursework across campuses Multiple campus teams engaging in community/regional service projects with local leaders	Recruitment resources Marketing and promotional materials Needs assessment funding National & International travel Housing Speaker's Bureau

Rural Health Funding	Offices of Grants and Contracts on each campus <a href="#">(Carbondale)</a> <a href="#">(Edwardsville)</a> (School of Medicine)	Doctoral projects across campuses Research office on each campus working together to identify funding priorities System-wide rural health focus on undergraduate research projects	Existing grant and contracts staff focus on rural health Project funding Travel Housing
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