

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE

CENTERS & INSTITUTES

FY24 ANNUAL REPORTING

Submitted by the SIU System Office of Academic Innovation, Planning & Partnerships to the SIU Board of Trustees

April 2025



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INTRODUCTION

In keeping with University Guidelines, the following reports from centers and institutes at Southern Illinois University's three campuses for FY2024 are provided for the SIU Board of Trustees. It is the tenth annual report on centers and institutes that have been approved by the Illinois Board of Higher Education (IBHE) and/or established by Illinois state statute. These reports will permit better administrative oversight of valuable components of the university system, as reflected in Section 2.4 Academic Affairs: Center and Institutes (http://siusystem.edu/about/section24.shtml).

Each center or institute completed and submitted to the campus leadership its annual report using a template developed by the Vice President for Academic Innovation, Planning and Partnerships, in consultation with campus and medical school administration. This template was used by all centers/institutes to ensure that reporting was consistent across the system. The annual report includes information about financial and other resources (such as total funds expended during the previous fiscal year, revenues by funding source, and total positions by type of position); intellectual contributions (such as publications, presentations, books, compositions, art exhibits, patents, theses and dissertations); public service contributions (such as community projects and patient care); students trained and graduated; evidence of the center's/institute's support for the institution's mission, priorities, and strategic themes; support for the SIU Board of Trustees' strategic plans and/or statewide priorities and needs; external reputation of the center/institute (such as cited publications, invited presentations, media coverage); and evidence that the center's/institute's product or outcomes achieve stated objectives and that results from evaluations are being used to improve the center's/institute's effectiveness. This annual reporting will clarify the center's/institute's organizational effectiveness.

Initially this report was to cover only those centers and institutes that were IBHE-approved and/or Illinois State Statute-established. Because of their importance, other center-like units were asked to report, such as SIUC's Paul Simon Public Policy Institute and SIUE's Illinois Metro East Small Business Development Center and University Museum. Other centers, institutes, and units are-included in this report, while still others may be considered in the future. Each campus will be assessing the criteria for this report as we move forward.

Gireesh Gupchup Vice President for Academic Innovation, Planning and Partnerships

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 – June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only)

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Advanced Energy Institute
3.	Date	February 28, 2025
4.	Director	Ken B. Anderson
	4.1 Telephone	618-536-5521
	4.2 E-mail	kanderson@siu.edu
5.	Year Established	1974
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Office of Vice Chancellor for Research and Graduate Dean
, .	Reporting Offic	Office of vice chancellor for Nesearch and Graduate Dean
8.	Туре	Activity
	,,	(Check all that apply)
	Instructional	
	Research	X
	Public Service	X

9. Overview

9.1 Description

AEI is the hub for SIU advanced energy research, collaboration, education and facilities. The center currently focuses on the following activities:

- 1) RESEARCH: maximizing proposal development and project implementation support to faculty and students across campus.
- 2) COLLABORATION: serving as a resource for the campus community and a bridge to government, industry, and other academic and research institutions, especially Illinois based organizations.
- 3) FACILITIES: Support and maintain specialized facilities; and
- 4) OUTREACH: facilitating the improvement of the public's understanding of energy, including special focus on regional energy and environmental topics.

9.2 Mission

Advanced Energy Institute is responsible for coordinating and facilitating energy related research and scholarship across all aspects of the SIU Carbondale campus, including promoting externally funded energy-related research, development, and deployment (RD&D) and assisting in development of energy related academic programs.

9.3 Objectives

- 1) Expand advanced energy education and research across campus.
- 2) Facilitate the development of an advanced energy workforce, with special focus on the changing energy production and utilization patterns of the State of Illinois, especially southern Illinois.
- 3) Support research to increase the return on investments in advanced energy.
- 4) Establish Illinois Energy Development Park as the regional test bed for advanced energy technologies.

10. Advisory Board

10.1 External Advisory Board - Membership

- John S. Mead, AEI Director Emeritus
- Kevin O'Brien, Director, Illinois Sustainable Technology Center, Illinois State Water Survey
- Thomas A. Sarkus, Division Director, Major Projects Division, National Energy Technology Laboratory, U.S. Department of Energy
- Don Stevenson, Vice President and Managing Director, Energy Supply & Conversion,
 Gas Technology Institute
- John Thompson, Director, Technology and Markets, Clean Air Task Force

10.2 Number of Meetings

In This Reporting Period	0
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11. Annual Performance

11.1 Performance Measures*

sure	Target for	Results in
	Year	Year
Faculty Seed Grants awarded	Up to 5	5*
Graduate Assistant positions (not included in	1-2	15*
total1 Student Worker)		
New Course Development contracts awarded	2-3	0*
Undergraduate Scholarships awarded	Up to 4	3
Student research grants awarded	Up to 5	0
Community outreach events	2	2
Visiting researchers	0	0
Publications	Up to 5	1
	Graduate Assistant positions (not included in total1 Student Worker) New Course Development contracts awarded Undergraduate Scholarships awarded Student research grants awarded Community outreach events Visiting researchers	Faculty Seed Grants awarded Up to 5 Graduate Assistant positions (not included in total1 Student Worker) New Course Development contracts awarded Up to 4 Student research grants awarded Up to 5 Community outreach events 2 Visiting researchers 0

^{*}Center/institute-defined measures and targets. Depending on the center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- Agrivoltaics European Tour 10/7-20/2023.
- Continuation of the New Course Development Grant program; College of Agricultural, Life, and Physical Sciences course opened for registration in Fall 2023.
- Awarded 2 Undergraduate and 1 IL Coal Country Energy Boost Scholarships. The program supports 3 continuing scholarship recipients.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

AEI established and maintained programs as per the Energy Boost Grant proposal, and faculty, staff, students, and community members benefit from these programs as is evidenced by the scholarships, grants, and support of graduate assistantships.

11.4 Evidence of Support for Center/Institute Objectives

- AEI supported students with scholarships.
- AEI was sensitive to faculty research objectives by offering matching funds for external grant proposals.
- Submission of congressionally directed spending requests for efforts toward revitalizing the Illinois Energy Development Park (IEDP) project, entitled *Renewing the IEDP*.
- AEI oversaw completion of necessary repairs to the former Coaltec building (now pole barn). AEI continued efforts toward revitalization of the site to ensure optimal

function and safety for future research activities. As in the previous fiscal years, there continues to be no water supply to the site.

• AEI continues to foster coordination and maintenance efforts with the SIU Facilities and Energy Management.

•

11.5 Evidence of Organizational Effectiveness

Over the course of the reporting period, AEI:

- Maintained existing grants and scholarships, supported undergraduates, graduate assistants.
- Continued to facilitate new faculty-based energy research programs to meet newly identified needs.
- Continued development of plans for redevelopment of the Carterville campus as an agrivoltaics and ecovoltaics RD&D facility.

12.	Institutional	l Assessment

12.1	Date of Last Review	March 20	March 2017		
12.2	Decision at Last Review	X	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended		
12.3	Explanation				

RESOURCES: (Advanced Energy Institute)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues:					
State Appropriations	132,954	123,357	126,150	117,741	104,998
Income Funds	137,505	150,352	161,666	160,722	170,083
Grants*	1,907,975	2,177,389	2,357150	2,709,863	2,631,930
Total Revenues	2,178,1434	2,451,097	2,644,965	2,988,325	2,907,011
Salaries: Staff/Faculty	260,655	220,663	207,627	200,978	158,004
Graduate Assistant Support	74,723	30,786	71,009	16,472	70,376
Student Worker Support (Sources: State and FWS Matching)	15,744	11,645	6,931	2,774	7,632
Travel	60,559	2,081	6,123	0	35
Commodities	26,212	15,365	26,384	5,063	4,255
Equipment	1,585	30,635	2,668	189	0
Contractual Services	47,695	25,474	27,189	21,691	74,923
Automotive	2,066	521	1,299		
Student Research Awards and Scholarships	29,254	15,000	40,000	30,000	45,000
Awards and Grants— Property Damage Settlement					(15,937)
Telecommunication Services	2,197	1,935	2,105	8,962	8,570
Fringe Benefits	48,917	55,498	51,091	43,000	43,658
Facilities and Administrative Costs	39,366	29,317	30,183	19,040	24,975
Total Expenditures	608,974	438,920	472,609	348,169	421,490
Revenue Minus Expenditures	1,569,460	2,012,177	2,611,099	2,640,156	2,485,521

Staffing	FY2024	FY2023	FY2022	FY2021	FY2020
(Full Time Equivalent)					
Faculty	.25	.25	.25	.25	0.0
Staff	2.25	2.25	2.25	2.25	3.3
Total Staffing	2.50	2.50	2.50	2.50	3.3

^{*}Note: The way the university reports this line shows the annual balance of grant funds for expenditure over a multi-year period.

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	SIU Carbondale
2.	Center/Institute	Cannabis Science Center
3.	Date	February 28, 2025
		Gary R Kinsel
4.	Director	
	4.1 Telephone	(618) 453-6482
	4.2 E-mail	grkinsel@siu.edu
5.	Year Established	2021
6.	Illinois State Statute (if pertinent)	(N/A)
	(ii pertinent)	
7.	Reporting Unit	Office of Vice Chancellor for Research
8.	Туре	Activity
		(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Southern Illinois Cannabis Science Center (SICSC) is the hub for SIU cannabis/hemp research, collaboration, education, and facilities development. The center currently focuses on the following activities:

- Hosting an annual symposium on hemp/cannabis
- Co-Sponsoring an annual "Hemp, Hops & Shrooms" cultural and educational festival with the city of Carbondale
- Engaging in community outreach to local farmers, processors and retail outlets
- Seeking, curating and disseminating funding opportunities for the SICSC and center affiliated faculty
- Researching agricultural best practices for all varieties of hemp—fiber, seed and flower crops
- Developing opioid addiction-mediation approaches for rural southern Illinois
- Researching cannabis medicine for prevention and treatment of cancer, epilepsy, seizure, and chemo--brain (side effect of chemotherapy)
- Analysis of economic impact of tax laws, alternative cannabinoids on the cannabis industry

9.2 Mission

To foster collaborations among various academic disciplines and industries to advance our knowledge and understanding of how best to utilize hemp/cannabis for the benefit of humankind and the environment.

9.3 Objectives

- 1. To formally establish a collaborative network for hemp and cannabis research.
- 2. To establish specific projects with defined goals.
- 3. To identify funding streams to support these projects.
- 4. To serve as a clearinghouse for hemp and cannabis related information.
- 5. To host symposia and outreach activities.
- 6. To bring into working groups individuals with a common interests in hemp / cannabis: Agricultural; Analytical; Biomedical, and Community.
- 7. To bring together Healthcare, Educational and Commercial interests to advance the impact of hemp / cannabis research on economic development in the southern Illinois region.

10. Advisory Board

10.1 Advisory Board - Membership

Kyle Baker, EcoBuds; CEO and founder

Curt Jones, 40 Below Joe; CEO and founder

Mark Peysakhovich, MBM Advantage; CEO and founder

Lawrence Hatchett, MD; Heartland Regional Medical Group; Chief of Urology

Lynn Anderson Lindberg, Innovation Center @ SIU; Director

10.2 Number of Meetings (In This Year) Board is currently being reconstituted for 2025

11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year	
1.	Grants	3	4	
2.	Publications	5	4	
3.	Presentations	10	13	
4.	Community outreach events	2	2	
5.	Undergraduate Scholarships	1	2	

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Below is a listing of the major accomplishments of the SICSC in CY2024. It should be emphasized however that this listing is focused on the accomplishments of the Center itself and there are numerous impactful accomplishments by the individual faculty members of the Center, including funding for basic research, establishment of international agreements, engagement with industrial partners, etc., that are not reflected in this listing. In many cases these accomplishments are leveraged by the existence of the SICSC and relationships that are established through the participation of the faculty member in the Center.

- The SICSC organized the 5th Annual SIU Hemp / Cannabis Symposium "Cannabis Science: Advancing Academic and Industry Collaboration" (9/27/24) bringing together academic researchers, students, industrial investors and state government representatives to discuss the future of the hemp / cannabis industry in southern Illinois (see attached). The Symposium included 9 oral presentations from nationally recognized speakers who traveled to Carbondale from across the US and a presentation by David Lakeman, Cannabis Division Manager from the Illinois Department of Agriculture. There were also numerous SIUC student poster presentations and exhibits from various regional businesses. All total, the symposium was attended by nearly 100 individuals.
- Faculty and staff from the SICSC supported and actively participated in the 3rd Annual City of Carbondale "Hemp, Hops & Shrooms Festival" (9/28/24) providing both hemp related demonstrations and a series of educational presentations (see attached).
- Several of the faculty affiliated with the SICSC had graduate students complete either MS or PhD degrees on topics associated with Hemp / Cannabis including Shamim Ahmed (MS, Advisor David Gibson) "The competitive response of hemp (Cannabis sativa L.) with

- different agricultural weed species"; Aliza Tandukar (MS, Advisor Mary Kinsel) "Analyzing the variability of cannabinoid and terpene content in cherry wine hemp cultivars"; Jaron DeSchamp (MS, Advisor Karen Jones) "Cannabinoid Receptors 1 and 2 in Equine Testicular Tissue"; Bristi Poudel (PhD, Advisor Joeseph Cheatwood).
- The Cannabis Science and Production Specialization in the School of Horticulture Bachelor of Science degree program, a minor in Cannabis Production Systems, and an Undergraduate Certificate in Cannabis Production Systems went "live" for AY25. Even before these new programs will appear in the 2025-2026 SIUC Academic Catalogue already 11 students have declared the BS degree specialization as their major. This number represents 30% of the students pursuing degrees within the School of Horticulture.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The SICSC clearly addresses 2 of the 4 goals of the Illinois Public Agenda (https://www.ibhe.org/assets/files/070109 Public Agenda.pdf), namely Goal 3: Address Workforce Needs and Goal 4: Enhance Economic Growth. Cannabis / Hemp has the potential to emerge as a major cash crop for the southern Illinois region – either from the perspective of hemp fiber production or from the perspective of cannabinoids production. Both crop-related products have huge, and expanding, market potential. Hemp fiber is used in a broad swath of products, from building materials to composite plastics, from paper to cloth production, and from biomass to animal feed. Similarly, the medicinal potential of many cannabinoids has only recently begun to be studied and early studies show enormous potential for these compounds in the treatment of epileptic seizures, chemotherapy induced nausea and pain management, among a host of other illnesses. Thus, the market potential of this aspect of hemp cultivation is only just beginning to be realized.

The SICSC is contributing directly, through research and education, to the **training of a workforce** capable of growing, harvesting, testing, and processing the hemp / cannabis plant. This workforce is already needed as the growth of hemp / cannabis, both in Controlled Environment Agricultural facilities and in open plots, has expanded dramatically since the federal legalization of hemp (2018) and the relatively recent state legalization of adult-use cannabis (2020). The **enhancement of economic growth** for the state of Illinois is also easily supported through recent economic analyses of the market for hemp / cannabis in Illinois which shows that total sales of adult-use cannabis in FY24 exceeded \$2B and contributed >\$490M to the tax-base of the state. It is also estimated that 30,000 jobs in the state of Illinois are directly supported by the industry. With proper development, the market for Illinois hemp is likely even larger and more sustainable.

The SICSC also addresses all 6 of the SIU Board of Trustees and SIU System Strategic Goals (https://siusystem.edu/about/strategic-plan/feedback.shtml) and all 5 pillars of the SIU Carbondale Strategic Plan (https://imagine2030.siu.edu/). In terms of SIU System Goal 1: Academic Innovation and Student Success (SIUC Pillar 1 - Student Success & Engagement), the SICSC has been instrumental in the creation of new academic degree programs and certificates which prepare students for jobs in the emerging hemp / cannabis market. In terms of Goal 2: SIU System Anti-Racism, Diversity, Equity and Inclusion (SIUC Pillar 2 - Diversity, Equity & Inclusion), the SICSC actively recruits minority students to enroll in the newly established

degree and certificate programs associated with hemp / cannabis agronomy and has successfully established scholarship support for a minority student through engagement with a local physician. In terms of SIU System Goal 3: Community Impact (SIUC Pillar 3 – Branding & Partnerships), the SICSC promotes and supports the city of Carbondale (Hemps, Hops, and Shrooms Festival) and numerous private sector businesses through direct engagement and through the annual SIU Hemp / Cannabis Symposium. The SICSC has worked to create publicprivate partnerships that can form the foundation for future economic development. In terms of SIU System Goal 4: Research, Creative Activity and Partnerships (SIUC Pillar 4 – Research & Innovation), basic research on Hemp agronomy, Hemp genetics, medicinal properties of cannabinoids, indoor cultivation, and consumer product analysis is all being pursued by research active faculty at SIU Carbondale. These activities lead to external funding for the university and enrichment of the educational experience for our students, both graduate and undergraduate. In terms of SIU System Goal 5: Faculty and Staff, the scholarly work driven by the research conducted in the SICSC provides the enriched research environment that allows SIU Carbondale to recruit new research active faculty to the campus. In terms of SIU System Goal 6: Infrastructure, the SICSC brings in research and overhead dollars which allow for investments in the teaching and research infrastructure of the institution. The SICSC is actively seeking public-private partnership opportunities to further augment these infrastructure improvements. Finally, in terms of the SIUC Pillar 5 – Sustainability, research has shown that hemp / cannabis can be used as a rotation crop, thereby supporting the sustainability of rowcrop agriculture, can be used for production of environmentally friendly fiber to replace petrochemical based polymers, can be used in the construction of environmentally sustainable housing, and can be converted into biomass for potential use in the production of alternative energy and animal feed. Development of Hemp / cannabis as a resource clearly aligns with the sustainability mission of the SIU Carbondale campus.

11.4 Evidence of Support for Center/Institute Objectives

The primary evidence of support for the objectives of the Southern Illinois Cannabis Science Center lies in the very large number of engagements Center members have had with state government, public and private entities over CY2024. From these interactions it is clear that the mission of the Center is being accomplished and the Center is filling an important role in providing service to these groups. Evidence of this role is indicated by the activities listed below.

- The Director of the Illinois Department of Agriculture, Cannabis Inspection Division, Russell J. Krug, approached the SICSC about developing an on-line training program for newly hired state Cannabis Inspectors. The discussions outlined the training modules that are needed and modalities by which the training could be delivered. These discussions are ongoing in 2025.
- Members of the SICSC were invited to set up a recruiting table at the Illinois News Joint Cannabis Conference held in Carbondale, IL on 5/4/2024.
- Met with staff members from the Illinois Department of Agriculture and gave them a tour of the IDCEO funded BioLaunch facility (10/17/24) and discussed the potential of these facilities to support hemp production in southern Illinois.
- Attended the NeCANN Conference in Chicago, IL (5/30/24 6/1/24) and met with Jim Belushi, an alumnus of SIU Carbondale and owner of Belushi Farms, a cannabis production

- facility in Oregon. Discussed the possibility of having Mr. Belushi visit SIU Carbondale at some point in the future.
- Numerous private businesses engaged with members of the SICSC throughout the year to discuss research opportunities, employee needs, internship opportunities, future opportunities for collaboration, etc. These companies include CuraLeaf, Trilogene, NuERA Cannabis, Tiger Fiber, etc.

11.5 Evidence of Organizational Effectiveness

The SICSC continues to engage with regional and national businesses in the hemp / cannabis industry, engages with and supports the city of Carbondale during its Hemp, Hops and Shrooms festival and continues to organize and deliver a high-quality Hemp / Cannabis symposium that attracts state government representatives, industry, and academic researchers to the SIUC campus. The SICSC is also actively engaged in expanding the educational opportunities for students who wish to study hemp agronomy and horticulture, controlled environment agriculture, hemp and consumer product testing, etc. These efforts are currently reflected in new degree and certification options for students at SIU Carbondale.

12.	. Institutional Assessment				
	12.1	Date of Last Review	Initiation of center in 2022		
	12.2	Decision at Last Review	X Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended		
	12.3	Explanation	(new Center founded June 2021, this is the 3 rd report)		

RESOURCES: (Cannabis Science Center)

Financial Resources	CY2024		
Davanua	0.00		
Revenues	0.00		
State Appropriations	0.00		
Income Fund	0.00		
Grants & Contracts	0.00		
XXX			
XXX			
XXX			
Total Revenues	0.00		
Expenditures*	0.00		
XXX			
Total Expenditures	0.00		
Revenue Minus Expenditures	0.00		

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	CY2023		
Faculty	0		
Staff	0		
*Total Staffing	0		

HEMP * CANNABIS SYMPOSIUM

09.27.2024

SPONSORED BY THE SOUTHERN ILLINOIS UNIVERSITY CANNABIS SCIENCE CENTER

ADVANCING ACADEMIC AND INDUSTRY COLLABORATION ACROS ALL AREAS OF HEMP CANNABIS PRODUCTION AND UTILIZATION

2024 PRESENTERS

MIKE PETERSEN

Transformation and CRISPR Knockout of the CBDAs and Other Genes in Type III Cannabis

MARK LANGE

Expanding the biochemical lexicon of cannabis - lessons from working with type 1 cannabis as a university employee

ANNA SCHWABE

Uncomfortably High: THC Inflation on Retail Cannabis Labels

CLAY W. MOORE

Texas A&M University Industrial Hemp Breeding Program

SANDRA LEAL

The Effect of Cannabidiol on Motor Behaviors and Serotonin Expression in Drosophilia

JAMES SWARTZ

Highlights from the 2024 Annual Report on Cannabis Use in Illinois

IEFF RAWSON

Legalizing Cannabis is Imperative for Public Health

REBECCA ABRAHAM

Drug Classification Changes: Why Education is Critical to Healthcare Providers & Nurses

DAVID LAKEMAN

Keynote Presentation on current and pending Illinois Hemp / Cannabis legislation.

SYMPOSIUM INCLUDES A STUDENT POSTER SESSION, EXHIBITOR SPACE AND SPONSORSHIP OPPORTUNITIES. Presentations are subject to change.

HEMP, HOPS & SHROOMS

09.28.2024

3-10PM • DOWNTOWN CARBONDALE

LEARN MORE AT: EXPLORECARBONDALE.COM CARBONDALE IL TOURISM



Event details and registration available online at:



CONFERENCESERVICES.SIU.EDU/SIHEMPCANN



CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	SIU Carbondale
2.	Center/Institute	Center for Archaeological Investigations
3.	Date	03/17/2025
4.	Director	Dr. Mark Wagner
	4.1 Telephone	618-453-5055
	4.2 E-mail	mjwagner@siu.edu
	4.2 L-mail	nijwagner@siu.euu
5.	Year Established	1978
•		1370
6.	Illinois State Statute	N/A
•	(if pertinent)	14//
7.	Reporting Unit	College of Liberal Arts
8.	Туре	Activity
		(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Center for Archaeological Investigations (CAI) is a research unit founded in 1978 within the College of Liberal Arts. The CAI is historically linked to the SIUC Department of Anthropology in a number of ways but has always been administratively separate. The academic mission of the CAI is bolstered by our close ties to the Department of Anthropology where the CAI Director is a faculty member teaching courses in cultural resource management (CRM) and applied archaeology. Other CAI archaeological staff include one who is 50% state supported, two who are funded entirely through external grants, and six temporary hires who were funded through external grants. All archaeological staff are engaged in external grant acquisition, hands-on student education, curation of archaeological collections, and field and laboratory research for state, federal, and private agencies Other permanent staff include a NAGPRA coordinator who is 100% state funded and an office manager who is also 100% state supported.

9.2 Mission

The CAI mission includes five key areas. These are: (1) Student education. The CAI operates a large external grant-funded archaeological research program that enables us to provide experiential learning and employment opportunities for SIUC students. As part of this mission, we seek funds from grant-making agencies that enable us to provide financial support for students in applied positions as GAs, extra help, and other positions conducting field and laboratory archaeological research. (2) Curation. The CAI maintains a world-class curation facility where we curate archaeological collections for government agencies and Native American groups as well as provide SIUC students with training in archeological curation. We currently curate approximately 9,100 standard letter-size archival storage boxes of artifacts and noncultural materials and more than 850 linear ft. of associated documentation, primarily from archaeological sites located in the Midwestern and Southwestern United States and some from Micronesia. These collection, including human remains, are curated in compliance with federal regulations 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections) and the Native American Graves Protection and Repatriation Act (NAGPRA); (3-4) to conduct archaeological and other research within an applied or cultural resource management studies (CRM) framework and publish the results of such research in peer reviewed forums. The CAI has been very successful in obtaining external grants from federal, state, and other agencies, receiving over 3.5 million dollars in external grants between 2016-2023; (5) Public outreach. To better serve the local community, CAI staff are actively involved in educational outreach throughout the region in the form of public talks, serving on local and national historic preservation boards, and leading public tours of archaeological sites. CAI Director Dr. Mark Wagner has recently served as president of the state archaeological organization, the Illinois Archaeological Survey.

9.3 Objectives

The current primary objective of the CAI is continued expansion of our external grant program to provide additional financial and educational support for undergraduate and graduate students in the form of applied or hands-on training to help prepare students for careers as professional archaeologists with private companies and/or government agencies after graduation. The acquisition of externally funded grants to provide experiential training opportunities and financial support for students is especially critical in an era of decreasing state support for higher education. In recent years, we have expanded our external grant program by adding the Daniel Boone National Forest in Kentucky as one of our partners. We also continued our work with a National Battlefield Preservation grant from the National Park Service with a remote sensing (ground penetrating radar and gradiometric) survey of a Civil War fortification (Fort Henry) in Kentucky that helped raise the national profile of both the CAI and SIUC.

10. Advisory Board

10.1	Advisory	Board -	Membership
10.1	AUVISULV	Duaru -	IMELLINE SHID

<u> </u>	Navisory Board Wiembersinp
	or advisory board is lapsed due to retirements. We are currently in the process of constituting the board.
10.2	Number of Meetings (In This Year)

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	External grants	5	6
2.	Intellectual & Professional Contributions	10	10
4.	UG student support	2	5
5.	Graduate student support	1	3

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

CAI accomplishments for FY24 included acquiring \$369,094 in new external grants. These grants include funding for research projects supported by the USDA Forest Service and Peabody Energy. With our continuing grants from previous years, the CAI had an annual grant total of \$996,775 for FY23. These grants allowed us to hire undergraduate and graduate students as UGAs, GAs, and Extra Help. These grants have also helped facilitate internships and fostered independent research opportunities by graduate and undergraduate students. Allowing for experiential learning opportunities beyond what they receive in the classroom. CAI faculty and staff also presented research papers at state, regional, and national meetings; authored book chapters; and wrote articles and presented lectures to the general public to increase SIUs positive image in the region. All CAI AP staff are Board Members of local and/or regional archaeological institutions. The CAIs curation facility staff are in the process of (1) rehabilitating and repatriating archaeological materials to the Hopi Tribe and Navajo Nation, and (2) searching old university collections that the CAI inherited from the University Museum or retired faculty members for human skeletal remains as required by under the Native American Graves Protection and Repatriation Act.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The CAI provides support for goals regarding student success outlined in the Imagine 2030 plan. Specifically, the CAI provides students with the opportunity to engage in research, creative activity and service learning by providing students with experiential learning opportunities through our external grant program to help prepare them for careers after graduation. The CAI also encourages mentoring at every level including mentoring of undergraduate students by graduate students, and mentoring of all students by faculty and staff. SIUC students work with CAI faculty and staff on a daily basis in a mentoring relationship as GAs, UGAs, work study, extra help, and interns to acquire skills in GIS, historical research, artifact analysis, and operation of state of the art ground penetrating radar (GPS) and gradiometric remote sensing units. The CAI Director and Interim Curator also works directly with undergraduates in conducting research as part of the SIUC REACH program. CAI staff have also worked to help establish a system-wide NAGPRA Compliance Committee that is headed by Dr. Sheila Caldwell. This committee supports the University's DEI initiatives by meeting throughout the year to update and inform relevant parties about the SIU System's efforts to engage in Native American tribal consultation and repatriation.

11.4 Evidence of Support for Center/Institute Objectives

Please see sections 11.1, 11.2 and attached resources table that provide information on our success in meeting our center objectives, specifically the acquisition of external grants to support CAI staff as well as undergraduate and graduate students through student work, extra help, and UA and GA assistantships.

11.5 Evidence of Organizational Effectiveness

CAI organizational effectiveness is based on our demonstrated ability to acquire external research grants from a variety of private industry, state, and federal partners that we use to support 2.5 full-time grant funded staff as well as undergraduate and graduate students in a variety of research related positions that enhance their potential to obtain employment after graduation. CAI staff are currently working on external grant projects in five states (Illinois, Indiana, Kentucky, Missouri, and Arizona). This continued expansion of our external grant program provides a stable footing for us to support our academic professional staff and students in an era of diminished state funding to support such positions.

12.	Institut	ional Assessment		
	12.1	Date of Last Review	2015	
	12.2	Decision at Last Review	x	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
	12.3	Explanation		provide any explanation necessary of the institutional ent or plans for pending program review)

RESOURCES: (Center for Archaeological Investigations)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	\$101,598.00	\$107,080.00	\$98,895.00	\$120,642.45	\$163,946.00
Starting Grant Balance	\$605,054.60	\$592,199.89	\$627,680.86	\$235,195.00	\$120,651.00
New Grants & Contracts	\$264,839.00	\$369,094.00	\$230,977.00	\$631,557.00	\$450,516.00
Annual Grant Total	\$869,893.60	\$961,293.89	\$858,657.86	\$866,752.00	\$571,167.00
Total Revenues	\$971,491.60	\$1,068,373.80	\$957,552.86	\$987,394.45	\$735,113.00
Expenditures*					
Grant Funded Salaries	\$146,761.00	\$299,532.07	\$226,081.97	\$199,724.36	\$207,986.00
Grant Funded OTS	\$43,929.00	\$59,157.58	\$40,376.00	\$39,346.78	\$127,986.00
State Funded Salaries	\$102,066.00	\$99,600.00	\$93,876.00	\$115,621.96	\$156,222.00
State Funded OTS	\$5,180.47	\$5,029.59	\$5,019.00	\$5,020.49	\$7,724.00
Total Expenditures	\$297,936.47	\$463,319.24	\$365,352.97	\$359,713.59	\$499,918.00
Revenue Minus Expenditures	\$673,555.13	\$605,054.60	\$592,199.89	\$627,860.86	\$235,195.00

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	0	0	0	0	0
Staff (State Supported)	2.5	1.5	1	1.5	1.5
Staff (Grant Supported)	2.5	3.5	2.5	3	3
Extra Help/Temp (Grant Supported)	4	6	4	4	3
Total Staffing	9.0	11	7.5	8.5	7.5

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Ins	titution	Southern Illinois University Carbondale				
2.	Center/Institu	te	Center for Autism Spectrum Disorders (CASD)				
3.	Date		February 8, 2025				
4.	Director		Denise Croft				
	4.1	Telephone	618-453-7130				
	4.2	E-mail	Denisecroft@siu.edu				
5.	Year Establis	hed	*2021				
6.	Illinois State (if pertinent)	Statute	IL Public Act 93-0395				
	(ii pertinent)						
7.	Reporting Un	it	School of Psychological and Behavioral Sciences				
			, <u>, , , , , , , , , , , , , , , , , , </u>				
8.	Type		Activity				
	,,		(check all that apply)				
	Instructio	nal	X				
	Research		X				
	Public Ser	vice	X				

^{*}Note: CASD became an IBHE-approved center in 2021 (start of FY2022)

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The CASD provides teaching/student-training, community service, and research opportunities in the field of autism spectrum disorders (ASD).

- Teaching: We train graduate and undergraduate students in the area of service delivery across
 disciplines within the College of Health and Human Services (current disciplines include speechlanguage pathology (SLP) from the Communication Disorders and Sciences program, applied
 behavior analysis (ABA) from the Behavior Analysis and Therapy program, and clinical
 psychology (CP) from the Clinical Psychology program. We are in the process of expanding our
 teaching and service delivery, as described below.
- Research: We conduct research on our services. This includes student-led projects (e.g. theses), conference presentations, and publications. It also includes grant activity. We also conduct research on our supervisory/supervisee skills.
- Community Service: We provide a multitude of services to children with ASD and their families, which include screening and diagnostic evaluations, speech-language therapy, applied behavior analysis therapy, parent trainings, school trainings, and consultations.

9.2 Mission

Mission Statement:

The Center for Autism Spectrum Disorders (CASD) is an interprofessional training and research center that provides high-quality services and leadership in the Southern Illinois region for individuals with autism spectrum disorder and their families. Our center focuses on Community Service, Student Training, and Research.

9.3 Objectives

- Provide exemplary training in empirically supported treatments and best professional practices to our student trainees
- Provide high-quality assessment and intervention to individuals with ASD and their families
- Provide needed consultation to our region to teachers, social workers, speech-language pathologists, administrators, school-psychologists, paraprofessionals, and parents/families
- Help inform state and local initiatives related to ASD
- Conduct research that spurs the field in the form of conference presentations and publications; provide research opportunities for our trainees (e.g. theses)
- Attain funding
- Meet deliverables outlined by our grants

• Began inter-professional practice (IPP), an empirically supported approach to treatment, and compare it to standard care (each discipline working separately) via research and assessment practices.

10. Advisory Board

10.1 Advisory Board - Membership

(provide the name and list the membership of the center/institute advisory board. If multiple boards are used, list each.)

CASD Advisory Board

Name	Title	Affiliation
Janet R. Albers, MD	Chair, Professor, and Physician	SIU School of Medicine
Pam Altman, LCSW	Director of Clinical Services	Brehm Preparatory School
Stephanie Brown	Director	Autism Society of Southern Illinois
Terri Bryant	State Representative	Illinois House District 115
Chrissy Chancey, M.S., BCBA	Behavior Analyst	Specialized Training for Adult Rehabilitation
LaDonna Henson, M.S., CRC, LCPC	Director	SIU Evaluation and Developmental Center
Anna Little, MD	Pediatrician Shawnee Health S	
Craig Rogers	Publisher	The Southern Illinoisan
Rocio Rosales, Ph.D., BCBA-D	Assistant Professor Umass Lowe	
Jenny Seachrist	Special Education Administrator	Effingham Community Schools
Terri West	Mother of Club '57 client	Center for Autism Spectrum Disorders

New Advisory Board Established 1/22:

^{*} Dr. Lina Slim - SLP/BCBA, International IPP presenter

^{*} Dr. Jon Hochmuth - CDC, NIOSH Behavior-Based Safety

- * Rebecca Trammel SLP, founder of CASD w/ Dr. Cuvo
- * Dr. Rocio Rosales BCBA, UMass faculty
- * Stephanie Brown director of autism society and parent
- * Anna Little, MD Shawnee Health, medical
- * Dr. Lea Maue Head Start / school
- * Julie Pratt and Sherry Riedel CEO/COO, private practice of interprofessional clinic
- * Dr. Kelli D. director of new nursing program at SIUC

10.2 Number of Meetings (In This Year)

 $\rm 0-one\ meeting\ with\ returning\ advisory\ board$ members to discuss assembly of new advisory board

11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year
1.	Students trained in ASD screening, assessment, and treatment in our clinic	N/A	45
2.	Graduate Assistant Positions	N/A	7
3.	Screening & diagnostic evaluations for children with ASD (measured in number conducted)	100 screenings & 65 diagnostics = Total of 165	135 screenings & 73 diagnostic evaluations = Total of 208
4.	Therapy hours provided for children with ASD and/or their parents	1000 hours	1740.75 hours
5.	Consultations with parents/families of children with ASD (measured in number of hours	100	243.75
6.	Trainings provided to our clinicians at our clinic, school districts & personnel, and families	90	97
	Attain extramural grants (measured in number attained)	N/A	1
	Raise money via donations	N/A	\$9,800

Present our work at conferences (measured in number of presentations)	N/A	4
Publish findings	N/A	4 Articles

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year) (briefly summarize center/institute's major accomplishments for the year)

- Awarded State (TAP) grant to continue services at the CASD (\$362,500) and received excellent rating from TAP grant
- Contracted with Licensed Clinical Psychologist to oversee and provide medical diagnosis at CASD
- Continued increase in CDS and BAT students placed at CASD for clinical training practicum experiences
- Continuation of inter-professional practice (IPP) meetings between BAT and CDS students, supervisors, faculty which was started because of grant funding in FY 22 (\$13,160).
- Faculty associated with the CASD were awarded the PDS Grant from SIU VCR
- Basketball Game SIU Men's Basketball Game for Autism Awareness and Acceptance
- Beneficiary of the Women Who Care of Jackson County Award of (\$7,800)

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

(briefly provide any evidence of the center/institute's support for statewide, SIU system, or campus priorities in this year)

IPA Goal 1. EDUCATIONAL ATTAINMENT. – Increase educational attainment to match the best-performing states

According to the Center for Disease Control, the prevalence of ASD in the U.S. is 1 in 36 children (CDC, 2023). Thus, for students in the Communication Disorders and Sciences (CDS, trains students in speech-language pathology (SLP)), Behavior Analysis and Therapy (BAT, trains students in applied behavior analysis (ABA)), and Clinical Psychology (CP, trains students in CP) programs receive cutting-edge education, training in how to treat/serve individuals with ASD, as they likely will be working with individuals with ASD in their future careers. All three programs have graduate students who volunteer, take practicum classes, and/or have paid assistantships at the CASD. Undergraduate students in the BAT and CDS programs are also involved in serving as volunteers and increasing their training through practicum courses. In fall 2024, the Occupational Therapy Doctoral Program began their pediatric practicum rotation at the CASD. Coordination with other programs at SIUC have allowed students to observe and volunteer including students from the School of Medicine, Recreational Therapy Program, Education Program, Dental Hygiene Program, and Nursing Program.

IP Goal 2. COLLEGE AFFORDABILITY. – Ensure college affordability for students, families, and taxpayers.

ASD is one of the most common, serious developmental disabilities affecting children in the USA (CDC, 2022). Effective treatment for ASD is extensive, multifaceted, individualized, and, as a result, costly (Sharpe & Baker, 2007). This cost of raising and treating a child with ASD often places a substantial financial strain on the families. On average, the annual cost is over 100k per child age 5 and under, and over \$85k for children ages 6-17 (Candon et al., 2019). Thus, children with ASD have a high utilization of health care services, even when compared to children with other types of developmental delays (Croen et al., 2006; Mandell et al., 2006). Moreover, many schools do not provide ABA or clinical psychology services, and SLP services are limited. Thus, financing services for children with ASD is a growing concern among families, private and public insurers, and policymakers at the state and federal levels (Council for Affordable Health Insurance, 2009). The CASD provides individualized, multi-disciplinary assessment and therapy services to children/adolescents with ASD and their families who live in the rural communities of Southern Illinois and do not have private insurance. Families receive these services at no cost to them, as the services are covered by IL's TAP grant. This much needed assistance is quite impactful to IL families. It also is impactful for IL taxpayers in general, as the better these families and children function, the fewer services they will require in the future, and the more they can focus on employment and other needs of the State. Having less future burden on our State's resources, and more parents working and paying taxes, frees more State resources for higher education. Additionally, the CASD funded 6 graduate assistantships for current students enrolled in the CDS and BAT programs, providing access to high quality programs, work and training experiences, while covering their tuition.

IPA Goal 3. HIGH QUALITY CREDENTIALS TO MEET ECONOMIC DEMAND. – Increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society.

Having well-trained students who are able to work with individuals with ASD helps our State. The CASD has increased the number of students trained from FY23 to FY24. This increase helps serve more future families and provides more high-quality trained individuals to enter the workforce. Families who have children with ASD can stay in the Southern Illinois region to receive care instead of having to drive long distances to other areas or States to receive it. By improving family functioning and the functioning of the individual with ASD, they are better able to function in their communities (pursue or sustain employment, utilize less public aid for healthcare, etc.). As noted under Goal 1, the CASD is strategically working towards expanding the number of programs involved with the Center. This will allow clients to receive an even wider array of services and more SIUC students to receive outstanding inter-disciplinary training. This better prepares our students for employment/practice in different employment sectors within Illinois and beyond.

11.4 Evidence of Support for Center/Institute Objectives

(briefly provide any evidence of the center/institute's support for the unit's objectives in this year – see 9.3 above)

- Provide exemplary training in empirically supported assessment and treatment and best professional practices to our student trainees
 - o Trained 45 students in such techniques/practices

- o Provided 1103.5 supervision hours of these students' work
- Provide high-quality assessment and intervention to individuals with ASD and their families
 - o Conducted 135 screenings for ASD to determine if further assessment is warranted
 - o Conducted 73 diagnostic evaluations at CASD
 - o Provided 1740.25 individual therapy hours for clients
 - In terms of quality, nearly all therapy clients were rated by their therapists and their supervisors as having made significant progress, maintained progress, or were substantially improved over the course of their treatment (as opposed to no progress).
- Provide needed consultation in our region to teachers, other professionals and paraprofessionals, and parents/families
 - o Provided 243.75 hours of consultations to clients and families in the Southern Illinois Region
 - Provided 97 trainings to professionals and paraprofessionals and their trainees.
 Additional professions represented included physician assistants, dental hygienists, physical therapy assistants, and early childhood workers.
 - For those who completed the satisfaction questionnaires, all rated that they were Satisfied with the training provided (this was the highest ranking possible).
- Help inform State and local initiatives related to ASD
 - Provided feedback to TAP (our main funding source) regarding needs in the Southern IL area
 - o Met with Governor Pritzker to discuss needs for funding and services in the area
 - o Went to Springfield, IL to advocate for autism funding
- Conduct research that spurs the field in the form of conference presentations and publications; provide research opportunities for our trainees (e.g., theses)
 - o 4 conference presentations
 - o 1 Master's Thesis presentation completed (with numerous in progress)
- Research, Publications/Grants:
- **Shawler, L.A.,** *Castaneda-Velazquez, G. & *Lafo, G. (2024). Toward maximizing efficiency: A Synthesized Trial-Based Functional Analysis and Competing Stimulus Assessment. Behavioral. Sciences. 14, 372. https://doi.org/10.3390/bs14050372

11.5 Evidence of Organizational Effectiveness (briefly provide any evidence of the center/institute's organizational effectiveness in this year)

Over the course of FY2024, the CASD met its mission in terms of Community Service, Student Training, and Research. We provided numerous assessment and therapy hours to children with ASD and their parents/families despite the pandemic. We provided 97 training sessions to professionals/paraprofessionals and their trainees to enhance their knowledge of ASD and how to more effectively work with children with ASD and their parents. We directly trained 45 students in service delivery so that they can perform a much-needed service for our State and beyond post-graduation (help children with ASD and their families). As part of this, we funded 6 students via graduate assistantships. We also delivered 8 conference presentations despite the pandemic and staff losses, sharing our research findings at the State and National levels. Our mission directly aligns with SIUC's goals of education, research, and community service, helping SIUC to meet its mission/strategic plan as well. Moreover, we helped SIUC meet three IPA goals, as detailed above.

12. Institutional Assessment

12. 1	Date of Last Review	(list the year of the last program review) N/A (we became an IBHE-approved center in FY2022)	
12. 2	Decision at Last Review:		<u>X</u> Center/Institute in Good Standing
			Center/Institute Flagged for Priority Review
			Center/Institute Suspended
12. 3	Explanation	Not Applicable	

RESOURCES: Center for Autism Spectrum Disorders (CASD)

Financial Resources	FY2022	FY2024	
Revenues			
State Appropriations			
Grants & Contracts *grant through TAP of IL	*185,502	362,500	
Fundraising			
Total Revenues	185,502	\$9800	
**efforts toward			
Expenditures*			
Salaries & Wages	80,250.24	146,841.58	
Fringe Benefits	19,577.84	51,573.28	
Equipment	0		
Travel	112.00		
Supplies	5,882.29	2,698.38	
Contractual & Subawards	242.50	68,500.00	
Consultants (Prof. Services)	27,350	30,000.00	
Training & Education	2,950	1,750.00	
Other or Misc. Costs	0		
Indirect Costs	41,758.57	60,322.40	
Telecommunications	340.33	298.66	
Total Expenditures	178,463.77	361,944.30	
Revenue Minus Expenditures	7,036.23	\$9,800	

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

^{**}the CASD became an IBHE-recognized center with permanent status in July, 2021

Staffing (Full Time Equivalent)	FY2022	FY 2024
Faculty Employee (E)	E 25% E 25% E 20% E 15% E 25%	E 25% E 75% E 25%
Staff Contractor (C) Graduate Assistants (GA)	C 75% C per diem C per diem 6 GAs at 25%	6 GAs at 50% C per diem C per diem C per diem
Total Staffing	6 Faculty Employees 3 Staff Contractors 6 Staff Graduate Assistants	3 Faculty Employees 3 Contractors 6 Graduate Assistants

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale	
2.	Center/Institute Center for Embedded Systems		
۷.	Contoninistitute	Contor for Embodded Gystems	
3.	Date	3/12/2025	
4.	Director	Spyros Tragoudas	
	4.1 Telephone	618 4537027	
	4.2 E-mail	spyros@siu.edu	
5.	Year Established	2022 (May 25, 2022)	
6. Illinois State Statute (if pertinent)		N/A	
	,		
7.	Reporting Unit	School of Electrical, Computer, and Biomedical Engineering	
8.	Туре	Activity	
		(check all that apply)	
	Instructional		
	Research	X	
	Public Service		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after the conclusion of the academic/fiscal year.

9. Overview

9.1 Description

A research center in the area of embedded systems that is exclusively funded by the participating industries' membership fees. The membership fee per industry is \$60,000 annually, but small companies pay a reduced annual membership fee of \$30,000. The State and the University do not provide any financial support to the center. The center charges a 10% indirect cost of the received membership fees.

9.2 Mission

Engage SIUC faculty and students in industry-relevant, multi-disciplinary research toward the design of embedded systems.

9.3 Objectives

- 1. To conduct industry-relevant, multi-disciplinary research toward the design of embedded systems;
- 2. To develop clear and well-defined mechanisms to transfer the research results to industry; and
- 3. To provide the Nation with a cadre of scientists and engineers, whose knowledge base and practical training covers a broad range of topics in embedded systems technology, including (and not limited to) networked and distributed systems, software design and verification, compiler technology, System-on-Chip and processor architectures, power/energy/thermal aware design, digital circuit design and optimization, VLSI CAD algorithms, digital/analog circuit design and test, novel devices and semiconductor materials and fabrication.
- 4. Study the cross-disciplinary nature of embedded systems research that transcends traditional Computer Science and Electrical Engineering boundaries and draws in application domains from Mechanical, Industrial, Civil, Environmental, and other Engineering and Science principles

10. Advisory Board

10.1 Advisory Board - Membership

Michael Krenz, Collins Aerospace, IL Kiri Nagesh Gowda, Advanced Micro Devices (AMD), CA Jason Wibbenmeyer, Ameren, MO

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Member companies	2	2
2.	Extramural funding generated from membership fees	\$120,000	\$120,000
3.	Number of projects	2	3 (one for FY23)
4.	Number of faculty in projects	2	2
5.	Number of participating PhD students	3	3
6.	Number of graduated students	0	0
7.	Number of placed students	0	0
8.	Number of publications	2	2

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, and public service activities.

11.2 Major Accomplishments (In This Year)

Ameren renewed its membership, and Advanced Micro Devices (AMD) joined the center.

- A new project aligned with AMD's priorities in embedded vision started 8/16/2023 with an end date of 8/15/2024. (Principal investigator: Tragoudas)
- The project aligned with Ameren's priorities that started in FY23 was renewed for one additional year. Phase 2 started 1/1/2024 with an end date of 12/31/2025. (Principal Investigator: Tragoudas.)
- Collins Aerospace did not renew its membership in FY23. However, it was involved in a project that started 1/15/23 with an end date of 12/31/24. (PI: Anagnostopoulos.)

Three PhD students participated in the center's projects. However, two were supported by other grants.

Publications that acknowledge the center's support: (Supported SIUC students are listed in italics.)

- 1. *V. Pentsos,* S. Tragoudas, J. Wibbenmeyer, and N. Khdeer, Optimizing Multivariate LSTM on real-world data for power load forecasting, Proc. 11th IEEE Intl Conf. on Smart Energy Grid Engineering (SEGE), 13-15 Aug. 2023.
- 2. *D. Senarathna*, S. Tragoudas, J. Wibbenmeyer, and N. Khdeer, Increasing Detection Rate of False Data Injection Attacks Using Measurement Predictors, Proc. IEEE Intl Conf. on Smart Energy Grid Engineering (SEGE), 13-15 Aug. 2023.

11.3	Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campu
	Strategic Planning

CES generated membership income and initiated projects that involved faculty and students as per the proposal.

11.4 Evidence of Support for Center/Institute Objectives

- Initiated a project in embedded systems vision using deep learning. It is aligned with the priorities of AMD. It started 8/16/2023 with an end date of 8/15/2024.
- Continued a project in smart grid security using deep learning. It is aligned with the priorities of Ameren. Phase 2 started 1/1/2024 with an end date of 12/31/2025.

11.5 Evidence of Organizational Effectiveness

This fiscal year, the center generated \$120,000 in income from membership fees. An additional surplus of \$112,853.84 was generated this fiscal year.

12.	Institut	ional Assessment	
	12.1	Date of Last Review	N.A.
	12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
	12.3	Explanation	(Briefly provide any explanation necessary of the institutional assessment or plans for pending program review.)

RESOURCES: (Center/institute name)

Financial Resources	FY2023	FY2024	FY2025	FY2026	FY2027
Revenues					
	\$0	\$0			
State Appropriations	- ·				
Income Fund	\$120,000	\$120,000			
Grants & Contracts	N.A.	N.A.			
Total Revenues	\$120,000	\$120,000			
Total Revenues	\$120,000	φ120,000			
Expenditures*					
Salaries	\$19,950	\$4,682.5			
GA fees	\$450				
Indirect costs (correction)		\$2,040			
Indirect costs		\$281			
Contractual/commodities		\$142.66			
XXX					
Total Expenditures	\$20,400	\$7,146.16			
	1 400 000	T + / / 2 - 2 - 2 / T		T	П
Revenue Minus Expenditures	\$99,600	\$112,853.84			

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full-Time Equivalent)	FY2023	FY2024	FY2025	FY2026	FY2027
Faculty	2	2			
Staff	0	0			
Total Staffing	2	2			

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Carbondale	
2.	Center/Institute	Center for English as a Second Language (CESL)	
3.	Date	February 7, 2025	
4.	Director	_ William Hellriegel	
4.	Director	vvilliaiti i leliitegei	
	4.1 Telephone	618-453-6538	
	4.2 E-mail	william.hellriegel@siu.edu	
5.	Year Established	1966	
6.	Illinois State Statute		
	(if pertinent)	NA	
7.	Reporting Unit	(College of Liberal Arts)	
8.	Туре	Activity	
		(check all that apply)	
	Instructional	X	
	Research		
	Public Service		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

CESL offers intensive English instruction to adults with a focus on preparation for success in university degree programs, principally at SIU. CESL is self-supporting and, in addition to classes, provides social-cultural activities, student advising, and specially designed programs for foreign partner institutions and governments that focus on English language teacher training, community engagement, and U.S. culture immersion.

9.2 Mission

The Center for English as a Second Language (CESL) serves international students enrolled in CESL or in Southern Illinois University. Our primary mission is to provide the highest quality English language program and curriculum, delivered by professionals in the field of ESL; thereby also increasing the number of students who end up pursuing degrees at SIU. Traditionally, 80% of CESL students who finish our program move on to SIU degree programs; however, that rate is now less, and there is greater focus on English language teacher training, community engagement, and U.S. culture immersion.

9.3 Objectives

- * Provide high quality English instruction for students to meet educational, professional, and/or personal goals.
- * Foster global citizenship by helping students acquire a better understanding of both U.S. academic and social culture as well as their own and other cultures.
- * Maintain extensive student services.
- * Provide effective teacher training and mentoring of CESL teaching assistants.
- * Encourage faculty and staff professional development in TESOL and in related fields in order to contribute to and further knowledge about the field.
- * Provide advanced linguistic, cultural and pedagogical training for international graduate assistants.
- * Promote international awareness within the SIU community and the region.
- * Advance the SIU reputation as an international and multicultural community.
- * Establish and maintain relationships abroad in order to promote CESL and SIU internationally.

10. Advisory Board

10.1 Advisory Board - Membership

CESL Advisory Board. Current membership includes: William Hellriegel, CESL Director; Lilia Angel-Post, CESL Assistant Director; Kathryn Carpenter, CESL NTT Instructor (Senior Lecturer); Colin Robinson, CESL NTT Instructor (Associate Professor of Practice); Stacie Lawley, CESL NTT Instructor (Senior Lecturer), and Geoffrey Young, CESL NTT Instructor (Assistant Lecturer.

10.2 Number of Meetings (In This Year) 4

11. Annual Performance

11.1 Performance Measures *

Mea	sure – Strategic Goals for 2023-24	Target for Year	Results in Year
1.	Continue offering CESL's suite of services: intensive English for academic preparation, English language teacher training, and community engagement; and grow the number of institutional partners overall, ongoing. ACCOMPLISHED	Grow the number of institutional partners to which we offer programming in all of these areas by 5 overall. ACCOMPLISHED.	At the end of the fiscal year, we were able to offer new teacher training programs to both Ecuadorian teachers (Universidad Tecnica de Ambato) and Brazilian teachers (Municipality of Recife). We also offered intensive English programming to a new Colombian partner (Servicio Nacional de Aprendizaje), and we expect to receive individual intensive English students from our two new Chinese recruiting agencies (BaiShiTong Consulting Agency and Start Education).
2.	Maintain and develop our relationships with our institutional partners in different markets across the world, so that CESL receives 30%	Grow particularly in the East Asian,	CESL was able to add two Chinese recruiting agencies (see above) and also

Mea	sure – Strategic Goals for 2023-24	Target for Year	Results in Year
			decrease to about \$50K just from those two changes. Moreover, the reduction in costs for graduate assistants in FY25 of about \$30K, should allow CESL to almost eliminate the annual deficit it has had.
3.	Adjust staffing, ongoing and as necessary, for optimal efficiency and cost reduction, so that CESL's costs are brought more in line with its income. ALMOST COMPLETELY ACCOMPLISHED JUST AFTER START OF FY25.	Reduce teaching staff by one FTE, down to 4 FTEs, and reduce admin staff from 3 FTEs down to 2 FTEs. Finally, Minimize number of administrative graduate assistants and teacher assistants. ACCOMPLISHED IMMEDIATELY AFTER START OF FOLLOWING (CURRENT) FISCAL YEAR).	CESL had one FTE NTT leave the University in August 2024 and did not replace her. Then, the CESL accountant also left for another position at the University, effective July 1 2024, and she was also not replaced. Instead, her tasks were taken on by the remaining administrative staff – the CESL Director and the CESL Assistant Director, the .5 FTE administrative graduate assistant. Finally, we reduced graduate assistant employment down to .75 FTE, total.
4.	Maintain competitive pricing for CESL's programs and services, while raising it slowly back to pre-COVID levels and also continuing to deliver excellent services to students and groups. ACCOMPLISHED.	Find the exact balance of attractive and competitive pricing with a pricing level necessary to generate maximum possible income from operation. ACCOMPLISHED.	^ We now offer an average tuition rate of \$1900 for full-time in-person study in CESL's 8-week Intensive English Program, \$100 higher than the average level of the previous several years, since COVID. We have found that the market will now bear this slightly higher pricing rate, as well as prorated versions of it for CESL's special programs. In fact, we charge a rate somewhat higher than \$1900 for some for our shorter special programs from Japan, and those rates get very positive responses from

Measure – Strategic Goals for 2023-24	Target for Year	Results in Year
		CESL's Japanese partner
		institutions.
		^ CESL's pricing for its Latin
		American institutional
		partners is still lower than
		our overall average, but we
		have also raised it from a
		previous 50% discount off
		CESL's official price of \$2300
		for 8-weeks to about
		\$1400/\$1500 at present, on
		average. The market will not
		bear a higher rate, especially
		because of the strong U.S.
		dollar.
		^ CESL's pricing still ranks it
		within the lowest quadrant of
		U.Sbased intensive English
		programs, and this seems
		prudent and strategic given
		CESL's disadvantageous
		location in the U.S.
		^ We will keep CESL's overall
		costs as low as possible by
		keeping staffing at the
		current minimal level of 4
		NTTs and 2 administrative
		staff, a level below which we
		cannot really go and still be
		able to offer all of our classes
		and programs and also
		provide excellent service. We
		already spend only about
		10% of our overall annual
		budget on contracts,
		commodities, travel, etc, and
		90% of CESL's expenses are
		personnel costs. Our current
		annual cost of operation is
		approximately \$420,000, and
		income is approximately
		\$390,000; so income clearly
		needs to be raised by \$30K in
		order for CESL's budgetary
		gap to be eliminated, and this
		is very doable by expanding
		enrollments in the areas, and

Measure – Strategic Goals for 2023-24		Target for Year	Results in Year
			with the institutional
			partners discussed above.

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

CESL's four major accomplishments in 2023-24 were the following:

- ** We increased our overall average tuition rate by about 5% (\$100 for 8-weeks of full-time study), enhancing our revenues under severe market conditions.
- ** We increased our number of institutional partners by 5, and we now work with about 12 partners (the most ever) distributed throughout the world, thus minimizing the risk we run in counting on enrollments from any one partner.
- ** We maintained the number of Fulbright scholars studying with us in their Long-Term English Program at about 15, continuing to receive students sent by the Institute of International Education (IIE), and also from our new partner, Amideast. Income from these students was about \$75K in FY24, and it has risen to about \$100K in the current year, FY25, due to the students starting earlier in the year with us than in the past, in January rather than in March.
- ** By shortly after the start of the current fiscal year, FY25, we had been able to reduce our faculty and staff sizes to the absolute minimum required for effective operation: 4 NTT FTEs and 2 administrative FTEs; thus maximizing our ability to close our budgetary gap via cost reduction.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

CESL's traditional and fundamental function has been to recruit tertiary level students who matriculate to SIU for full-time degree study and then succeed is central to the University's mission to internationalize and to attract as many students as possible from diverse backgrounds. Although, as mentioned, these students have decreased as a percentage of our overall enrollments in recent years, we hope they will increase again, and we are always ready to accept such students in the largest numbers possible. Collaboration with the SIUC Center for International Education will be key going forward.

11.4 Evidence of Support for Center/Institute Objectives

By employing teaching assistants, CESL supports the SIUC School of Languages and Linguistics' efforts to give their graduate students teaching experience under the guidance of experienced CESL instructors. It has likewise also supported the Department of Curriculum and Instruction in the College of Education and Human Services. Although the number of teaching assistants employed has decreased to almost 0 in recent years, they always remain an option. CESL currently employs one 25%-effort SIUC teaching assistant.

11.5 Evidence of Organizational Effectiveness

We continue to maintain a rationalized CESL staff and faculty structure in order to be able to deliver valuable instruction as well as extracurricular experiences to students at the lowest possible cost, as indicated above. By retaining the most capable and energetic persons, this goal continues to be accomplished.

With the lean staff and faculty that we have, we have been able to serve approximately 300 separate individual students over the course of each of the past several years, with the different students studying for varying lengths of time; and we have done this with very positive student and institutional partner response, avoiding the commission of any significant errors. This says a lot about both the appropriateness of the size of our staff and faculty and the quality of our academic programming and associated support services.

12.	Inctitutional	Assessment
1/	Institutional	ACCECCINEII

12.1	Date of Last Review	February 2024	
12.2	Decision at Last Review	X Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended	
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)	

RESOURCES: (Center/institute name)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations					
Student Tuition and Fees	349,823	339,166	327,555	270,020	860,585
Grants & Contracts	1,170	15,898	327,000	270,020	000,000
Investment Income	7,094	6,087	6,500	10,000	15,000
Miscellaneous	33,513	3,780**	0,300	10,000	13,000
	00,0.0	0,1.00			
Total Revenues	391,600	364,931	334,055	280,020	875,585
Expenditures*					
Salaries and Wages	490,135	443,118	412,258	385,815	576,402
Insurance Contributions	9,522	9,394	11,000	9,000	15,000
Travel	7,071	10,864	15,000	19,000	16,000
Equipment		948	3,000	3,000	3,000
Commodities	18,821	6,241	2,230	23,412	34,828
Contractual Services	3,789	19,499	16,875	30,605	53,336
Other	20,854	16,172	84,000	51,500	179,706
Total Expenditures	550,192	506,236	544,363	522,322	878,272
	1	_		_	
Revenue Minus Expenditures	(158,592)	(141,305)	(210,308)	(242,312)	(2,687)

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

^{**} Student activities fees minus expenditures for student activities.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	5	5	5	4	4
Staff	3	3	3	3	3
Total Staffing	8	8	8	7	7

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale		
2.	Center/Institute	Center for Fisheries, Aquaculture, and Aquatic Sciences		
3.	Date	March 6, 2025		
4.	Director	James Garvey		
	4.1 Telephone	618-536-7761		
	4.2 E-mail	jgarvey@siu.edu		
5.	Year Established	1950		
6.	Illinois State Statute (if pertinent)	N/A		
7.	Reporting Unit	Vice Chancellor for Research		
8.	Туре	Activity (check all that apply)		
	Instructional	Х		
	Research	X		
	Public Service	X		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

SIUC's Center for Fisheries, Aquaculture, and Aquatic Sciences (CFAAS; previously Fisheries and Illinois Aquaculture Center), the oldest research center on the SIUC campus, was created as the Cooperative Fisheries Research Laboratory under SIUC President Delyte Morris 1950 and led by the first Director, Dr. William Lewis until 1983. The center comprises research facilities shared across colleges and departments including a 100-acre, 100-pond outdoor aquaculture facility near Touch of Nature, a 12-acre research lake, and the Aquatic Research Laboratory and Saluki Aquarium at the Gower Translational Research Building as well as computer and instrument laboratories, and research vessels. Current CFAAS faculty have split appointments with undergraduate and graduate-level teaching responsibilities in the School of Biological Sciences, College of Agricultural, Physical, and Life Sciences and research appointments in the Vice Chancellor for Research's office. Courses include Fisheries Management, Aquaculture, Limnology, Marine Biology, Aquarium Science, Aquatic Toxicology, and Fish Genetics. CFAAS is one of the top ten academic fisheries programs in the US and is the largest in the Midwest.

9.2 Mission

The mission of the Center for Fisheries, Aquaculture and Aquatic Sciences is to perform high quality research leading to peer reviewed research and train graduate and undergraduate students in fisheries and aquaculture in a research-intensive environment. We strive to maintain a critical mass of complementary faculty and shared resources that enhance the individual faculty member's ability to acquire external funding and contribute to teaching within and beyond the classroom. We also provide outreach to Illinois' commercial aquaculture industry supporting > \$3 million of fish sales annually.

9.3 Objectives

- Perform high quality research funded with external grants.
- Publish research in high quality peer-reviewed journals.
- Train M.S. and Ph.D. graduate students. Student success is highest priority.
- Provide research opportunities for undergraduate students.
- Teach graduate and undergraduate courses in fisheries, aquaculture, aquatic toxicology, water science, and related fields.
- Maintain sufficient shared resources (boats, fish tanks, instrumentation etc.) to foster collaboration among faculty within the Center and across departments and colleges to make individual faculty members more productive.
- Conduct outreach to local schools and public about aquatic science.
- Provide service to Illinois' aquaculture industry.

10. Advisory Board

10.1 Advisory Board - Membership

Developing the Saluki Aquarium and Aquatic Outreach advisory board including faculty at SIU and in agencies/aquariums. Will meet in early fall semester 2025.

10.2 Number of Meetings (In This Year) N/A

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	External Grant Funding	\$1,000,000	\$ 2,163,338
2.	Peer-Reviewed Publications	15	15
3.	Graduate Students Enrolled	15	23
4.	Graduate Students Finishing Degrees	5	9
5.	Undergraduate Research Projects Supervised	5	28

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- External funding remains at sustained level, leading to 15 publications in the peerreviewed literature.
- SIU faculty oversaw the Student Subunit of the American Fisheries Society and the Saluki Reefers RSOs – both very active student groups
- Hosted several outreach activities to local schools including external outreach to engineering teams in St. Louis area
- Several CFAAS students received state and national awards for their research
- Working with local fish farm companies to bring infrastructure and training opportunities in aquaculture to southern Illinois
- Dr. Ed Heist was appointed to the USFWS Pallid Sturgeon Propagation Committee
- Dr. Ed Heist consulted with Missouri Department of Conservation and Arkansas Game and Fish Commission on Rainbow Trout stocking strategy – New species and research thrust in Center
- Dr. Greg Whitledge served on the Fish Endangered Species Technical Advisory Committee, Illinois Endangered Species Protection Board
- Dr. Mike Lydy was awarded the Sigma Xi Leo Kaplan Award for 2024
- Dr. Jim Garvey served as Special Editor of the Rivers and Floodplains section of Frontiers in Freshwater Science
- Dr. Jim Garvey served on the Board of Directors of the North Central Regional Aquaculture Center (USDA)
- All faculty and students served on multiple professional society committees

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Consistent with the SIU Imagine 2030 Strategic Plan for SIUC "developing research and innovation", CFAAS has maintained very high research productivity through competitive external grants, peer-reviewed publications, and graduate training at the MS and Ph.D. level. The Center is integral in outreach and consultation to natural resources agencies and stakeholders throughout the region, benefitting fish conservation. CFAAS is reaching out to Illinois' aquaculture industry, which ranges from small farm-pond operations to larger commercial facilities through industry brokerage and fish-health screening that make the industry more profitable. Most CFAAS students become employed with private industry, academia, or government agencies throughout the US and beyond.

11.4 Evidence of Support for Center/Institute Objectives

- Obtained more than \$2.1 M in funding
- 15 peer-reviewed publications
- 23 graduate students enrolled
- 28 undergraduates engaged in funded research
- Outreach to K-12 students in the region supports recruitment to SIU
- Teach graduate and undergraduate courses in fisheries, aquaculture, and related fields.
- CFAAS faculty continue to teach more than contractual teaching loads
- Provide service to Illinois' aquaculture industry generating more than \$3M in aquaculture economic sales and monitoring for diseases

11.5 Evidence of Organizational Effectiveness

The CFAAS continues to effectively exceed its mission goals annually. Despite the loss of our aquaculture faculty member, faculty are productive bringing in \$420,000 in grant funding per FTE and generating about 5 publications per faculty member. External funding levels are stable. A greater proportion of external funding in 2024 was for permanent, durable equipment (e.g., vehicles, boats, and analytical equipment) for the Center and SIUC. The Center includes other faculty in research and teaching at SIU and beyond, including the STEM Educational Center, the Center for Advanced Energy, the School of Engineering, and the School of Geography and Environmental Resources.

12.	Institut	ional Assessment		
	12.1	Date of Last Review	2018	
	12.2	Decision at Last Review	X	Center/Institute in Good Standing

		Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: Center for Fisheries, Aquaculture, and Aquatic Sciences

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues:					
State Appropriations	585,626.43	602,342.95	589,367.30	624,315.44	669,049.23
Local Accounts	311,580.42	310,122.42	225,613.74	240,726.68	205,305.70
Grants & Contracts	2,163,338.01	2,103,899.89	3,555,184.88	1,728,382.86	934,260.83
Total Revenues	3,060,544.86	3,016,365.26	4,370,165.92	2,593,424.98	1,808,615.76
Expenditures:					
Salaries	1,628,896.99	1,585,196.83	1,622,411.67	1,366,664.98	1,360,971.03
Wages	40,152.88	27,599.01	20,172.47	28,034.49	18,247.26
Travel	104,592.44	89,877.16	83,777.73	52,951.44	77,649.98
Equipment	97,925.22	42,155.70	216,564.66	262,523.90	52,856.26
Commodities	577,737.70	454,775.08	507,957.26	256,673.65	226,724.25
Contractual Services	218,326.24	1,017,068.18	1,315,935.31	786,173.68	469,447.55
Op/Auto	18,946.89	56,587.39	69,368.86	51,668.88	35,350.21
Telephone	6,508.85	4,676.97	5,719.58	4,000.90	5,913.79
Fringe Benefits	282,518.88	244,402.09	228,935.51	152,743.18	166,986.10
Indirect	307,434.50	356,802.42	305,445.38	209,106.32	176,833.95
Other	48,704.72	40,188.68	90,180.68	108,660.76	19,446.99
Total Expenditures	3,331,745.31	3,919,329.51	4,466,469.11	3,279,202.18	2,610,427.37
Revenue Minus Expend	(271,200.45)	(902,964.25)	(96,303.19)	(685,777.20)	(801,811.61)

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equ	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	5	5	5	5	5
Staff	30	27.5	28.5	31.5	37
Students	14	9	6	11	4
Graduate Assistants	11	13.75	13	11	10.5
Total Staffing	60	55.25	52.5	58.5	56.5

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023- June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University School of Medicine		
2.	Center/Institute	Center for Rural Health and Social Service Development		
3.	Date	March 1, 2025		
4.	Director	Jeffrey Franklin		
	4.1 Telephone	618.453.1251		
	4.2 E-mail	"See all the Oath over Lord		
	4.2 E-IIIali	jfranklin@siumed.edu		
5.	Year Established	Academic Year 1991		
6.	Illinois State Statute (if pertinent)	N/A		
	(ii portinont)			
7.	Reporting Unit	SIU SOM, Office of External Relations		
•	responding office			
_	T	A abit the		
8.	Type	Activity (check all that apply)		
	Instructional	X		
	Research	X		
	Public Service	X		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

Through a highly successful track record of both external funding and impact of projects, the *Center for Rural Health and Social Service Development* continues to position itself as a link between SIU School of Medicine resources and the central and southern Illinois region. The *CRHSSD* has a historical record of creating stable and sustained networks, programs, policies, and systems that demonstrate improvements in health outcomes and economic impact. As a result, the CRHSSD is able to launch new initiatives quickly, scale rapidly, and function with stability and sustainability. The *CRHSSD*'s highly developed operational framework, successful grant management experience, and rural expertise, provides a structural framework that is beneficial for the SIU System, the SIU School of Medicine, and the communities served.

9.2 Mission

The *CRHSSD's* mission is to strengthen rural health infrastructure and to promote opportunities for enhancing health primarily in rural communities. Primary activities of the CRHSSD are grant and project development; research and evaluation; training and workforce development; and community engagement and outreach.

The CRHSSD is committed to the understanding of the Social Determinants of Health and resulting barriers and vulnerabilities that impact rural communities. The CRHSSD is built on a foundation of Diversity, Equity, and Inclusion, and with the utilization of a cultural competency lens to guide efforts that improve community resiliency, health outcomes, and individual health and well-being.

9.3 Objectives

To accomplish the goal of being a resource center addressing health and social service issues that impact the lives and productivity of the citizens with in the SIU School of Medicine's 88 Illinois county service region, the Center for Rural Health and Social Service Development provides leadership for health and social services development to Southern Illinois University, the southern and southeastern Illinois region, and the state of Illinois.

Primary objectives of the CRHSSD include:

- 1. Advance development of the health and social services infrastructure in southern Illinois. Coordinate and conduct program demonstrations. Develop alternative service delivery systems.
- 2. Develop new knowledge and practice in regional health and social services through increased scholarship and research. Support and coordinate new grant development of community projects and programs. Stimulate and conduct cooperative research.
- 3. Enhance funding for regional health and social service programs through external grants and contracts. Develop resources to support improvement in the delivery of community health and social service programs.
- 4. Participate and lead where possible in the development and implementation of public policy associated with regional health and social service programs. Develop policy alternatives and recommendations.

- 5. Contribute to the development of a well-prepared professional health/social service workforce for the southern Illinois region. Coordinate and conduct continuing education activities for the regional health and social service workforce.
- 6. Develop and enhance an effective network of community health and social service agencies for the southern and southeastern Illinois region. Act as a collaborative partner for regional development projects.

10. Advisory Board

10.1 Advisory Board - Membership

University volunteers guide the Center for Rural Health and Social Service Development and acts in a consultative capacity on projects, activities, and overall direction. The board meets once per calendar quarter to stay acquainted with and up-to-date on all CRHSSD projects and plans, in addition to providing valuable input and leadership into development, research, service and training functions.

Currently, due to many retirements and switching of careers, the Advisory Board is being reinvented with new internal and external members. There is going to be a collaboration/merger of the CRHSSD Advisory Board and the SIU System Institute for Rural Health Implementation Team. Both have similar missions and both are being led by the current CRHSSD/IRH Executive Director.

10.2 Number of Meetings (In This Year)

The full group did not meet during this time. However, the Director and staff had individual meetings with Council Chair and various Council members.

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	External Funding Generated	\$500,00	\$3,327,437
2.	Grant Applications (New/Non-Compete	3	6
	Cont.)	Projects/\$250,000	
3.	Publications and Presentations	5	242
			Presentations/Trainings
4.	Continuing Education Programs	5	10
5.	Community Collaborations	75	25
6.	University Collaborations/Councils &	10	8
	Advisory Boards		

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Program Title: Rural Health SUD Leadership Center

Program Overview:

The CRHSSD serves as one of five Substance Use Disorder Leadership Centers in Illinois and specializes in rural health.

FY24 Accomplishments

- SIU Leadership Center (RLC) staff participated (as facilitators or attendees) in the following SUD and behavioral health coalitions and criminal justice programs:
 - Southern Illinois Opioid Response Advisory Council
 - Southern Illinois ROSCs
 - Southern Illinois Rural Community Opioid Response Programs
 - County SUD/Opioid Coalitions
 - TASC deflection program (Central Illinois and Southern Illinois "Tri-County" initiatives)
- 2. Developed, disseminated, and produced a document with the results of a survey to determine availability and affordability of Naloxone at Illinois pharmacies.
- 3. Facilitated provision of psychiatric consultation to Hardin County General Hospital's (HCGH) MAR program. Ayame Takahashi, an SIU psychiatrist who is board certification in Addiction Medicine through the American Board of Addiction Medicine, joins HCGH's interdisciplinary team meetings to consult with providers on patient needs.
- 4. The SIU RLC staff assisted with development of a CRSS training and apprenticeship program for southern and central Illinois. Funding was used to 1) revise the CRSS curricula, 2) coordinate apprenticeship and training sites, 3) support 10 students with monthly stipends in southern and central Illinois, and 4) continue working with IDOC to teach the CRSS class at the Murphysboro Life Skills Re-Entry Center and the Kewanee Life Skills Re-Entry Center. Nine of the 10 students completed the coursework, with one discontinuing the program in March 2023. All students received monthly stipends after successful completion of coursework.
- 5. Take Action Today (TAT) and the Second Judicial Circuit Court are continuing their programs funded by this grant. With SOR II funding, TAT is expanding their Peer Recovery Support Specialist training program, developing Peer Recovery Communities, and overseeing the delivery of peer recovery support services to participants in the Jefferson County Drug Court Program. The Second Judicial Circuit Court has focused on enhancing drug court services for Jefferson and White Counties, including developing a peer recovery support system and hiring peer recovery support specialists and drug court counselors. They have expanded counseling hours for drug court participants, paid travel costs for clients going to therapy appointments, provided emergency needs to clients, paid fees for psychological/psychiatric testing/assessment, and have expanded drug testing personnel hours.

Program Title: Rural Opioid Prescriber Training Program

Program Overview:

Through the Rural Opioid Prescriber Training Program, trainings are developed for providers who prescribe opioids. Webinar topics vary, and all address opioid prescribing best practices. CMEs are provided through SIU School of Medicine. An opioid prescribing best practices webpage is also maintained by Center for Rural Health staff.

FY24 Accomplishments:

An updated version of the Best Practices in Opioid Prescribing webpage was developed and published during FY24, https://www.siumed.edu/center-rural-health-and-social-service-development/rural-opioid-prescribing-best-practices. The purpose of the webpage is to provide information on opioid-related resources and prescribing best practices, and to connect prescribers to the FY22 Rural Opioid Prescriber Training Program courses.

Program Title: Farm Family Resource Initiative

Farm Family Resource Initiative

Externally funded: IDHS

Amount: \$500,000

Grant period: July 1, 2023 – June 30, 2024

Program Overview:

The Southern Illinois University School of Medicine Center for Rural Health and Social Service Development (CRHSSD) is leading the effort to build a network of support and resources for Illinois farm families. The purpose of the initiative is to provide a range of resources including a helpline to assist with farmer and farm-related issues that include mental and physical health needs. Additionally, the initiative offers ongoing outreach, education and training to rural clients and partners working to improve the health and safety of farm families.

In 2021, the Illinois General Assembly and the Illinois Department of Agriculture expanded this support statewide. The Farm Family Resource Initiative (FFRI) has grown exponentially in the past year, to include a 24/7 helpline to aid farmers with work-related issues, and outreach, education and training for rural clients and partners, as it strives to improve the mental and physical health and safety of our farm families

FY 24 Accomplishments:

The FFRI developed and put into operation a text line **1-833-FARMSOS** and an email line **FarmFamilyResourceHelpline@mhsil.com**. During FY24 the helpline has received 56 calls/text/emails by farm families seeking services.

As a part of the FFRI Initiative, farm families are able to request and receive up to 6 Telehealth sessions with a SOM mental health professional. During FY24, there have been:

- 1) Helpline calls received: 23
- 2) Emails to helpline: 28
- 3) Telehealth sessions: 39
- 4) Telehealth clients: 32
- 5) 13 Presentations to agriculture professionals, leaders and members of the community with over 550 people reached.
- 6) 2000 people reached at events.
- 7) 200 marketing/educational outreach activities reaching 328,141
- 8) 13,209 website views
- 9) 12 FFRI Advisory Council meetings

FY24 Accomplishments:

22 requests for Telehealth counseling, 27 telehealth sessions provided, resulting in 20 telehealth clients.

FFRI staff have provided 39 presentations to agriculture professionals, leaders, and members of the community with over 1,798 people reached. In addition, FFRI staff have provided 4236 marketing/education outreach activities and have reached over 2200 people through participation in various community events.

The FFRI state-wide Advisory County meets on a monthly basis alternating between virtual and in-person meetings.

Program Title: Rural Health SUD Leadership Center

Program Overview:

The CRHSSD serves as one of five Substance Use Disorder Leadership Centers in Illinois and specializes in rural health.

FY24 Accomplishments:

- SIU Leadership Center (RLC) staff participated (as facilitators or attendees) in the following SUD and behavioral health coalitions and criminal justice programs:
 - Southern Illinois Opioid Response Advisory Council
 - Mobile MAR Learning Collaborative
 - Southern Illinois ROSCs
 - Southern Illinois Rural Community Opioid Response Programs
 - County SUD/Opioid Coalitions
 - Southern Illinois Recovery Network
 - TASC deflection program (Central Illinois and Southern Illinois "Tri-County" initiatives)
 - Statewide Recovery Alliance
- 2. Staff implemented the Opioid Overdose Recognition and Response Training at 39 organizational training events during this reporting period, with 1,572 people trained.
- 3. Developed a Mobile Harm Reduction program, in collaboration with the Community Action Place, a harm reduction organization that serves southern Illinois communities. In the first year of the program, outreach occurred in Saline and Jackson counites.
- 4. Expanded recovery support services for justice involved populations by funding Problem-Solving Court development.
- 5. Provided webinars, in-person trainings, and conference presentations on substance use disorder and mental health-related topics.
- 6. Developed and delivered an Opioid ECHO for community health workers (CHWs). Fifty-four CHWs were trained in the following one-hour ECHO topics:
 - What is Opioid Use Disorder (OUD);
 - Harm Reduction;
 - Myths about OUD;

- OUD and COVID:
- OUD and Pregnancy;
- Virtual Reality and OUD Treatment.

Program Title: Rural Opioid Prescriber Training Program

Program Overview:

Through the Rural Opioid Prescriber Training Program, trainings are developed for providers who prescribe opioids. Webinar topics vary, and all address opioid prescribing best practices. CMEs are provided through SIU School of Medicine. An opioid prescribing best practices webpage is also maintained by Center for Rural Health staff.

FY24 Accomplishments:

An updated version of the Best Practices in Opioid Prescribing webpage was developed and published during FY24, https://www.siumed.edu/center-rural-health-and-social-service-development/rural-opioid-prescribing-best-practices. The purpose of the webpage is to provide information on opioid-related resources and prescribing best practices, and to connect prescribers to previous Rural Opioid Prescriber Training Program courses.

Staff continues to assist with coordination and recruitment for the SIU School of Medicine Opioid ECHO (Extension for Community Healthcare Outcomes) for rural healthcare providers. The ECHO program includes a series of one-hour training sessions comprised of a patient story and didactic presentation related to opioid prescribing.

The ECHO topics presented in FY24 were as follows:

- Opioid Treatment Medication Essentials
- Complications of Opioid Medications
- Neurobiology of Addictions
- Psychiatric Comorbidity Relevant to Opioid Addiction and Treatment
- Pain Management and Alternatives to Opioids
- Management strategies for the Relapsing or Aggressive Patient
- Compassionate Opioid Tapering
- Foods and Nutrition Related to Opioids

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Program Title: MAR Now

Program Overview:

Family Guidance Centers, Inc. (FGC), the Illinois Department of Human Services, Division of Substance Use Prevention and Recovery (SUPR) and the Illinois Helpline for Opioids and Other Substances (HelpLine), developed MAR NOW to connect individuals with Opioid Use Disorder (OUD) to medication-assisted recovery (MAR). Callers to the HelpLine have the opportunity for same day or next day medication access. FGC serve as the model's "hub," receiving calls from the HelpLine, providing interim coverage on medications for the treatment of opioid use disorder and connecting callers with OUD to a "spoke" site for ongoing care. The CRHSSD serves as a spoke site where staff connect callers referred by FGC case managers to providers who are willing to treat a person with OUD.

FY24 Accomplishments:

The CRHSSD staff placed 166 callers with OUD into ongoing care throughout Illinois.

Program Title: Certified Recovery Support Specialist Training Program

Program Overview:

SIU School of Medicine received funding from two programs, the HRSA Behavioral Health Workforce Education and Training (BHWET) Paraprofessional Program and the Illinois Dept. of Human Services (DHS), to develop two separate Certified Recovery Support Specialist training programs. The DHS program, CRSS Success, focused on students in northern Illinois. Students were trained in SIU's curriculum and placed into 300-hour internships. The HRSA BHWET program came from central and southern Illinois. Students also trained in the same curriculum, but were placed in 2,000-hour apprenticeships at apprenticeship sites approved by the US Dept. of Labor. The purpose of the CRSS programs was to develop and expand community-based experiential training such as field placements and internships to increase the supply of students preparing to become peer support specialists and other behavioral health-related paraprofessionals while also improving distribution of a quality behavioral health workforce. A special focus is placed on the knowledge and understanding of the specific concerns of children, adolescents, and transitional-aged youth in high need and high demand areas at risk for behavioral health disorders.

Both programs emphasize establishing relationships with community-based partners (e.g., emergency departments, faith-based organizations, first responders, judicial systems, health centers, social services, community policing organizations, recovery community organizations or other peer-based recovery support organizations), to increase access to behavioral health services to populations across the lifespan. The program will expand and improve access to quality treatment and foster an integrated approach to address behavioral health prevention, treatment, and recovery services, including but not limited to Opioid Use Disorder (OUD) and other substance use disorder (SUD), in high need and high demand areas. The program also emphasizes developmental opportunities and educational support in interdisciplinary collaboration by utilizing team-based care in integrated, interprofessional behavioral health and primary care settings and recruiting a workforce interested in serving high need and high demand areas.

FY24 Accomplishments:

A CRHSSD instructional designer developed the curriculum, which consists of 128 hours in 32 four-hour classes. Sixty-one students enrolled in the program in FY24.

<u>Program Title: Delta States Network Development Grant – CATCH onto</u> Health Consortium

Program Overview:

A school-based initiative serving the Illinois Delta Region. The population served with Delta States funds are children prekindergarten—12th grade in the Illinois Delta Region. Illinois Delta Region youth face worsened health outcomes due to poverty, infant mortality, low birth weight, and teen pregnancy than those in other parts of the state. They exhibit high rates of sadness, hopelessness, and bullying. Physical inactivity, poor eating habits, and obesity are also high among Illinois Delta Region youth.

Furthermore, Illinois Delta Region adults exhibit higher rates of obesity, diabetes, smoking, and physical inactivity than their counterparts. Working with Illinois Delta youth can help break this multigenerational cycle.

The Illinois CATCH on to Health Consortium (ICHC) established and maintains itself as an active and functional consortium, despite the COVID-19 pandemic. The consortium was able to quickly adapt to the virtual world, be flexible, and meet schools where they were. ICHC implemented the CATCH curriculum, including vaping-prevention program CATCH My Breath. Furthermore, through the application of CDC's WSCC model, ICHC piloted implementation of Illinois social-emotional learning standards into pre-K–12th grade in its schools. The consortium also conducted Hidden in Plain Sight demonstrations in several settings such as teacher institute days, parent education nights, and community events. Also, in line with the WSCC model, ICHC implemented Mental Health First Aid to school administration, teachers, and staff, as well as community partners such as Boys and Girls Club. Overall, within this grant period, ICHC has worked on the goal of reducing the prevalence of chronic disease among school-age children in the Illinois Delta Region.

ICHC is at an advantage to promote and educate various community partners, schools, and early childhood education sites. Training and professional development provided will have a lasting impact on the community and schools served. Through a policy, systems, and environment focus, it encouraged schools to look at wellness as a whole and as a cultural/environmental change to ensure behavior changes are made for a lifetime. Furthermore, the resources provided through the funding period sustain themselves through future use. The COVID-19 pandemic also expanded reach and access with the use of virtual technology. It allowed for work with other agencies, as both a resource and partnership, resulting in diverse relationships. Last, the goals of ICHC have been replicated on a larger community-based scale, taken on by local community coalitions as well as the Healthy Southern Illinois Delta Network as a whole, therefore, positioning the efforts and programming for greater sustainability and impact.

FY24 Accomplishments:

Secured new 3-year funding (~\$850,000/year) from August 1, 2023 - July 31, 2026.

Program Title: Drug Overdose Prevention Program (DOPP)

Program Overview: Narcan training provided to area southern Illinois communities

FY24 Accomplishments: 7 trainings in various community and professional sectors including churches, schools, probation/judicial offices, and social service organizations

<u>Program Title: Drug Endangered Children & Family Human Trafficking</u> (DEC) Training:

Program Overview:

A community awareness training about the dangers that children face when they live in a home where drugs are being misused. Dangers involve prenatal, post-natal, short term and long-term issues. In addition, an introduction to the intersection of drug endangered children and familial human trafficking is introduced and discussed.

Statewide alliance involving various state level agencies to encourage community awareness and technical assistance on the topic of drug endangered children and human trafficking

DEC trainings are designed to teach communities how to develop a coordinated response for assistance utilizing "a multidisciplinary strategy", with the goal of changing "the trajectory of a drug endangered child's life through recognition of a common vision, ongoing collaboration between disciplines, and ongoing change in practices and policies, all of which increases the likelihood of better outcomes for drug endangered children". Trainings are provided by Liesl Wingert (in partnership with the RCCU School Resource Officer, Brad Ameter). The overall goal is to create active DEC alliances that involve multidisciplinary involvement in each Illinois county.

FY24 Accomplishments:

Planning began for 2nd annual Illinois DEC Alliance conference to be held in September 2024 with 200 people in attendance.

12 DEC/FHT trainings were conducted for communities, regional and state conferences. 2 community Handle With Care discussions held in order to develop new programs.

Program Title: Upward Bound

Guest speaker for Upward Bound students (high school students who will be first in their family to attend college)

FY 24 Accomplishments:

3 presentations to different groups of students on current drug trending, Narcan training, careers involving the treatment of substance use disorder/mental health, 56 students served.

Program Title: Body Safety for Children

Program Overview:

A simple, direct program for children K-8th grade on body safety/good touch-bad touch

FY24 Accomplishments:

1 private school presentation for K-8th grades, 138 children participated. 1 training for school staff, 8 participants.

Program Title: Richland County Drug Coalition

Program Overview:

Community drug coalition for Richland County involving members from all sectors of the community involved in the recovery process – sober living, medical, social service, law enforcement, and DCFS.

FY24 Accomplishments:

Continuation of Handle With Care program and consulting services to area school system staff and law enforcement.

Program Title: Other Presentations/Trainings

Program Overview: Multiple topics for presentations/trainings to community groups throughout the southern IL area – topics include rural challenges of problem-solving courts, parents in recovery, how to talk to your child about your recovery, trends in addiction and recovery processes, mothers in recovery, the family experience in recovery, grandparents raising grandchildren, emerging adulthood and related difficulties.

FY24 Accomplishments:

12 different presentations/trainings to community groups, regional and state organizations both in person and on webinar.

<u>Program Title: CRHSSD Staff serving on various State and Regional</u> <u>Boards of Directors and Advisory Councils</u>

FY24 Highlights/Accomplishments:

Illinois Rural Health Association Board of Directors

Dean's Advisory Council, SIUC College of Health and Human Sciences

MPH Advisory Council, SIUC College of Health and Human Sciences

PROWD Grant, SIU Core Team

Community Benefits Advisory Council, Southern Illinois Healthcare

Governance Team, Centerstone, Illinois Children's Healthcare Foundation Initiative

Healthy Southern Illinois Delta Network Leadership Team

SACIS/CAISA

Board of Directors, Take Action Today

Illinois Association of Problem-Solving Courts

Wabash Ministerial and Guidance Board

Birth to Five Action Council

Advisory Board Member, National Drug Endangered Children's Alliance

Illinois Alliance for Drug Endangered Children

Richland County Addiction Prevention Coalition

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Center for Rural Health and Social Service Development supports the priorities of the State of Illinois, Southern Illinois University, and the SIU School of Medicine. The CRHSSD advances Goal 4 of the Illinois Public Agenda and its call to use "educational, research and innovation assets to meet economic needs of the state and its region." The CRHSSD's reliance on community networks and public/private partnerships and the focus on community service directly support the priorities of the SIU Board of Trustees and SIU Carbondale. The center's mission complements SIU's mission and its call to "improve our communities" and the SIU goal for "collaboration with the broader community in our mutual goals of research translation, workforce education, and economic development and (to) sustain and grow SIU's outreach and service mission." The CRHSSD is a practical example of SIU School of Medicine's mission area of "service to the community" and numerous medical school strategic priorities, including those dealing with workforce development, research, patient health, and engagement with the community. Currently, another School of Medicine unit, The Office of Community Care and Complex Initiatives, is being merged under the Center for Rural Health and Social Service Development and both departments will be managed by the

current CRHSSD Executive Director and Director. This merger/alignment is a consolidation of similar programmatic efforts, objectives, and community outreach. This new CRHSSD will allow for a tremendous growth in capacity for both CRHSSD, OCC, and the SOM outreach efforts to improve health for all.

11.4 Evidence of Support for Center/Institute Objectives

In FY2024, the Center for Rural Health and Social Service Development advanced its center objectives as outlined in 9.3 above. The center's numerous, diversified community projects support its primary objective for development of the regional health and social services infrastructure. The CRHSSD had over 100 active community partnerships in the past year and received over \$3 million in extramural funding, filtering a large percentage back into the southern and southeastern Illinois region. This positively impacted the region's economy and its health/social services infrastructure; this is evidence of support for the center's community collaboration, research, and funding enhancement objectives. In support of its educational and workforce development objective, the CRHSSD contributes to the educational mission of the university and the medical school by providing learning experiences for student interns and graduate assistants. Students are assigned project responsibilities of substance that provide hands-on research and/or service experience while benefiting the communities in which the projects are implemented.

11.5 Evidence of Organizational Effectiveness

The Center for Rural Health and Social Service Development is effective as an organization. The center's mission and activities support the priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine as well as meet the expectations of its community partners and funding agencies. The CRHSSD has extensive partnerships and collaborations with health and social service agencies in the southern Illinois region. It has been successful in attracting external grant funding. The center's most recent program review in 2019 found that the CRHSSD was active and respected in the region, that it had formed effective collaborations with regional groups, and that it was a strong voice for rural, southern Illinois. The Center for Rural Health and Social Service Development is well situated for future success.

12.	Institutional	l Assessment
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12.1	Date of Last Review	2019	
12.2	Decision at Last Review	XX	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation		N/A

RESOURCES: Center for Rural Health and Social Service Development

Financial Resources	Fy2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	383,795	367,499	356,718	295,443	210,443
External Grants/Sub-	3,327,437	2,737.085	2,809,849	2,228,938	2,513,799
Awards					
Contractual/Income	0	77,188	88,000	137,132	1,537
Rural Health Initiative	0	0	120,000	135,501	161,600
Indirect/Overhead	72,996	155,049	52,000	97,575	75,848
Return					
Total Revenues	\$3,784,228	3,336,821	\$3,326,567	\$2,894,589	\$2,963,227
<u>Expenditures</u> *					
Salaries	846,465	590,690	543,358	384,122	456,835
Wages	2,908	8,734	2,063		
Fringe Benefits	221,540	168,718	104,287	14,850	56,154
Travel	12,914	13,649	10,909	1,386	29,300
Equipment	(700)	16,935	723	3,646	3,844
Commodities	204,787	93,373	33,625	31,663	31,803
Community/University	0	159,000	465,000	100,251	609,791
Program Grants					
Contractual – Other	1,290,923	629,196	35,640	324,000	430,000
Indirect to University	317,256	412,866	96,364	170,366	110,249
Total Expenditures	\$2,896,093	2,093,162	\$1,291,969	\$918,636	\$1,727,976
Revenue Minus	\$888,135	1,243,659	\$2,034,598	\$1,975,953	\$1,235,251
Expenditures					

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	Fy2024	FY2023	FY2022	FY2021	FY2020
Faculty	0.00	0.00	0.00	0.00	0.00
Staff	18.00	13.00	12.00	11.00	11.00
Student Worker	1.00	1.00	1.00	0.00	0.00
Extra Help	0.00	2.00	2.00	1.00	3.00
Graduate Assistants	5.00	3.00	2.00	3.00	2.00
Practicum/Intern Students	1.00	1.00	0.00	2.00	0.00
Total Staffing	25.00	20.00	17.00	16.00	16.00

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale		
2.	Center/Institute	Center for Virtual Expression		
		·		
3.	Date	3/17/2025		
4.	Director	Tobias Merriman (Assistant Director)		
	4.1 Telephone	618.303.1452		
	4.2 E-mail	tobios@aiu.odu		
	4.2 E- IIIali	tobias@siu.edu		
5.	Year Established	2024		
6. Illinois State Statute		N/A		
	(if pertinent)			
_				
7.	Reporting Unit	College of Liberal Arts		
8.	Type	Activity		
	Last and a set	(check all that apply)		
	Instructional	X		
	Research	X		
	Public Service	X		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Center for Virtual Expression (CVeX) at Southern Illinois University Carbondale is an interdisciplinary research and technology hub dedicated to supporting AI, virtual reality (VR), digital humanities, and digital narrative initiatives. CVeX collaborates with faculty, students, and departments to modernize curricula, integrate emerging technologies into research, and provide resources for exploring the impact of AI and immersive media.

9.2 Mission

The Center for Virtual Expression (CVeX) at Southern Illinois University Carbondale is dedicated to advancing research, innovation, and curriculum modernization through AI, virtual reality (VR), and digital media. Our mission is to support faculty, students, and departments in integrating emerging technologies into education, research, and creative expression.

9.3 Objectives

- 1) Upgrade the Firmware in the brains of our faculty, modernizing their curriculum to incorporate emergent technologies where they deem appropriate. We don't just defend against AI, we help our faculty incorporate and teach it ethically and effectively.
- 2) **Provide students with access to cutting-edge technology** for both educational and recreational exploration, ensuring they gain hands-on experience with AI, VR, and digital media.
- 3) Establish strong connections between SIUC and regional K-12 schools to collaboratively modernize curricula, introduce immersive learning experiences, and enhance recruitment efforts.
- 4) **Support interdisciplinary research and innovation** by fostering collaborations across departments and providing technical infrastructure for AI and VR-driven projects.
- 5) **Expand community engagement initiatives** through summer camps, faculty workshops, and the CVeX residential learning experience to create a hub for digital exploration and collaboration.

10. Advisory Board

10.1 Advisory Board - Membership

Joddy Murray Joshua Daniel Pinckney Benedict Jonathan Bean Joseph Smith

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Faculty trained in AI, VR, or digital tools	10 workshops	15
2.	Departments integrating AI or VR into curriculum	3 departments	5
3.	Student participation in AI/VR projects	20 students	50+
4.	Collaborative research projects initiated	2 projects	6
5.	K-12 school partnerships for outreach & recruitment	3 schools	6

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Established CVeX as a Campus-Wide Resource for AI & VR

- CVeX has become a recognized hub at SIUC, extending beyond the College of Liberal Arts (COLA). Faculty and students from multiple disciplines seek CVeX for Al-related inquiries, VR experimentation, and curriculum integration.
- Professors use the space **full-time for teaching**, while others bring their classes in for **hands-on experiences with cutting-edge AI and VR tools**.

Expanded K-12 Engagement & Outreach

- CVeX has hosted numerous school visits from local K-12 institutions, introducing students to AI, VR, and immersive learning.
- Tobias Merriman, Assistant Director, personally visited six local schools in the past six months to demonstrate the technology and promote SIUC as a leader in curriculum modernization and recruitment.

Speaker at "Reimagining Classrooms 2025" Conference

- Tobias Merriman was an invited speaker at the SIUC & John A. Logan College
 "Reimagining Classrooms 2025" Conference.
- His presentation emphasized the role of AI, VR, and immersive technology in shaping the future of education.

Secured Research Collaborations & Grant Involvement

- Tobias Merriman is a **co-investigator on four active research grant applications**, collaborating with **Physics**, **SIU Medicine**, **and other departments**.
- These grants explore VR applications in physics education, Al-driven medical training, and interdisciplinary uses of emerging technologies.

Launched Community Engagement Programs

- **CVeX Summer Camps** introduced students to **AI, VR, and digital storytelling**, providing hands-on experiences with **state-of-the-art technology**.
- The upcoming **CVeX Dorm Floor Initiative** (Fall 2025) will provide a **dedicated residential learning space** for students interested in immersive digital education.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Center for Virtual Expression (CVeX) at Southern Illinois University Carbondale (SIUC) aligns closely with the university's strategic priorities as outlined in the **Imagine 2030** plan.

1. Student Success & Engagement

CVeX Initiatives:

- Providing students with access to cutting-edge technologies for educational and recreational purposes.
- Offering hands-on experiences with AI and VR tools, enhancing practical skills and learning outcomes.
- Alignment: These initiatives promote active student engagement and equip students with skills relevant to modern job markets, directly supporting SIUC's goal of fostering student success and engagement.

2. Research & Innovation

CVeX Initiatives:

- Assisting faculty and departments in integrating AI and VR into their curricula and research projects.
- Supporting interdisciplinary research collaborations, including coinvestigating grants with departments like Physics and SIU Medicine.
- Alignment: By fostering research collaborations and integrating innovative technologies into academia, CVeX enhances SIUC's research capabilities and contributes to the university's commitment to research and innovation.

11.4 Evidence of Support for Center/Institute Objectives

We are sought out for advice for curriculum updates, grant co-authorship, and visits to or from CVeX to talk tech with various courses at SIUC and area K-12 schools.

11.5 Evidence of Organizational Effectiveness

Our Director was recruited by SIU-Med in Springfield to start a very similar initiative to CVeX in Springfield, and our current director-search is nearing its completion with an excellent array of applicants. Our facility is frequented by walk-in traffic of students and faculty at all hours of operation when it is not reserved by one of four regularly scheduled classes that meet in CVeX.

12.	Institut	ional Assessment	
	12.1	Date of Last Review	
	12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
	12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: (Center/institute name)

Financial Resources	FY2025	FY2024	FY2023	FY2022	FY2021
Revenues					
State Appropriations					
Income Fund	10.100				
Grants & Contracts	10,400				
XXX					
XXX					
XXX					
Total Revenues					
	•				
Expenditures*					
VR & Classroom Equipment	10400				
XXX					
Total Expenditures					
Revenue Minus Expenditures					

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2025	FY2024	FY2023	FY2022	FY2021
Faculty	12100	6050			
Staff	65000	32500			
Total Staffing	77100	38550			

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Center for Wildlife Sustainability Research
3.	Date	February 20, 2025
4.	Director	Mike Eichholz
	4.1 Telephone	618-453-6951
	4.2 E-mail	eichholz@siu.edu
5.	Year Established	1950
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Vice Chancellor for Research
	, 0	
8.	Type	Activity
	•	(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The CWSR consists of five full time Faculty members who also have appointments ranging from 25% - 51% in the College of Agriculture, Life, and Physical Sciences (CALPS). Teaching and research focus on basic and applied wildlife ecology and natural resource management. Faculty members teach both graduate and undergraduate courses, and the lab generally has ~25 active MS and PhD students at any point in time. The CWSR shares 2 full time office staff and 3 student workers with the Fisheries unit. Resources include modern research labs, a centralized computer facility, field vehicles, and an off campus annex with laboratory, office, and storage space.

9.2 Mission

Anthropogenic activities have dramatically impacted the environments that support wildlife worldwide. Landscapes have been modified to meet human demands, the climate has been modified by various human activities, and wildlife diseases and invasive exotic species have been introduced with their establishment and population growth facilitated by the changing climate. These environmental changes are leading to declines in many wildlife populations. The United Nations defines sustainable wildlife management as: "the sound management of wildlife species to sustain their populations and habitats over time, taking into account the socioeconomic needs of human populations." Meeting the needs of a growing human population while maintaining the populations of wildlife that rely on natural resources will require a collaborative effort among biologists, economists, sociologists, psychologists, agronomists, climatologists, political scientists, hydrologists, chemists, physicists, geomorphologists, engineers, toxicologists, educators, and others.

The Mission of the Center for Sustainable Wildlife Research is to help create the collaborations required and to develop and communicate the information needed to allow for a growing human population to meet its needs without detrimentally influencing the wildlife that depend on natural resources.

9.3 Objectives

The overall goal of the CWSR is to train basic and applied wildlife researchers at the graduate and undergraduate levels and develop collaborative approaches of sustaining wildlife population. Consistent with this goal, CWSR faculty and staff work to maintain the unit's excellent record of research productivity and generating grant funds to support research and education. CWSR faculty and staff also work to maintain a cohesive, collaborative environment that fosters a very interactive group of students. The CWSR has a remarkable history of placement of graduates in career positions. Key future objectives:

Maintain a rate of 6 externally funded students/FTE for core faculty.

- Average at least 4 publications per year/FTE in journals that are ranked in the top 3
 quartiles of journals in their field of expertise.
- Maintain or slightly increase the 3-year rolling average grant dollars/FTE of \$464,686
- Increase the proportion of direct federal funding from 11% to 25%
- Pursue the hiring of at least 1 new Core Faculty member that increases our gender, ethnic or racial diversity
- Continue to support current programs and identify at least 1 new program that
 facilitates the removal of barriers that prevents a more diverse interest in students
 pursuing undergraduate and graduate degrees in Environmental Resources and
 Conservation fields.
- Provide more paid opportunities for undergraduates from under-represented ethnicities and races.
- Continue to identify emerging issues in wildlife management, ecology, and sustainability in order to determine research areas such that the CWSR will maintain its national and international recognition.
- Maintain and upgrade shared resources (vehicles and other major equipment) to foster productive collaborations among faculty members in the CWSR and other units
- Continue to develop and expand outreach and public education programs, such as the Graduate Research Assistants Supporting Science (Grass) program to address needs in southern Illinois beyond SIU.

10. Advisory Board

10.1	Advisory	/ Board -	Membership
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N/A

10.2 Number of Meetings (In This Year) N/A

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	External Grant Funding	\$1,000,000	\$2,048,890
2.	Peer-Reviewed Publications	20	19
3.	Graduate Students Enrolled	20	22
4.	Graduate Students Finishing Degrees	5	3
5.	Undergraduate Research Projects Supervised	5	6

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Additional accomplishments include:

- Received more than twice the target for external funding
- Completed the process of changing the research center name
- Developed a new strategic plan with a new Vision, Mission, and Goals

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Consistent with the SIU Imagine 2030 Strategic Plan for SIUC "developing research and innovation", the CWSR maintains a productive, high-quality research, training, and teaching program. As outlined above, CWSR faculty members consistently receive external grant dollars, produce peer-reviewed publications, and produce undergraduate and graduate students that excel in the job market. Locally, the CWSR enhances the mission of "public service... guided by its location in a region of small communities, farms, and mines" through research projects and outreach programs that address local issues related to game management, outdoor recreation, wildlife diseases, nuisance wildlife species, and wildlife sustainability. The CWSR provides service at the state, regional, and national scale through the numerous committees in which the faculty serve including but not limited to the Illinois Invasive Species Council, the Illinois Habitat Fund Advisory Committee, the Upper Mississippi River Great Lakes Region Joint Venture Technical Committee, The Mississippi Flyway Council Technical Committee, The Bobwhite and Grassland Initiative Technical Committee, and The Wildlife Society College and University Education Working Group.

11.4 Evidence of Support for Center/Institute Objectives

The CWSR continues to meet or nearly meet its annual objectives of, producing high quality research products such as peer-reviewed publications and books, and graduating students that are competitive in their fields. These activities provide numerous opportunities for undergraduate and graduate students in the zoology and forestry programs within CALPS.

11.5 Evidence of Organizational Effectiveness

12.

The CWSR operated without a permanent Director from 2013 to January 2024. In addition, there continues to be a 2 vacant faculty lines within the Center. Despite these limitations, the CWRL continues to capture federal funding and funding from the state for wildlife research management/conservation and serves as one of the major training programs for graduate students and undergraduate researchers at SIU. Under new leadership, the CWSR has developed a new strategic plan to expand its role and level of collaboration by engaging with experts outside the traditional field of wildlife ecology to help develop a more sustainable approach to managing wildlife populations.

Institut 12.1	ional Assessment Date of Last Review	2018	
12.2	Decision at Last Review	Х	Center/Institute in Good Standing Center/Institute Flagged for Priority Review

Center/Institute Suspended

12.3 Explanation

(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: Cooperative Wildlife Research Laboratory

FINANCIAL RESOURCES

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues:					
State Appropriations	398701.26	64,450.29	66,956.06	63,651.60	306,060.55
Local Accounts	125160.81	24,531.98	81,132.80	2,479.24	75,122.18
Grants & Contracts	1790247.04	11,937.97	2,207,757.75	1,040,160.63	125,628.49
Total Revenues	2,314,109.11	1,300,920.24	2,655,846.61	1,476,291.47	506,811.22
Expenditures:					
Salaries	1,294,668.27	1,104,415.64	924,958.75	874,442.35	878,357.32
Wages	47,894.55	19,371.19	28,861.58	24,116.20	20,257.97
Travel	60,239.71	33,161.09	16,320.52	9,471.32	35,677.52
Equipment	47,132.37	46,279.94	32,832.27	2,791.00	42,282.44
Commodities	278,658.30	424,679.62	241,710.73	153,118.03	122,109.71
Contractual Services	146,324.80	69,225.24	56,638.31	58,627.86	74,855.92
Op/Auto	88,808.54	121,599.66	60,113.04	44,441.48	93,490.48
Telephone	88,198.26	78,463.09	29,477.29	24,058.25	9,718.31
Fringe Benefits	95,356.41	82,317.31	27,110.32	22,188.11	28,990.02
Indirect	306,508.08	273,284.87	173,430.04	153,936.60	176,373.58
Other	44,466.65	22,503.87	956,266.46	3,737.88	574.00
Total Expenditures	2,498,255.94	2,275,301.52	2,547,719.31	1,370,929.08	1,482,687.27
Revenue Minus Expenditures	(184,146.83)	(974,381.28)	108,127.30	105,362.39	(975,876.05)

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	5	5	5	5	5
Staff	77.5	68.5	46.5	39	58
Students	25	4	11	12	15
Graduate Assistants	11	11.75	10.5	10	10.5
Total Staffing	118.5	89.25	73	66	88.5

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023- June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University School of Medicine (SIUSoM)
2.	Center/Institute	Dale and Deborah Smith Center for Alzheimer's Research & Treatment (Smith Alzheimer's Center)
3.	Date	January 14, 2025
4.	Director	Erin Hascup, PhD, Executive Director
	4.1 Telephone	217-545-6988
	4.2 E-mail	ehascup@siumed.edu
5.	Year Established	Academic Year 1987
6.	Illinois State Statute (if pertinent)	Public Act 90-0404
7.	Reporting Unit	Southern Illinois University School of Medicine (SIUSoM)
8.	Type Instructional	Activity (check all that apply) X
	Research Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

In 1987, SIU School of Medicine's Alzheimer's Center, was established as a Regional Alzheimer's Disease Assistance Center (RADAC) by the State of Illinois, pursuant to Public Act 90-0404. The Center is now known as the Dale and Deborah Smith Center for Alzheimer's Research and Treatment (Smith Alzheimer's Center). The Smith Alzheimer's Center is part of the Neuroscience Institute at Southern Illinois University School of Medicine (SIUSOM). The Memory and Aging Clinic, the Smith Alzheimer's Center's main clinical component, is located on the SIUSOM campus in Springfield, Illinois at 751 N. Rutledge Street. The Smith Alzheimer's Center Memory and Aging Clinic provides complete memory and cognitive assessments, treatment, education, counseling, and referrals to other resources for patients and their families. Clinical trials research opportunities are also available for patients and care partners. Additionally, the Smith Alzheimer's Center has an established Memory and Aging Network (MAN) that consists of community-based healthcare facility partners in central and southern Illinois to offer training and dementia care support. The Smith Alzheimer's Center bench and translational research laboratories are located at 801 N. Rutledge Street in Springfield, IL. These research laboratories focus on identifying early biomarkers and novel therapeutic strategies for Alzheimer's disease and related dementias with a longterm goal of improving outcomes for those with dementia. Our community engagement serves people with dementia, their caregivers, and the community at large in central and southern Illinois through education, outreach, and our Beyond the Medical Center programs. Dr. Erin Hascup has been the Director of the Smith Alzheimer's Center since 2020 and oversees all clinic, community engagement and education, and research aspects of the Smith Alzheimer's Center. All of the Smith Alzheimer's Center staff meet monthly to ensure dissemination of information to the entire group and enhance collaboration between interested parties.

The Smith Alzheimer's Center broadly services Illinois regions 1-5, which is comprised of a 93-county area in Illinois that excludes Cook County and the surrounding collar counties (Cook and collar counties make up Regions 6-7). The Center's 93 county service area covers more than 91% of Illinois' 102 counties.

Rush University Medical Center recently reported Illinois population metrics per county (Dhana et al., 2023). In the Smith Alzheimer's Center's 93 county service area, approximately 11% of the population has Alzheimer's disease, which is slightly higher than the national average of ~10.7%, according to the Alzheimer's Association 2023 Alzheimer's disease Facts & Figures. The top ten counties with the highest number of Alzheimer's disease cases within the Smith Alzheimer's Center's service area, are listed below:

County	Number of Alzheimer's disease cases
St. Clair	5,500
Madison	5,200

McHenry	4,700
Sangamon	4,000
Peoria	3,700
Rock Island	3,300
Champaign	3,200
Tazewell	2,800
McLean	2,600
Macon	2,600

It has been established that the incidence of dementia is higher in the Black American population. Data from the latest census indicates that within the Smith Alzheimer's Center service area, the ten counties with the largest percentage of black residents are:

County	Black Residents (%)
Alexander	32.0
Pulaski	31.0
St. Clair	30.6
Brown	18.8
Peoria	18.7
Macon	17.5
Jackson	15.2
Vermilion	14.0
Champaign	13.6
Sangamon	12.9

Out of these counties, Alexander, Pulaski, and Jackson are in southern Illinois. St. Clair is located in Metro East St. Louis. Brown, Peoria, Macon and Sangamon are all central Illinois. Vermilion and Champaign are in eastern Illinois. The counties in the Smith Alzheimer's Center service area with both the ten highest percentage of Alzheimer's

disease cases and black population percentages are St. Clair, Sangamon, Peoria, Champaign and Macon.

9.2 Mission

The mission of the Smith Alzheimer's Center is to integrate patient care, education, and research to better understand the biological aspects of aging, cognition, and neurodegenerative disorders allowing us to design innovative personalized care that addresses both the underlying symptoms and the disease leading to improved patient, family, and community outcomes.

Our personalized approach involving patient care, education, research and service to the community leads to improved patient, family, and community outcomes. The Smith Alzheimer's Center has one dementia/Alzheimer's disease trained cognitive neurologist and three dementia/Alzheimer's disease focused nurse practitioners who operate under the guidance of our cognitive neurologist. The Smith Alzheimer's Center also works with nurses and clinical researchers with training specific to the needs of people with dementia and their caregivers. The Smith Alzheimer's Center also has a gerontologist and licensed counselor on staff.

The Smith Alzheimer's Center has a team of bench and translational researchers lead by three internationally renowned and externally funded neuroscientist. Their collective research uses preclinical models of Alzheimer's disease to examine pharmacological and non-pharmacological approaches to intervention and treatment for Alzheimer's disease with the aim of improving disease outcomes. This team recognizes the importance of personalized medicine and is leading studies to determine best intervention strategies based on stage of disease progression.

The Smith Alzheimer's Center has a unique evidence-based, non-pharmacological approach consisting of our "Beyond the Medical Center" programming that is offered at no cost to help our patients and caregivers exercise their brains and bodies to maintain a healthy lifestyle and promote quality of life. Our Beyond the Medical Center programs include a supervised lower body exercise program (Stepping UP), an expressive art program (Art Express), a multifaceted mind program using various types of activities (Minds in Motion), a music program (Music and Memory), a support group (Early Stage Memory Loss Group), a MIND Diet class, a Lego program (Building Moments), and an educational program specific to caregivers called "Dementia Caregiving 101". We also anticipate offering a new choral program, Sing by Heart in the fall of 2024. The Smith Alzheimer's Center Beyond the Medical Center programs not only offer activities to keep the brain and body active and helps to build a community for those navigating their dementia journey, it also serves as respite for the caregivers, if they decide not to participate in the programs themselves.

9.3 Objectives

As defined by the State of Illinois Public Act 90-0404, which established the Smith Alzheimer's Center as a Regional Alzheimer's Disease Assistance Center, the center is expected to provide the following:

1. Comprehensive diagnosis and treatment facilities and services which have (i) professional medical staff who are specially trained in the treatment of dementia

which may include: geriatric medicine, neurology, psychiatry and pharmacology, and the detection, diagnosis and treatment of Alzheimer's disease and related disorders, (ii) sufficient support staff who are trained as caregivers to patients of Alzheimer's disease and related disorders, (iii) appropriate and adequate equipment necessary for diagnosis and treatment, (iv) for assuring access of patients to available services, (v) and such other support services, staff and equipment as may be required;

- 2. Consultation and referral services for patients and their families to ensure informed consent to treatment and to assist them in obtaining necessary assistance and support services through primary Alzheimer's providers and various private and public agencies that may otherwise be available to provide services under this Act.
- 3. Research programs and facilities to assist faculty and students in discovering the cause of and the diagnosis, cure and treatment for Alzheimer's disease and related disorders;
- 4. Training, consultation and continuing education for caregivers, including families of those who are affected by Alzheimer's disease and related disorders;
- 5. Centralized data collection, processing and storage that will serve as a clearinghouse of information to assist victims and families and Alzheimer's Disease Assistance Center Resources, and to facilitate research; and
- 6. Programs of scientific and medical research in relation to Alzheimer's disease and related disorders that are designed and conducted in a manner that may enable such centers to qualify for Federal financial participation in the cost of such programs.

10. Advisory Board

10.1 Advisory Board - Membership

The Smith Alzheimer's Center Administrative Advisory Board meets monthly and the FY24 members included:

- Erin Hascup, PhD, Executive Director Smith Alzheimer's Center, Associate Professor of Neurology
- Jayant Acharya, MD, Professor and Chair of Neurology, Co-Director of NSI at SIU Medicine
- Joel Milner, Business/Administrative Associate of the Smith Alzheimer's Center at SIU Medicine
- Marcella Bland, Administrative Director of the NSI at SIU Medicine

The Smith Alzheimer's Center Clinical Health, Analytical Neuroscience, and Community Engagement (CHANCE) Advisory Board consists of members of the Smith Alzheimer's Center with additional representation from the SIUSoM community including Center for Clinical Research, the Department of Neurology, Department of Neurology, the Office of Marketing and Communication, the Office of Development and Alumni Relations, and the Department of Public Health the in the School of Human and Behavioral Sciences at SIU. The Internal Advisory Board meets monthly. FY 24 members included:

- Erin Hascup, PhD, Executive Director Smith Alzheimer's Center, Associate Professor of Neurology
- Tom Ala, MD, Emeritus Professor of Neurology and Smith Alzheimer's Center

- Jennifer Arnold, MD, Assistant Professor of Neurology, Smith Alzheimer's Center
- Mehul Trivedi, PhD, Assistant Professor of Clinical Psychiatry, Smith Alzheimer's Center
- Justin McDaniel, PhD, Associate Professor of Public Health, SIU-Carbondale, Smith Alzheimer's Center
- Amber Fifer, PharmD, ACRP-CP, Associate Professor of Neurology, Director of Clinical Research (Neurology), Associate Director of the Center for Clinical Research, Assistant Professor of Pharmacy at SIU-Edwardsville
- Kevin Hascup, PhD, Associate Professor of Neurology, Smith Alzheimer's Center
- Cindy Womack, DNP, FNP-BS, CNRN, Neurology, Smith Alzheimer's Center
- Andrea Perkins, FNP-BC, Neurology, Smith Alzheimer's Center and PDC
- Ann Jirmasek, MA, LPC, NCC, Clinical Gerontology Specialist, Neurology, Smith Alzheimer's Center
- Deborah Kuhns, Program Coordinator Smith Alzheimer's Center
- Emily Hassara, Program Coordinator, Smith Alzheimer's Center
- Aren Dow, Marketing Associate, Office of Marketing, Communications, and Engagement at SIU Medicine, Smith Alzheimer's Center
- Lindsey Teefey, Program Coordinator, Smith Alzheimer's Center
- Karen Lee, Program Coordinator, Smith Alzheimer's Center
- Casey Copeland, Development Officer, Smith Alzheimer's Center
- Cindy Stelte, Fiscal/Business Assistant, Smith Alzheimer's Center
- Deidra Frisbie, DNP, FNP-BC, Department of Neurology
- Stephanie Kohlrus,
- Andre Catalano, PharmD, Assistant Professor of Neurology, Smith Alzheimer's Center
- Aida Adlimoghaddam, PhD, Assistant Professor of Neurology, Smith Alzheimer's Center

The Smith Alzheimer's Center Caregiver Advisory Board consists of dementia patients and caregivers. The goal of this advisory board is to get direct feedback from caregivers about what is and isn't working, ideas for better utilization of resources, and community relations. Members include:

- Deborah Kuhns, Program Coordinator Smith Alzheimer's Center
- Roger Steinback, Springfield
- Nancy Seelbach, Springfield
- Mel Kuntemeier, Glenarm
- John Record, Springfield
- Amy Lyons, Springfield
- Marcie Blanchard, Springfield

The Smith Alzheimer's Center Event Planning Committee was implemented this year and consists of community members passionate about finding a treatment/cure for Alzheimer's disease and supporting people with Alzheimer's dementia and their care partners. The goal of this advisory board is to facilitate new ideas and planning of

philanthropic events to support the mission of the Smith Alzheimer's Center. Members include:

- Casey Copeland, Development Officer, Smith Alzheimer's Center
- Joan Carnduff
- Stephanie Christofilakos
- Gabrielle Dinardo
- Megan Saxsma
- Kristy Sims
- Shelly Tulo

10.2 Number of Meetings (In This Year)

Administrative Advisory Board (11); CHANCE Advisory Board (11); Caregiver Advisory Board (2); Event Planning Committee (2)

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Evaluations of new patients (Springfield	N/A	571
	site)		
2.	Evaluations of new patients (network)	N/A	68
3.	Follow-up patient visits (Springfield site)	N/A	1,671
4.	Follow-up patient visits (network)	N/A	173
5.	Educational programs (Springfield) –	N/A	195
	Number of Programs		
6.	Educational programs and resources	N/A	>20,000
	(including social media; Springfield) –		
	Attendance		
7.	Clinical Trial Studies – Number of studies	N/A	10
	based on IRB approvals		
8.	Research – Number of publications	N/A	18

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

1. We have increased the Smith Alzheimer's Center's effort to inform and educate communities. Our Marketing Associate, Aren Dow has done an excellent job disseminating educational opportunities and helps to raise dementia awareness to the community. The Smith Alzheimer's Center sends out monthly e-newsletters (Brain Boost) as well as periodic physical newsletters (Mind Matters). The e-newsletter is sent to over 500 individuals with the aim to inform caregivers and community members about caregiving tips, upcoming programs, Smith Alzheimer's Center updates, and more. The Mind Matters newsletter provides similar information and reaches 1,000 patients, families, health care professionals and community members. Facebook was the primary source of social media used by the Smith Alzheimer's Center which reached 18,600 individuals in FY24. Currently, 173 people follow the Smith Alzheimer's Center

Facebook page to receive Smith Alzheimer's Center updates, photos from programs, news, and more. Additionally, the Smith Alzheimer's Center provides quarterly articles to the Senior News & Times, highlighting a variety of topics to better educate the public on dementia. Furthermore, Smith Alzheimer's Center staff have conducted interviews with various print, radio and television outlets. Notably the Smith Alzheimer's Center patient care, research, and staff are showcased in a documentary in final production, "My Mama Joe; Hope and Help", scheduled to air on PBS in Spring 2025. This documentary highlights the life a Black woman and her struggles with dementia while trying to destigmatize dementia in Black communities and provide education on the topic.

2. The Beyond the Medical Center programs provided outreach and education for people with dementia, caregivers and families. The number of touchpoints for these programs in FY24 is summarized below:

<u>Program</u>	<u>Persons with</u> <u>Caregivers</u> Memory Loss		Volunteers/Students
Art Express	372	281	427
Minds in Motion West	191	154	50
Minds in Motion East	180	42	36
Stepping Up	377	364	24
Early Stage Memory Loss	182	182	
Dementia Caregiving 101		256	
Lego Building Moments	9	9	3
MIND Diet Cooking	61	59	8
Total:	1,372	1,347	548

3. Dr. Aida Adlimoghaddam joined the Smith Alzheimer's Center this year as a research- focused Assistant Professor and brought with her a grant from the Alzheimer's Association. Her primary focus is the involvement of mitochondria in Alzheimer's disease and dementia.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Smith Alzheimer's Center advances several priorities of the State of Illinois, SIU, and SIUSoM. As noted, the Smith Alzheimer's Center was established by Public Act 90-0404 as a state-designed Regional Alzheimer's Disease Assistance Center. The Smith Alzheimer's Center has been successful in this role, as evidenced by its continued designation by the State of Illinois as a regional center. The Smith Alzheimer's Center also supports the Illinois Public Agenda's goal for use of university educational, research, and innovation assets to advance the state's and region's economy. This is evident in the Smith Alzheimer's Center's positive impact on patient care, community education and research.

The Smith Alzheimer's Center physicians and other health professional staff provide essential patient care for Alzheimer's and dementia patients in the Smith Alzheimer's Center Springfield clinics, as well as extend their expertise as consulting physicians/professionals for other healthcare professionals in Illinois. As a required component of their educational programs, SIU Neurology, Internal Medicine, Psychiatry, and Family and Community Medicine residents all have required rotations through the Memory Clinic in the Smith Alzheimer's Center to learn the clinical aspects of Alzheimer's disease and dementia, as do SIUSoM medical students and Physician Assistant program students. These activities support SIUSoM and SIU goals for patient care and workforce development.

The Smith Alzheimer's Center researchers lead state, federally, and association funded bench and translational original research with the overall goal of determining pharmacological and non-pharmacological intervention strategies to improve patient care. This research is disseminated through attendance and participate at local, national, and international conferences, invited speaker opportunities, and published manuscripts. As an academic institution, our research faculty also provide educational opportunities and training for medical students and residents, and undergraduate/graduate students. We also provide laboratory demonstrations and learning opportunities to groups ranging from high school students through Congressional leaders. Together this supports the Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning.

The Smith Alzheimer's Center also advances goals of SIU and SIUSoM, such as those associated with community outreach, public/private partnerships, and research. The Smith Alzheimer's Center has been invited to participate in many local, regional, and state programs sponsored by the Alzheimer's Association, the Alzheimer's Disease Advisory Committee for the Illinois Department of Public Health, and the Illinois Cognitive Resources Network. The Smith Alzheimer's Center has also collaborated with researchers in other departments both in Springfield and in Carbondale, as well as those in the other two state-designated Regional Alzheimer's Disease Assistance Centers in Chicago, to assist the Illinois Department on Aging in obtaining a Community Living grant. Furthermore, our research-focused faculty and staff has received several invitations to present their work at national and international conferences, and at other Institute of Higher Education. The Director of the Smith Alzheimer's Center has also been a member of Strategic Planning Committees both at the SIUSoM School of Medicine and SIU System levels, and provides mentorship to faculty at the SIU System level. These activities directly support the SIU Board of Trustee's priorities for community partnerships, SIU Carbondale's priority for research and innovation, and SIUSoM's goals for research and professional engagement.

The Smith Alzheimer's Center also initiated and participates as content experts for Extension for Community Healthcare Outcomes (ECHO) project designed to improve access and care to people with memory loss. One-hour sessions occur monthly following the ECHO model.

11.4 Evidence of Support for Center/Institute Objectives

The Smith Alzheimer's Center directly advanced the objectives described in section 9.3 during FY24. As noted in section 11, patient care, consultation, and referral services were provided in over 2,240 new and return patient visits in the Smith Alzheimer's Center Springfield site and over 240 additional patient visits in the Smith Alzheimer's Center network sites. In addition, the Smith Alzheimer's Center provided consultations and training to our network and other providers through the ECHO platform. These activities support the patient care objectives (Objectives 1 and 2) above. Preclinical, clinical and population health research projects were advanced in FY24, and efforts to increase them continued in support of the research objectives (Objectives 3 and 6). Our educational programs and resources reached over 20,000 people with dementia. caregivers, community members, and health care providers in FY24, in support of Smith Alzheimer's Center community educational objective (Objective 4). The Smith Alzheimer's Center has also developed and maintains three databases of patient data which are used to facilitate research. This supports the centralized data collection objective (Objective 5). Collectively, these activities provide strong evidence that we met our objectives in FY24.

11.5 Evidence of Organizational Effectiveness

The strongest evidence of organizational effectiveness has already presented in the preceding sections. The Smith Alzheimer's Center continues to be recognized as a leader in the clinical, educational, and research aspects of Alzheimer's disease and dementia in Illinois and has been effective in growing its reputation nationally and internationally. The Smith Alzheimer's Center faculty and staff members actively participate in regional, state, national, and international conferences and symposia to present findings from their research, and clinical and outreach programs. We continue to offer excellent clinical care including several options for industry-sponsored clinical trial – currently among the best hope for improving patient outcome, support for caregivers, and internationally recognized bench and translational research. We continue to build and grow our clinical, research, and outreach programs to benefit those in Illinois and beyond. As discussed above, the Smith Alzheimer's Center is meeting its organizational objectives.

12. Institutional Assessment

12.1	Date of Last Review	2019-2020	
12.2	Decision at Last Review	X Center/Institute in Good Standing	
	. tenen	Center/Institute Flagged for Priority Review Center/Institute Suspended	
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review) N/A	

RESOURCES: (Smith Alzheimer's Center)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
resources					
Revenues					
State	\$1,518,000.00	\$1,522,380.95	\$1,518,000.00	\$1,518,000.00	\$1,664,500.00
Appropriations					
Income Fund					
Grants &	\$1,476,203.43	\$1,513,889.11	\$2,249,819.59	\$1,677,304.36	\$2,360,743.73
Contracts					
Certification	\$2,600.00				
Fees/Sponsorships					
Transfers In-				\$414.66	\$433.00
Conference					
Fees/IDC					4
Transfers In –	\$6,750.47				\$156.99
SOM/Foundation	405 000 00				
Transfers In-SOM	\$25,000.00				
Practice Plan			\$62,074.20	\$45,312.15	\$37,915.20
Total Revenues	\$3,028,553.90	\$3,036,270.61	\$3,829,893.79	\$3,241,031.17	\$4,043,748.92
Expenditures*					
Travel	\$10,581.01	\$22,260.44	\$3,430.58	\$1,847.73	\$7,308.84
Equipment	\$295,104.29	\$539,316.94	\$23,637.99	\$7,045.47	\$239,476.66
Commodities	\$248,022.23	\$321,099.49	\$407,984.18	\$252,182.46	\$270,954.24
Contractual	\$275,338.84	\$303,336.88	\$513,881.44	\$487,710.16	\$600,093.20
Services					
Telecom	\$7,653.43	\$11,376.17	\$5,720.18	\$4,827.24	\$5,108.26
Rent					
Fringe Benefits	\$149,037.93	\$153,101.57	\$158,062.04	\$171,909.92	\$212,680.52
Grants &	\$306,785.97	\$466,372.18	\$566,995.97	\$458,007.62	\$662,648.41
Contracts Indirect					
Costs					
Transfers Out	\$80.00	\$500	\$135,646.28		
Salaries	\$1,393,517.39	\$1,225,367.35	\$1,208,523.40	\$890,424.29	\$1,103,654.45
Total Expenditures	\$2,686,121.09	\$3,045,117.53	\$3,023,882.06	\$2,293,954.89	\$3,101,924.58
Revenue Minus Expenditures	\$342,432.81	\$ (8,847.47)	\$806,011.73	\$947,076.28	\$941,824.34

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	4	4	5.29	4.29	4.29
Staff	16.8	18	12.69	12.24	11.79
Total Staffing	20.8	22	17.98	16.53	16.08

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale		
2.	Center/Institute	Fermentation Science Institute (FSI)		
3.	Date	3/28/2025		
4.	Director	Matthew McCarroll		
	4.1 Telephone	618-453-7508		
	4.2 E-mail	mmccarroll@siu.edu		
	T.E E Maii			
5.	Year Established	2014 (approved by IBHE)		
6.	Illinois State Statute	N/A		
	(if pertinent)			
7.	Reporting Unit	Dean (College of Agricultural, Life, and Physical Sciences)		
		and Vice Chancellor for Research (dotted-line reporting)		
8.	Type	Activity		
	Leafer offered	(check all that apply)		
	Instructional	X		
	Research	X		
	Public Service	X		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Fermentation Science Institute (FSI) supports fermentation related activities through support and administration of the fermentation science *academic degree program*, the operation of the *FSI Service Laboratory*, support of the Illinois Food, Entrepreneurship, Research and Manufacturing (iFERM) Hub of the Illinois Innovation Network, support of fermentation related *research*, and *outreach* to fermentation related businesses and economic development.

9.2 Mission

The mission of the FSI is to support the students and faculty of Southern Illinois University Carbondale to advance knowledge in the associated areas of fermentation science and to transfer this knowledge through our educational programs, research activities and outreach to the region and fermentation related industries, which includes the production and analysis of alcoholic beverages, fermented foods and cheese, and industrial fermentation (energy, biomanufacturing, and pharmaceutical).

9.3 Objectives

Administer and Support the Degree Program in Fermentation Science and Other Educational Activities. The Director, faculty, and staff of the FSI will support and administer the Bachelor of Science degree in fermentation science, which is housed both physically and administratively within the FSI and seek opportunities to engage with other academic areas of campus.

Establish Professional Advisory Board. The Director of the FSI will continue establishing further industry contacts and to identify and invite appropriate individuals to serve on the advisory board of the Institute.

Encourage and Support Research Efforts. The Director will continue to work with the campus community to encourage research in the general area of fermentation science and to identify and support research that builds synergies and opportunities for students, faculty and industry partners.

Manage and Expand FSI Service Laboratory. The Director, in coordination with staff, will oversee operations of the Service Laboratory and will expand its impact and effectiveness to the campus community and the businesses served by the laboratory by expanding its outreach base and to provide a revenue stream supporting the mission of the FSI.

Maintain and Expand Infrastructure. The director will oversee efforts to maintain current infrastructure supporting the educational, research and

outreach mission of the FSI, as well as leading efforts and identifying opportunities to expand the capabilities of the FSI to further its mission.

Fundraising and Promotion. The Director will continue to work with the SIU Foundation to identify and work with prospective donors to enhance the effectiveness and impact of the programs, activities, and infrastructure of the FSI. Additionally, the Director will actively promote the FSI and its objectives on both regional and national levels.

Public Outreach and Engagement. The FSI will actively identify and support public outreach and engagement with the public for the purpose of supporting the objectives and mission of the FSI and SIU.

10. Advisory Board

10.1 Advisory Board - Membership

Professional Advisory Board (in progress)

Florian Kuplant – Brewmaster and Co-Owner, Urban Chestnut Brewing Company

Mark Yocum – Technical Director, North America, Anheuser Busch InBev

Paul Cobet - Annheuser Bush (retired)

Alastair Pringle – Board Examiner, Institute of Brewing and Distilling

Bradley Beam - Enology Specialist, Illinois Grape Growers and Vintner's Association

Eric Stamp – Corporate QA Manager, MillerCoors

10.2 Number of Meetings (In This Year) 0 (informal consultations ongoing)

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Fundraising	-	17 Gifts - \$31,000
2.	Research Projects	2	2
3.	Sponsored/Hosted Events	2	5
4.	Carbondale Brewfest	-	\$1,925
5.	FSI Related Grant Proposals Submitted	2	6
6.	FSI Related Grant Proposals Funded	1	1
7.	Testing & Services	\$30,000	\$36,816.30
8.	Facility Tours/FSI Hosted Events		36 (648 individuals)
9.	Conferences/recruited Events Attended		6
10.	FSI Service Events Staffed		19
11.	Invited Presentations		3

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Key targets/objectives and outcomes of the FSI include the following:

Facilities and Infrastructure

- Management of facilities that house the FSI in the McLafferty Annex on the Carbondale campus which include:
 - Administrative operations for the FSI
 - Teaching laboratories to support fermentation courses and the fermentation science degree program
 - Laboratories to support operation of the FSI Service Laboratory and the Core Facility for Ecological Analysis
 - Teaching classroom and tasting facility
 - Pilot brewery supporting teaching, research and outreach activities
 - ¼ ton Pilot Malting Facility
- Coordinating construction with SIU Facilities and Energy Managment and equipment purchases related to grant establishing the BioLaunch facility as collaboration with the SIU Research Park and the Vice Chancellor for Research.
- Coordinating design and construction planning for pilot facilities of the iFERM Hub.
- Ongoing optimization of infrastructure and staffing for business operations of the FSI, including support for the academic, research, outreach, and event management activities of the institute

Programmatic

- Administered the 4-year BS degree in fermentation science.
- Develop educational affiliation partnership with industry for placement of student interns
- Continued development of SIU branded beers in partnership with Ravinia Brewing Company. Activities included staff and student attendance at the Great American Beer Festival, which included marketing and serving King Ale to an audience of 40,000 attendees in Denver, CO.
- Fostered and managed successful student teams for SIU branded beer and malting, where students develop and produce commercial products sold on the retail market, representing an invaluable and gratifying opportunity for our students.

Fundraising Activities

O During FY23 nine donors provided gifts totaling \$31,000, including increased endowment for the Karen "K-Dawg" Jakstas Memorial Scholarship.

Research

- Support of research activities in fermentation science
 - Analytical support for fermentation related research by campus faculty and students in the FSI Service Lab.
 - Research and development support for fermentation and related industries
 - Two student research projects were facilitated, including research related expenses (\$2,036) provided by the FSI

Service and Outreach

- Continued growth of the FSI Service Laboratory, which is a fee-for-service 3rd party testing facility specializing on analysis of alcoholic beverages
 - Renewed certifications from the Federal Tax and Trade Bureau for the analysis of beer, wine and spirits (one of only a few 3rd party testing facilities triply certified for beer, wine and spirits nationally)
 - Provides training and student work opportunities for students
 - Manages testing services of the Core Facility for Ecological Analysis
 - FY24, 1,399 analyses were performed on 900 submitted samples for a revenue of \$31,935.03.
- Support of regional fermentation industry and economic development
 - Supports and Collaborates with the Illinois Grape Growers and Vintners Association (IGGVA) and the Shawnee Hills Wine Association
 - Member and collaborator with the Illinois Craft Brewers Association and the Master Brewers Association of the Americas (MBAA)
 - Producing member of the Craft Maltsters Guild (Director is member of Technical Committee)
 - Outreach and professional consultation to fermentation businesses
 - Co-organized with Carbondale Mainstreet the 10th annual Carbondale Brewfest

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Supporting the Illinois Public Agenda:

The development of and activities by the Institute support several aspects of the Illinois Public Agenda. The core mission of the Institute is squarely aligned with Goal 4 of integration of educational, research & innovation assets. The degree program in fermentation science also supports Goal 1 of Educational Attainment. Based on the local, regional and national growth of the craft brewing sector, the planned programs and activities also contribute to Goal 3 of High-Quality Credentials to meet Economic Demand.

Supporting the SIU Board of Trustees Strategic Plan:

The activities of the Institute related to program development and the initiation of new programs are well aligned with the Board of Trustees strategic themes of *promoting* satisfaction and success. The operation of the Service Laboratory, the coordination of student internship opportunities, the unique niche of the degree program and the general outreach activities of the Institute all contribute to the Board's goal of *innovating to transform our state* and region, and the goal of building a stronger system by developing alternative sources of revenue and additional revenue centers, as well as theme of developing our people and our places.

Supporting the SIU Carbondale Strategic Plan:

The development of the Fermentation Science Institute facilities in the McLafferty Annex provides students and faculty with state-of-the-art laboratories and teaching space, which support several of the primary goals of the campus strategic plan to *contribute to student success*, and to *encourage research*, *scholarship and creative activities*. As a new, interdisciplinary institute with interdisciplinary programs, the FSI furthers the SIU strategic plan

by acting to strengthen campus community and community relations by bringing together faculty interest from various departments and colleges in efforts to capitalize on untapped programmatic and research opportunities. By developing novel programs with an efficient, administrative structure, the Institute also contributes to the SIU strategic plan goal of improving finance, infrastructure and resource allocation.

11.4 Evidence of Support for Center/Institute Objectives

Administer and Support Degree Program in Fermentation Science and Other Educational Activities.

Support of Degree Program. In spring of 2017 the FSI received formal program recognition by the Master Brewers Association of the Americas as one of six 4-year degree programs in North America. The program is the only recognized program in the central region of the country.

General Promotion of FSI, degree program, and the iFERM Hub. Significant effort was placed on promoting the FSI and the degree program, as well as broader activities under the auspices of the iFERM Hub and Biolaunch. During FY2024, the FSI hosted 36 events, activities or tours for the campus community, local businesses, civic groups. As a result, approximately 648 individuals toured the FSI, the McLafferty Annex and learned about the iFERM Hub and the BioLaunch project. In addition, the Director gave 3 invited presentations promoting the FSI.

Encourage and Support Research Efforts

The FSI serves a central role in bringing together fermentation related research projects on campus and with industry partners. Faculty from several departments and colleges are involved in various research projects and have developed grant proposals. These activities will accelerate significantly with completion of the iFERM Hub and the BioLaunch facilities.

Manage and Expand FSI Service Laboratory.

Efforts are ongoing to establish a network of clients. This expands the reach and impact of the FSI while also providing service for the industry. The activity provides revenue for the program and training grounds to further the educational opportunities of our students. The laboratory has maintained formal certification from the Tax and Trade Bureau of the U.S. Government for the analysis of beer, wine and spirits since 2016 years. During this time the service lab has experienced a significant increase in request for services. In FY24, 1,399 analyses were performed on 900 submitted samples for a revenue of \$31,935.03.

Pilot Facilities. Pilot facilities are either complete and in operation or are in various stages of planning and implementation. The Director was Principal Investigator (with the Vice Chancellor for Research and the Executive Director of the SIU Research Park serving as co-leads) on an infrastructure grant that was submitted to the Illinois Innovation Network (IIN), requesting \$5.5M in funding to build out remaining infrastructure that will support facilities in the FSI, as well as other units as part of the Illinois Food, Entrepreneurship, Research, and Marketing (iFERM) Hub. The IIN

committed to support Phase 1 of the project with an initial tranche of \$2.5M, which is being implemented by the Capital Development Board and is in final construction planning stages. The current and pending facilities supported by the iFERM Hub are listed below.

Pilot Brewery. A ½ barrel brewery has been established and is operational. The system serves as a primary teaching and research tool for faculty and students in the fermentation science program, as well as research and collaborations with industry partners. As part of the iFERM Hub expansion, a 4-barrel brewery will be available to develop as a student-run campus brewery.

Pilot Distillery. The Director secured a commitment from Artisan Still Designs to donate a custom designed multi-column distillery. The value of this donation is on the order of \$90,000. A grant from the Delta Regional Authority and the USDA for \$40,000 has been awarded to assist in establishing the training distillery. This facility will differentiate the program and provide world-class training to our students, as well as outreach training and workshop opportunities. The equipment is onsite and will be put into operation as the necessary infrastructure is put in place.

Fermented Beverage Facility. As part of the pilot facilities equipment will be available for the production of fermented beverages, including wine, kombucha and other beverages. These new developments will allow the FSI to further strengthen synergies with the wine industry in the region.

Cheese and Fermented Dairy Facility. As part of the iFERM Hub expansion, facilities will be in place to produce a campus cheese program. This is an excellent opportunity for SIU and the fermentation science program, as well as supporting current and future dairy businesses in the region through R&D support and training.

Malting Facilities. The SIU Malting Facility, provided by a grant from the USDA Rural Development Program, has been installed is currently in operation. The malting facility serves as both a training hub and a demonstration site to support and spur economic development in value-added agriculture. In addition, we have launched a campus branded malt that is made by students and marketed to local brewers. Revenue returns support students and the program.

Faye Minor Magill Teaching Kitchen and Sensory Laboratory. The FSI continues to support efforts toward completion of the Fae Minor McGill Teaching Kitchen and Sensory Laboratory, which is based on the vision and bequest of the late Faye Minor Magill. The project will result in a commercial production kitchen and formal sensory laboratory that will be used by multiple departments for teaching, research and outreach activities. The infrastructure proposed in the *iFERM Hub* will support and allow completion of this resource.

Public Outreach and Engagement.

Carbondale Beer Festival. After being cancelled for two years during the pandemic, the Carbondale Beer Festival was relaunched in May of 2022 and again in May of 2023. The partnership has continued successfully with the 2024 festival bringing in net profit of \$3,850, split between the Fermentation Science Institute and Carbondale Mainstreet.

Service and Catering Operations. The FSI provides service for campus organizations and units needing certified servers for alcoholic beverage service for approved events. These operations provide a service for the campus community while providing employment opportunities for students in fermentation science. It also provides a positive engagement between the public and students representing the program, often by them pouring beers they helped to develop. These activities generated \$4,881.27 in gross revenue, much of which went to support students in the form of student wages.

11.5 Evidence of Organizational Effectiveness

The institute continues to benefit from stable and efficient staffing the past 4 years. Despite additional challenges during the pandemic, efficient operations were maintained due to the efforts of a strong and dedicated team. All business aspects of the Institute are now running smoothly and at full capacity.

Challenges remain in the realm of instructional capacity for the fermentation science program. The instructional needs for courses needed to maintain adequate student progress have been managed by an instruction FTE of 1.4, which is only sustainable with a significant portion of the director's workload being diverted to instructional effort. Additional instructional capacity will be needed to allow necessary growth and stability in the degree program and to add necessary expertise to effectively leverage the new pilot facilities. Efforts to develop additional resources to improve the effectiveness and impact of the FSI are ongoing.

12. Institutional Assessment

12.1	Date of Last Review	Permanent Status for FSI Granted by IBHE 2019, Degree Program Reviewed in 2021 and in Good Standing			
12.2	Decision at Last Review	x Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended			
12.3	Explanation				

RESOURCES: (Fermentation Science Institute)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	298,339.57	281,657.57	213,498.02	223,861.43	198,696.37
Service Lab & Activities*	57,911.24	68,962.77	36,527.12	32,997.00	37,129.36
Overhead Recovery (expenditure)	0.00	(1,802.00) payback	0.00	250.00	3,766.09
Overhead Recovery (income)	***	***	28.37	75.94	
Course Fees	1,620	960.00	1,485.00	1,020.00	1,035.00
Awards and Grants	0**	0**	6,700,000†††	1,140,000††	160,427.00†
Total Revenues	357,870.81	369,661.92	6,951,538.51	1,398,204.37	401,053.82
Expenditures					
Salaries + Wages	304,230.40	291,698.64	196,508.83	217,096.43	189,475.70
Travel	9,448.50	11,858.97	1385.17	373.87	6,575.86
Equipment	267.31**	1,376.40	2,930.30	5,701.81	108,444.04
Commodities	10,064.30	27,569.16	8,500.64	17,357.41	25,251.67
Contractual Services	9,919.48	8,578.58	6,354.02	5701.81	20,377.25
Awards and Grants	0**	0**	0**	0	0
Telecommunications	232.20	651.72	147.14	1,091.45	734.07
Course Fees	1,586.24	1096.79	588.46	1,459.69	276.51
Total Expenditures	335,748.43	342,830.26	216,414.56	248,782.47	351,135.10
Revenue Minus Expenditures	22,122.38	26,831.66	6,735,123.95	1,049,421.90	49,918.72

^{*}Includes beginning balance of \$30,884.85.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	1.41	1.42	.38	.38	.25
Staff	2.5	2.5	2.5	2.5	2.5
Total Staffing	3.91	3.92	2.88	2.88	2.75

^{**}Ongoing project cost not included.

^{***}Not available, to be distributed from tenure home unit

[†]Represents beginning balance from FY18 of \$120,427

^{††}Represents beginning balance from FY18 of \$40,000

^{†††}Represents beginning balance from FY21 of \$1,140,000

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale		
2.	Center/Institute	Illinois Soybean Center		
3.	Date	February 28, 2025 (amended 3/17/2025)		
4.	Director	Boyd M. Goodson		
	4.1 Telephone	618-453-7177		
	4.2 E-mail	bgoodson@chem.siu.edu		
5. Year Established		1997		
6. Illinois State Statute		N/A		
	(if pertinent)			
7. Reporting Unit		College of Agricultural, Life, and Physical Sciences		
•	reporting office			
8.	Туре	Activity		
		(check all that apply)		
	Instructional	N N		
	Research	V		
	Public Service	V		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

Southern Illinois University Carbondale (SIUC) has a long history of excellence in soybean research, teaching, and outreach. For over half a century, several generations of SIUC faculty have continued to build upon this excellent reputation with soybean growers and the industry to address production challenges and to find new uses for soybean. The Illinois Soybean Center (ISC) was first established in 1997 as the Center for Excellence in Soybean Research Teaching and Outreach (CESRTO) through a state appropriation. In 2008, the name was changed to the ISC. In 2005, the ISC was granted a \$500,000 endowment from the Illinois Soybean Association. The terms of this endowment allowed for SIUC to match the interest generated by the endowment for use in ISC activities. In the formative years of the ISC, activities focused on improving production techniques with various cultural practices, developing and releasing improved soybean genetics, and developing management strategies for weeds, diseases, and other production constraints. Subsequently, additional focus areas included the utilization of soybean in food and feed.

SIUC provides a unique home for the ISC as a "center without walls" to foster more significant interdisciplinary research, teaching, and outreach with investigators representing various units within the College of Agricultural, Life and Physical Sciences, the School of Medicine, the Fisheries and Illinois Aquaculture Center, and the College of Engineering, Computing, Technology, and Mathematics. Recent interdisciplinary collaborations will potentially benefit both soybean production and new potential markets / applications (including in energy). The faculty collaborate with scientists with land grant universities in the U.S. and international institutions and research centers. During the past eight years, research programs affiliated with ISC have received support from the Illinois Soybean Association, the United Soybean Board, North Central Sustainable Agriculture Research and Education (SARE) program, the North Central Soybean Research Program, the Illinois Nutrient Research & Education Council, and more, as well as from numerous corporate sponsors.

9.2 Mission

Development of technologies using an interdisciplinary approach to enhance soybean production in Illinois and in the North Central Region, increase soybean utilization by the global community, contribute to the base of scientific knowledge, and educate human capital.

9.3 Objectives

- 1) Conduct research on soybean that increases basic knowledge and contributes practical solutions to stakeholder problems.
- 2) Develop new soybean cultivars and germplasm that enhance production and value.

- 3) Facilitate technology transfer of research outcomes to growers, to the soybean industry, and to consumers.
- 4) Establish consortia with public and private organizations to enhance research, teaching and outreach for mutual benefit.
- 5) Encourage multi-disciplinary research and improve external funding opportunities.

10. Advisory Board

10.1 Advisory Board - Membership

Board of Directors: The Board of Directors seeks budget and facilities support for the ISC. Additionally, this group determines fund use priorities, establishes an administrative structure for the ISC and approves, and promotes events and activities associated with the ISC. (Note: the list below represents the current make-up of the Board of Directors, including membership changes that occurred after this report's reporting period.)

- 1. Associate Dean, CALPS Boyd Goodson (Director, SIU Soybean Center)
- 2. Director of Agricultural Sciences Ira Altman
- 3. Director of Biological Sciences Frank Anderson
- 4. Director of Earth Systems and Sustainability Justin Schoof
- 5. Director of Human Sciences Juliane Wallace
- 6. Director of Chemical and Biomolecular Sciences Qingfeng Ge
- 7. Director of the Fermentation Science Institute Matt McCarroll
- 8. Director of Physics and Applied Physics Saikat Talapatra
- 9. School of Medicine Judy Davie
- 10. Center for Fisheries, Aquaculture & Aquatic Sciences (vacant)
- 11. Illinois Soybean Association Jennifer Jones
- 12. Illinois Soybean Association Heath Houck
- 13. Dean, CALPS Ex Officio Karl Willard (Acting Dean)

Faculty Advisory Board: Represent faculty members from multiple colleges within SIUC to develop and propose ISC program priorities, events and activities. They also support needs of the Board of Directors. (Note: the FAB did not meet during the reporting cycle; membership will be reviewed during the next cycle.)

<u>Faculty Member</u> <u>Discipline Areas</u>

Dwight Sanders

Ed Heist

Animal Biotechnology

Gary Apgar

Animal Nutrition

Dawn Null

Food and Nutrition

Kanchan Mondal

Engineering/Technology

Ranchan Mondai Engineering/ recino

Scott Hamilton-Brehm Microbiology

Buck Hales (retired) Medical Physiology

Andrew Wood Plant Biology Stella Kantartzi Plant Breeding

Ahmad Fakhoury Plant Pathology/Nematology

Karla Gage	Weed Science
Amir Sadeghpour	Soil Science

10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Previous Year	Results in Year
1.	Publications	7	21 [¶]
2.	Public Service Activities (Field Days,		
	Conferences, workshops, etc.	22	30
3.	National/Regional Research Projects or		
	Working Groups	9	16
4.	Graduate Students Trained (MS and PhD)	25	30
5.	Undergraduate Student Workers Trained	23	19
6.	Undergraduate Leadership Training (Agronomy		
	Honor Society)	0	1
7.	Undergraduate Job Placement/Graduate		
	School	5	8
8.	Graduate Students Job Placement/Graduate		
	School	5	7
9.	Grant Dollars	\$1,455,561	\$2,194,440
10.	Internships	3	0

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities

11.2 Major Accomplishments (In This Year)

The Board of Directors developed and released a request for proposals and was open to all faculty at SIUC. The available funding source was the interest gained from the Endowed fund and the University match. Proposals were selected for funding and represented many program areas and faculty within CALPS, the School of Medicine, and Engineering.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

In review of the general expectations for Centers and Institutes for the SIU System, the Illinois Soybean Center has evidence of support for these expectations set forth in table 11.1:

Create and transfer knowledge to students and other learners -

Offer students and other learners' opportunities to apply knowledge to the real world -

Soybean researchers trained over 1,700 industry, alumni, and soybean stakeholders in the past year (based on estimated head-counts at Public Service Activities / Events). Center faculty also helped place 15 undergraduate and graduate students with jobs, internships, and positions at other universities.

Support graduate and professional students – Faculty research grants led to the support of 30 graduate students (MS and PhD).

Not counting at least 6 public archive preprints and manuscripts in progress.

Support undergraduate research activity – Faculty research grants led to the support of 19 undergraduate student researchers.

Enhance the university's external reputation – Faculty were engaged with 16 National/Regional Research Projects. Faculty (and their students) also contributed via publications, conference presentations, and public service activities across the state of Illinois and secured millions in research funding (see Table).

Engage and contribute to the welfare of the people we serve – Faculty presented workshops and presentations to over 1700 people representing industry, alumni, and soybean stakeholders (including at the annual Illinois Soybean Summit). Faculty are actively involved in recruitment, retention, and placement.

Translate research findings to useable products and services for academia and the public – Faculty research grants led to 21 publications in scientific journals and provided crop management recommendations via extension talks and publications.

Maintain a minimal critical mass of faculty – Over the last several years (continuing statements in previous reports), the number of faculty involvement in soybean research has been affected by a reduction in state research funding. Several researchers have diversified their research portfolios. Nevertheless, the Soybean Center supported 7 research projects with seed funding for the 2023 funding cycle and very recently, 6 research projects with seed funding for the 2024 funding cycle. Taken together, roughly two dozen unique faculty have been recently awarded seed funding (as PI or co-PI) over the past 3 cycles—funding that will hopefully lead to successful efforts to secure external funding for new soybean-related research projects.

11.4 Evidence of Support for Center/Institute Objectives

Conduct research on soybean that increases basic knowledge and contributes to practical solutions of stakeholder problems - This is evident by the amount of research grant funding and the number of publications. Faculty at SIU have a great reputation among the funding agencies and review boards of professional journals.

Develop new soybean cultivars and germplasm that enhance production and value - SIU did not release new soybean cultivars and germplasm in this reporting cycle, but historically this has been a hallmark of the soybean research program at SIU.

Facilitate technology transfer of research outcomes to growers, to the soybean industry, and to consumers - This is evident by the number of publications, extension presentations, workshops, and one-on-one training sessions.

Establish consortia with public and private organizations to enhance research, teaching and outreach for mutual benefit - SIU soybean researchers maintain a strong tradition of seeking funding from the national United Soybean Board and being the Lead Investigators on funded United Soybean Board Projects. The Illinois Soybean Center is actively engaged with State, Regional, and National Soybean Associations in addition to Soybean Centers at The Ohio State University, Iowa State University, University of Missouri, and Purdue University.

We encourage multi-disciplinary research and seeking external funding opportunities, as evidenced by the wide variety of backgrounds and affiliations of our involved faculty and the funding of seed grants involving a wide range of different soybean-related research projects.

11.5 Evidence of Organizational Effectiveness

Dr. Eric Brevik, who served ex officio on the Board of Directors, recently stepped down from serving as the inaugural Dean of CALPS; however, he has taken up the mantle of soybean research and attended the 2025 Soybean Summit with the Director. Our new acting Dean, Karl Williard, now serves ex officio on our Board and is a strong supporter of the SIU Soybean Center (having previously served on our Board of Directors). We very much look forward to working with incoming Dean Boone (whose research background is in Ag Ed) when she arrives in May/June. Many new schools and program areas are already part of the ISC. We seek even greater multidisciplinary collaborations in soybean research to benefit Illinois Soybean growers. Last cycle, under Dr. Brevik's leadership, a new Board of Directors was seated, representing all new schools in CALPS and critical schools from outside the College (and new board members were identified and seated this cycle). A third call for grants went out last year and 6 were funded by the Board. Last cycle the Associate Dean – Research of CALPS, Boyd Goodson, began serving as the permanent Director of the SIU Soybean Center and continues to serve in this role. He continues to rely on a number of knowledgeable SIU faculty, administrators, and staff (including former dean Brevik, current associate dean Groninger, former Soybean Center director Jason Bond, Susan Graham (CALPS Foundation director), Melissa Gibbons (CALPS office manager), and others for advice, and they have all been an enormous source of help and support. Finally, the CALPS The Board of Directors is set to meet on March 6, 2025.

12. Institutional Assessment

12.1	Date of Last Review	2021
12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review
12.3	Explanation	Center/Institute Suspended (briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: <u>Illinois Soybean Center</u>

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	_	_	_	_	_
Income Fund	_	_	-	_	_
Grants & Contracts	-	_	_	_	8,216,497
(faculty research activity)**					, , , ,
University Match on Interest from Endowment***	23,400¶	23,376.89	25,272.49	22,936.98	21,816.86
Distribution from Endowment	23,400 [¶]	23,376.89	25,272.49	22,936.98	21,816.86
Total Revenues****	-	-	-	-	-
Expenditures*					
Salaries	-	-	-	-	-
Fringe Benefits	-	-	-	-	-
Travel	-	-	-	-	-
Equipment	-	-	-	-	-
Commodities	-	-	-	-	-
Contractual Services	-	-	=	-	-
Award and Grants (Grad As. Fee)	-	-	-	-	-
Operation of Auto	-	-	-	-	-
Telecommunications	-	-	-	-	-
Total Expenditures	-	-	-	-	-
Revenue Minus Expenditures	-	-	-	-	-

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

[¶]Estimated amounts; pledged amount not received yet at the time this report was prepared.

Staffing (Full Time Equivalent)	FY2022	FY2021	FY2020	FY2019	FY2018
Faculty	-	-	-	-	-
Staff	-	-	-	-	-
	•	•		•	
Total Staffing	-	-	-	-	-

^{**} Not direct funding to the Center. Faculty research activity associated with Center as reported by Faculty. Includes, multi-year projects that were initiated in FY 2021.

^{***} University Match received in 2018 includes the matches for FY14, FY15, FY16; FY23 funds are pledged.

^{****} Total Revenues does not include Grants and Contracts, that are managed by faculty.

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023- June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Meyers Institute
2.	Center/Institute	Meyers Institute
3.	Date	02/27/2024
4.	Director	Yuqing Hou (Acting)
	4.1 Telephone	(618)-453-5174
	4.2 E-mail	houyq@siu.edu
5.	Year Established	(2000, and re-established in 2020)
6.	Illinois State Statute (if pertinent)	(if created by Illinois state statute, list the specific statute by number and title; otherwise, list N/A)
7.	Reporting Unit	VCR
8.	Туре	Activity
		(check all that apply)
	Instructional	Yes
	Research	Yes
	Public Service	No

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Meyers Institute for Interdisciplinary Research in Organic and Medicinal Chemistry was initiated by late Distinguished Professor Cal Y. Meyers through a \$3 million endowment to SIU foundation in 2000. Cal Y. Meyers served as the first director of the institute until his death in 2012. The institute is currently managed by Dr. Yuqing Hou. Professor Meyers firmly believed that basic research leads to new applications and broad-field publications. Students with exposure to a variety of interdisciplinary research activities are prime candidates for positions in the scientific, medical, and commercial sectors.

The institute has provided assistantships, postdoctoral fellowships, and undergraduate stipend during the past years. The students get their degrees in chemistry. Currently, the institute supports two graduate students, who are working on their advanced degrees.

The Institute is located in the Neckers Building, which houses the Department of Chemistry and Biochemistry.

9.2 Mission

The institute carries out basic research in organic chemistry, medicinal chemistry, and related interdisciplinary fields. The institute aims to provide education opportunities for undergraduate, graduate, and postdoctoral students in these fields.

9.3 Objectives

The current objectives of the institute are:

Holding biannual symposium to promote SIUC and research

Teaching and supporting students in the institute

Recruiting more students

Seeking external funding

Providing instructional service to the Department of Chemistry and Biochemistry when needed Carrying out research activities

Communicating results to scientific communities

10. Advisory Board

10.1 Advisory Board - Membership

Dr. Chuck Rawlings

Professor Rob Schwartz

Ms. Gayla Borgognoni

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year	
1.	Continue on three research projects	4	4	
2.	Teach courses in Chemistry	1	1	
3.	Recruiting new graduate students	1	1	
4.	Recruiting undergraduate students	1	1	
5.	Publications/conferences	1	1	

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Dr. Yuqing Hou taught Chem 543, one of the required core courses for organic graduate students, in the School of Chemical and Biological Sciences.

Sylvia Acquah has joined the institute as a PhD student.

The institute has contacted Dr. Punit Kholi and Dr. Rebecca Burgess for collaborative research on fluorescent probes. Our fluorescent probes have been tested in live cells for detection of oxidative species.

The Institute has completed the renovation project of Lab 305 in Neckers Building. The institute had the second seed grant program and received four grant proposals. They are from the School of Chemical and Biological Sciences, Physics, and School of Electrical, Computer, and Biomedical Engineering.

The institute has awarded Drs. Lichang Wang and Kyle Plunkett \$12,000 for their collaborative proposal entitled: Rational Design and Synthesis of Organic Small Molecules for Coherent Fluorescence Sensors

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Dr. Yuqing Hou volunteered as Regional and State Illinois Junior Science Fair judge.

11.4 Evidence of Support for Center/Institute Objectives

The institute has contributed to the School of Chemical and Biological Sciences by teaching chemistry courses. Dr. Yuqing Hou also serves on several graduate students' committees, helping and guiding the students, writing cumulative exams.

Graduate students from other groups frequently come to Dr. Yuqing Hou to ask for advice on their synthetic chemistry projects.

The Institute provided financial support for the graduate students conducting research in the institute.

Collaborative research with other researchers on campus has been ongoing.

The institute awarded Drs. Lichang Wang and Kyle Plunkett \$12,000.

The Institute covered the cost of the renovating Lab 305 in Neckers Building.

11.5 Evidence of Organizational Effectiveness

The institute has been managed by Dr. Yuqing Hou since Dr. Meyers's death. We have three graduate students and an undergraduate student doing research with us, and we also contribute to the School of Chemical and Biological Sciences. He also manages the account/PCard, and purchases chemicals.

12.	Institut	ional Assessment	
	12.1	Date of Last Review	(list the year of the last program review)
	12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
	12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: Meyers Institute

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	0	0	0	0	0
Income Fund	432285.74	75,269.63	75,000.00	150,000	150,000.00
Grants & Contracts	0	0	0	0	0
Previous year balance	(35,539.98)	13,161.30	21,000.10	59315.00	39000.00
XXX					
XXX					
Total Revenues	396745.76	88,430.83	96347.20	209315.00	189000.00
Fringe benefits	29442.23	2,8932.62	29,457.92	35000.00	33400.00
Contractual service	336.16	4,016.40	2,526.29	7920.00	410.00
Salaries	87065.25	77,594.50	86,749.50	102000.00	78100.00
Commodities	5240.14	2,837.61	9,035.20	5165.00	3200.00
Equipment	0	0	2527.00	2600.00	1100.00
Awards & Grant	0	270.00	450.00		
Building maintenance	283385.63	10,320.04			
Total Expenditures	405469.39	123,970.81		152685.00	129685.00
Revenue Minus Expenditures	(8723.63)	(35,539.98)	13161.30	56630.00	59315.00

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty					
Staff	1	1	1	1	1
Total Staffing	1	1	1	1	1

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023- June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University School of Medicine
2.	Center/Institute	SIU Neuroscience Institute (NSI), including the Parkinson's Disease Center (PDC)
3.	Date	2/1/25
4.	Director	Kari Wolf M.D., Jayant Acharya M.D.
	4.1 Telephone	217-545-7625; 217-545-7226
	4.2 E-mail	Kwolf48@siumed.edu; jacharya37@siumed.edu
5.	Year Established	Academic Year 2015
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Southern Illinois University School of Medicine
8.	Туре	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The SIU Neuroscience Institute (NSI) is a state-designated, public service institute providing advanced multispecialty clinical care for patients with neurological disorders and/or mental health conditions. The NSI is a collaboration of SIU School of Medicine's physician practice organization (SIU Medicine) and Springfield Memorial Hospital (SMH), a principal affiliated teaching hospital of the medical school in Springfield. The NSI coordinates the patient care services of the school's existing Department of Neurology, Department of Psychiatry, the Division of Neurosurgery and Physical Medicine and Rehabilitation (PM&R) while collaborating with SMH's neuroscience-related outpatient and inpatient services and facilities.

The Institute's physicians, health care staff, and other professionals provide advanced, coordinated treatment to patients throughout central and southern Illinois who suffer from complex, debilitating neurological or mental disorders. While the institute's focus is primarily patient care oriented, the NSI provides opportunities and resources for neuroscience-related research, medical and community education, and community outreach. As an institute based in an academic medical center, the NSI is advancing the translation of new and emerging basic research and the application of new medical products and technologies into improved patient care.

The vision of the NSI is to be housed in a single facility on the SIU School of Medicine/ Springfield campus, unifying the outpatient clinical services, research, education and operations related to the above-noted clinical departments and divisions. Once the NSI is fully implemented, patients will have seamless availability within one site to neuroscience and spine specialists, ancillary services, case management and clinical trials, all sharing common scheduling, billing and electronic health record systems. Quality and safety measures, outcomes, patient satisfaction, cost of care, and value will be substantially improved.

The Parkinson Disease Center (PDC) was established by the Illinois state government to address the needs of Parkinson disease patients in the region. The Smith Alzheimer's Center and the PDC are integrated into the SIU Neuroscience Institute (NSI) and are incorporated into this report.

9.2 Mission

The Neuroscience Institute (NSI) provides comprehensive care for diseases of the nervous system for small, urban and rural Illinois communities

9.3 Objectives

Objectives of the SIU Neuroscience Institute include:

• Clinical Objectives: The institute coordinates adult neurology, neurosurgery, psychiatry (including child and adolescent psychiatry), physical medicine and rehabilitation and related ancillary services. The institute develops disease-specific

multidisciplinary clinics to improve diagnostic services and treatment as well as improve the patient's experience.

- Patient Objectives: The institute enhances the patient's experience through coordination of patient and support services, and develops shared patient scheduling and registration processes to ease access. Outcome metrics include patient satisfaction data, patient access and clinic utilization rates.
- Quality Objectives: Quality objectives include patient satisfaction metrics; improved physician and staff recruitment, retention, and satisfaction; improved operating efficiencies; and financial sustainability through coordination among institute departments.

The SIU Neuroscience Institute is designed to produce significant clinical, patient, operational and financial benefits. The NSI is the only regional and academically-based neuroscience institute in central or southern Illinois.

10. Advisory Board

10.1 Advisory Board - Membership

The NSI Steering Committee provides advice and oversight to the institute's leadership.

NSI Steering Committee members in FY2023 include:

- Kari Wolf, MD, Professor and Chair, Psychiatry, SIU School of Medicine (Co-Executive Director)
- Jayant Acharya, MD, Professor and Chair, Neurology, SIU School of Medicine (Co-Executive Director)
- Marcella Bland, MBA, NSI/SIU School of Medicine (Administrative Director)
- Jeffrey Cozzens, MD, Professor of Neurosurgery, SIU School of Medicine
- Bruce Frankel, MD, Professor and Chief of Neurosurgery, SIU School of Medicine
- Michael Neumeister, MD, Professor and Chair, Surgery, SIU School of Medicine
- John Horvat, Associate Provost for Finance and Administration, SIU School of Medicine
- Michelle Lynn, Executive Director, SIU Clinical Operations
- Kevin England, Senior Vice President and Chief Administrative Officer, Memorial Health
- Evan Davis, Administrator, Vice President, Clinical Operations, Memorial Health
- Charles Callahan, PhD, President, Memorial Health Hospital Group and President & CEO, Springfield Memorial Hospital (through May 2024)
- Jay Roszhart, MBA, President & CEO, Springfield Memorial Hospital (May 2024)

10.2 Number of Meetings (In This Year)

4- Steering Committee

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for FY24	Results in FY24
1.	Patient Encounters – Visits	60,000	48,376
2.	Total Patients Served – Unduplicated	15,900	15,796
	Count		
3.	New Patients Served – Combined total	3,100	7,709
4.			
5.			

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Department specific and overall NSI accomplishments include:

Southern Illinois University (SIU) in collaboration with Springfield Memorial Hospital continues to maintain the second largest Electroconvulsive Therapy service (ECT) in the state, only second to the University of Chicago. Access to essential medical services, such as ECT, within the community is crucial as it ensures individuals receive timely, localized care, improving their chances for recovery and overall well-being without the barriers of long-distance travel. The partnership has allowed for extensive education and training to medical students, resident physicians and medical staff. The majority of Psychiatry faculty are trained in ECT to ensure there are no gaps in care and access.

In partnership with Springfield Memorial Hospital (SMH), the SIU neurology team continues to maintain a comprehensive stroke program and received the highest award from the American Heart Association for advanced stroke care in 2024. The honor is known as the Gold Plus- Stroke Honor Roll Elite and Honor roll Advanced Therapy. For the first time the program also received the Stroke advanced Therapy Honor Roll for door to device <90 minutes for ED patients and <60 minutes for transferred patients. SIU SOM faculty clinicians, including the team of vascular neurologists, stroke APPs, and resident physicians, play a crucial role in the success of the program by providing 24/7/365 coverage.

The Stroke One program continued to progress since it's inception in February 2022. The program provides 24/7/365 Stroke attending consultation coverage to Memorial Health's Primary stroke center at Decatur Memorial Hospital (DMH) and Acute Stroke Ready centers at Lincoln Memorial Hospital (LMH), Taylorville Memorial Hospital (TMH), and Jacksonville Memorial Hospital (JMH). The program allows for increase in SMH's bed capacity to care for the most complex stroke patients while also keeping patients in their own communities when possible. All other referring hospitals within Central Illinois make "One Call" to fast-track stroke transfers to appropriate Memorial Health facilities. On average the service encounters 200 patients per month.

The Neurocritical Care Service in Springfield is one out of 2 dedicated neurocritical care services in Illinois outside of Chicago. This is a busy primary service providing high quality, specialized care for complex neurological conditions.

Dr. Seth Bires, PM&R specialist joined the department in July 2023. With the loss of neuromuscular neurologist in spring of 2023, Dr. Bires was able to continue providing EMG services to the community and allow for continued medical education and training for the resident physicians. At the completion of the year, he won Educator of the Year awarded by the residents and increased volumes for EMGs.

The comprehensive Epilepsy Center at SMH is staffed by the epilepsy trained neurologists from the SIU SOM. The center is currently recognized as a National Association of Epilepsy Centers (NAEC) level 3 and continue to make headway for certification of NAEC level 4 status in the upcoming years. The volume of Epilepsy Monitoring Unit admissions is one of the five metrics necessary to become certified as a level 4 center. EMU admissions have been on a steady increase from 53 in 2022, 94 in 2023 and are on target for the 100 admissions required in 2024. With the addition of specialists Dr. Acharya (May 2022), Dr. Ibrahim (Fall 2022), recruitment of resident Paul Guerin (Fall 2025) the program will continue to grow and develop.

The emergency department (ED) sought collaboration with the neurology department due to the high percentage (40%) of patients that were discharged for seizure. The purpose of the clinic was to allow for first time seizure patients to be followed up promptly in the outpatient setting. The patient population did not require hospital stay thereby optimizing hospital bed availability while maintaining a high quality of care for the patients and keeping costs low to the patient in decreased hospitalization.

The addition of an advanced practice registered nurse (APRN) in December of 2023 will allow for greater access for a variety of neurological diagnosis.

Current and seasoned stroke APRN in neurology has increased access for follow up stroke patients. The addition to access offers timelier follow up visits for discharged stroke patients.

Discussion and feasibility study is underway for creation of an infusion center within the Neuroscience Institute department of Neurology. The infusion center is proposed with the intent to attract more clinical trial opportunities. The proposal would call for processes and protocols to be established then including other necessary, routine or specific neurological treatments for the patients of the institute, organization and community.

Neurology held the first symposium since its hiatus and since new Chair of the Department was appointed. The successful turn out and feedback gave renewed momentum for further planning of the annual event. The symposium focused on the essential information for clinicians outside of the specialty of neurology. Planning for the subsequent symposium is underway with a focus on primary care providers who treat patients with neurological disorders.

The Division of Mental Health (DMH) has approved a proposal to fund the expansion of the Psychiatry residency training program. This expansion will add two new residents each year, eventually increasing the total number of residents by eight over the course of four years. The proposal introduces a new rotation in the residency curriculum at the Packard State Mental Health Center, where trainees will gain valuable educational and training experiences working with individuals who have serious mental illnesses and require round-the-clock care. This partnership will provide much-needed support to the community.

Dr. Arindam Chakrabarty was named the Site Medical Director of the SIU Federally Qualified Health Center (FQHC) Integrated Wellness Clinic. The addition of his role in the clinic allows for enhanced collaboration between the FQHC and department of Psychiatry to improve oversight of psychiatric clinical activities in the integration of care for patients.

Dr. Wolf provided testimony to the Illinois General Assembly in the Spring of 2024 to help reduce barriers to behavioral health care and optimize Medicaid reimbursements. The testimony prompted more discussion and interest with follow up to be expected.

A deep dive analysis was completed in the patient access for appointment times in Psychiatry. As a result, scheduling templates were enhanced and lag time for appointments decreased to a short 6 weeks from appointment request. Furthermore, a consult clinic was piloted to allow for one-time referrals for patients with less complex psychiatric needs. The addition of the clinic will allow for greater access for more complex cases for patients who are in need of specialized care.

Dr. Wolf and other identified members of the faculty were called upon to work on a comprehensive safety protocol for Choate and all state operating centers. Their continued charge is expand to other State Operating Psychiatric Hospitals (SOPH) throughout the state.

With the addition of newly appointment chief of Neurosurgery Dr. Bruce Frankel, there has been a surge in spine surgery volumes and continues to grow. A neurosurgical spine fellowship was established in 2024, focusing on both traditional open procedures as well as a heavy emphasis on minimally invasive techniques including endoscopy.

Dr. Mantovani, a functional neurosurgeon has been recruited and arrived fall of 2023. She quickly began collaboration with neurology in surgical treatments for epilepsy and movement disorders. The faculty addition will allow SIU to continue to be a standout program for treating patients with Deep Brain Stimulation. Deep Brain Stimulation offers treatment to patients whose symptoms are not controlled with medicines. She plans to continue growth in this area.

Continued the Comprehensive Epilepsy Program by continuing neurosurgical capabilities, including stereo electroencephalography (SEEG), incorporating the ROSA Surgical Robot and deep brain stimulation of the anterior nucleus of the thalamus and Responsive Neurostimulation.

Continuing the Neurosurgery's Residency Program by graduating third Resident in June 2024 and recruiting new residents.

Continued planning for a single building to house the entire Neuroscience Institute. A future site has been identified and discussions are taking place regarding land acquisition of site. Architects are working on schematics for programming.

Research efforts throughout the NSI were substantial for the year with contributions from every area:

Neurology contributed with 44 investigator-initiated studies, 25 sponsored clinical trials, 9 grants awarded, 43 publications, 28 abstracts, posters and presentations and 21 book chapters.

Psychiatry contributed with 20 investigator-initiated studies, 10 industry sponsored clinical trials, 7 grants awarded, 8 publications, 30 abstracts, posters and presentations and 39 book chapters.

Neurosurgery contributed with 11 investigator-initiated studies, 1 sponsored clinical trial, 9 publications and 9 abstracts, posters and presentations.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The SIU Neuroscience Institute supports priorities of the university, the medical school, and the State of Illinois. SIU Carbondale's focus statement notes that the university "strives to meet the health care needs of central and southern Illinois through appropriate health-related programs (and) services ... "and "develops partnerships with communities (and) businesses" The NSI addresses both of these by providing community-based patient care services in demand by the people of the region. The institute also supports SIU Carbondale's priorities for community service and collaboration, as noted in the Pathways for Excellence: A Strategic Plan document. The SIU Board of Trustees' strategic priorities include those to "extend the external presence and relationships of the system to aid in the development of innovative approaches to address Illinois' problems relating to education, health care ..." and to "streamline for efficiency and cost-savings to ensure financial stability, encouraging productive, mutually beneficial collaborations across system campuses and locations" The NSI provides innovative, streamlined approach to health care through the consolidation of clinical and research services related to diseases of the nervous system. This improves patient accessibility to services, patient care and safety, and operational efficiency and effectiveness through the consolidation of administrative positions and functions across the NSI's departments and divisions. Longstanding university priorities call for programs to contribute to workforce development, stronger health care and social welfare systems, and increased cooperation among health programs and the community. The NSI advances each of these priorities.

The NSI supports various elements of the medical school's strategic plan, particularly its priority for clinical practice, health of the population and community service. Through its individual academic divisions and departments and its combined clinical and research operations, the NSI addresses and enhances the major strategic priorities within the SIU School of Medicine, including strategies associated with: educating future physicians; attracting, progressing and retaining a diverse faculty; developing innovative teaching methods for students and residents; expanding research studies, initiatives and collaborations across the institution; providing accessible and quality health care; establishing relationships with various health care and other community entities within the region and the state; and enhancing the brand that is SIU Medicine.

The NSI also directly advances the *Illinois Public Agenda* goals for economic growth and workforce development. Economic growth is advanced through this program's ability to address patient needs related to neurological and mental health disorders in the region. This provides an important professional service, one that is in demand throughout central and southern Illinois. The institute also provides learning opportunities for medical students, physician assistant students, graduate science students, clinical residents and fellows and other allied health professions in the neurosciences. This improves the state's workforce of these important professionals while enhancing the relevance of the medical school's educational programs. The SIU Neuroscience Institute advances these complementary goals.

11.4 Evidence of Support for Center/Institute Objectives

In FY 24, the SIU Neuroscience Institute has made progress in achieving its objectives as outlined in 9.3 above. Efforts continue to mature in the areas of balancing finance and accounting operations for the Departments of Neurology, Psychiatry, PM&R and the Division of Neurosurgery based on the needs of the respective Departments and divisions. Patient quality, risk and safety was also advanced by the integration of the Neurology/Psychiatry PSES (Patient Safety Evaluation System) Committee which reviews and discusses all patient safety and quality-related incidents as documented within the Patient Incident Reporting System (ALERT).

In an effort to improve clinical efficiencies, enhance the patient experience, and achieve cost savings through the attrition of redundancies in clinical support staff, efforts were undertaken by individual departments/divisions and collectively within the NSI as demonstrated in section 11.2 above (major accomplishments). Many initiatives center around at minimum two objectives set forth by the neuroscience institute.

Lastly, the Institute's clinical, financial, teaching and research missions continued despite the ongoing challenges with national staff shortages and hospital and health systems financial challenges in the post-pandemic recovery era. As the institute continues to progress, intentional strategy around the stability of the institute continue to be paramount.

11.5 Evidence of Organizational Effectiveness

The SIU Neuroscience Institute is justified by the immense burdens for the patients, their families, and society associated with neurological and mental health disorders as well as the potential for developing a truly unique, high-quality, academic medical center-based neurosciences patient care program for Springfield and the region. The aim of the NSI is to facilitate more favorable patient experiences, better patient outcomes, lower costs of patient care, and enhanced value to patients and the communities of central and southern Illinois, particularly in the Springfield area. The community supports the NSI's mission and vision for patient care. This is expected to continue as the NSI develops.

12. 12.1	Institutional Assessment Date of Last Review	To be reviewed summer 2025		
12.2	B coloioir at Eact	N/A	Center/Institute in Good Standing	
	Review		Center/Institute Flagged for Priority Review Center/Institute Suspended	
12.3	Explanation	N/A		

RESOURCES: (SIU Neuroscience Institute)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020	FY2019
Revenues						
State Appropriations						
Income Fund						
Grants & Contracts						
Patient Care Revenues	\$11,314,125	\$9,399,043	\$10,463,589	\$11,070,774	\$8,679,930	\$8,862,475
Non-Patient Care Revenues ¹	\$1,778,488	\$2,210,001	\$1,795,183	\$1,828,848	\$1,335,741	\$1,017,762
Ancillary Revenue ¹	\$1,318,943	\$1,191,179	\$1,097,272			
Accumulated Balance ²						
Total Revenues	\$14,411,556	\$12,800,223	\$12,258,772	\$12,899,622	\$10,015,671	\$9,880,240
	•	•				
Expenditures						
Department Overhead ³	\$3,310,351	\$2,898,501	\$2,083,696	\$2,056,149	\$1,549,796	\$1,221,411
Space Costs	\$1,062,890	\$1,113,643	\$1,022,167	\$1,067,582	\$863,013	\$873,753
Malpractice Insurance	\$80,286	\$174,029	\$353,050	\$237,658	\$638,359	\$834,940
Other Direct Expenses	\$80,286	\$552,421	\$195,584	\$961,084	\$974,991	\$1,034,325
Academic Support Expenses	\$1,431,787	\$1,314,252	\$1,253,997	\$927,310	\$926,702	\$930,661
Grants & Contracts Indirect Costs						
Provider Compensation ³	\$5,245,424	\$3,562,716	\$4,303,287	\$3,297,744	\$2,895,102	\$2,826,743
SIU MED Overhead ³		\$1,225,289	\$929,825	\$1,009,755	\$977,626	\$978,601
Ancillary Expenses	\$1,575,554	\$1,207,788	\$1,082,463	\$801,247	\$932,131	\$541,549
Total Expenditures	\$14,115,816	\$12,048,639	\$8,134,095	\$10,358,529	\$9,757,723	\$9,241,983
D Mi 5	6005 740	¢754 504	¢4 070 700	¢0 €44 000	¢0E7.040	#630.057
Revenue Minus Expenditures ²	\$295,740	\$751,584	\$1,079,702	\$2,541,093	\$257,948	\$638,257

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

- 1. Non-Patient Care Revenues are defined as income derived from affiliated hospital agreements and community outreach contracts. Ancillary Revenue is income derived from operations that support and enhance the overall patient care experience such as imaging, labs, rehabilitation, and other special procedures.
- 2. No accumulated balance is forwarded from year to year. Each year is managed and any deficit or surplus does not accrue to the NSI but are managed through SIU's practice plan, SIU Healthcare.
- 3. Department Overhead expenses include primarily salary expenses for staff directly involved in supporting patient care activities, such as front desk reception staff, call center, nursing and medical assistant, medical records, etc. Provider Compensation is physician compensation from patient service. SIU Medicine Overhead expenditures include costs of support services provided by SIU Medicine including support for information technology, credentialing and managed care, patient business services, and quality, risk and safety programs.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020	FY2019
Faculty	45	43	40	51	39	36
Staff	99	96	89	107	96	81
Total Staffing	144	139	129	158	135	117

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale				
2.	Center/Institute	Office of Innovation & Economic Development/Research Park (includes IL Small Business Development Center and Center for Innovation)				
3.	Date	March 17, 2025				
4.	Director	Lynn Andersen Lindberg, Executive Director				
	4.1 Telephone	618.453.6754				
	4.2 E-mail	LINDBERG@SIU.EDU				
5.	Year Established	1986 Innovation & Economic Development; 2001 Research Park, 1985 SBDC				
6.	Illinois State Statute (if pertinent)	N/A				
	(ii portainority					
7.	Reporting Unit	OIED (including the SBDC) reports to the Office of the Vice Chancellor for Research; Research Park is a university- related 501(c)(3) organization				
8.	Туре	Activity				
٥.	. , , , ,	(check all that apply)				
	Instructional	X				
	Research	X				
	Public Service	Х				

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Office of Innovation and Economic Development (OIED) is an umbrella organization for business, economic development, and community engagement activities within the University. This includes the Illinois Small Business Development Center at SIU, Illinois APEX Accelerator at SIU, Business Incubator Programs, Illinois Manufacturing Excellence Center, Center for Delta Studies, Center for Innovation, Office of Workforce Innovation and Research, Illinois Nurse Aide Testing program, Illinois Community Health Worker program, Illinois Economic Empowerment Center at SIU, Career Pathways, SI Film and TV Workforce Training Program, Business Annex (BioLaunch at the Gower Translational Research Center), Saluki Innovation Lab, Saluki Ventures student business incubator, Saluki CEO Corps, University Innovation Fellows, and Jackson CEO.

The SIU Research Park, a separate, university-related 501 (c)(3) organization, is also directed through this office.

The Illinois Manufacturing Excellence Center (IMEC) is an Illinois non-profit corporation with four higher education partners within the State of Illinois. SIU Carbondale is one of those partners. At present, six IMEC staff are SIU employees.

9.2 Mission

OIED & SIU Research Park Mission: To establish and support an environment to foster innovation, commercialize University discoveries, and advance entrepreneurship and economic development within SIU and throughout the region.

IMEC's Core Purpose: to foster long-term economic and workforce competitiveness and its Mission is to partner with Illinois manufacturers to deliver practical solutions that enhance productivity, innovation, and growth for long-term success.

9.3 Objectives

- * Create an entrepreneurial culture on campus, encompassing both spatial opportunities and programmatic activities
- * Integrate activities within OIED and the SIU Research Park with the campus community, ranging from increased traffic, student and community business development, and technology entrepreneurship
- * Optimize business, economic development, and community engagement services for the broader community
- * Become an economic development leader in Southern Illinois and create a regional focus on collaboration among University researchers, regional businesses, and the community

10. Advisory Board

10.1 Advisory Board - Membership

SIU Research Park Board of Directors

Gary Williams, Board Chair (Executive Director, Rend Lake Conservancy District)

Curtis Baird, Vice Chair (CEO Sure-Response)

Teresa Katubig, Secretary (CEO, HireLevel, Inc.)

John Dosier, Treasurer (President, First Southern Bank)

Duane Stucky (Senior Vice President and Board Treasurer, SIU)

Austin Lane (Chancellor, SIU Carbondale)

Sheryl Tucker (Provost and Vice Chancellor, SIU Carbondale)

Costas Tsatsoulis (Vice Chancellor for Research, SIU Carbondale)

Curt Jones (Founder 40 Below Joe)

Angela Povolish (Partner, FMGR Law Firm)

SBDC Advisory Board

Abby Ancell, St. Nicholas Brewing Company

Darren Berger, First Southern Bank

Eric Bridges, Illinois SBDC Network (IL DCEO)

Linda Flowers, Carbondale NAACP

Lynn Andersen Lindberg, SIU Research Park

William Lo, Carbondale Chamber of Commerce

Chastity Mays, Black Chamber of Commerce of Southern Illinois

Lee Messersmith, Cycle 1 Cycling Studio & Mayor, City of Benton

Amy Mills, 17th Street BBQ

Steven Mitchell, City of Carbondale

Karen Mullins, Marion Chamber of Commerce

Martin Parsons, Legal Advocacy

Christina Pisoni, State Farm Insurance

Melissa Ray Roach, SIU Entrepreneurship & Business Development

Vanessa Sneed, SIU Innovation & Economic Development

Jamie Storey, Greater Jefferson County Chamber

10.2 Number of Meetings (In This Year) Research Park – 1; SBDC - 1

11. Annual Performance

11.1 Performance Measures *

<u> </u>	errormance ividasares	
Mea	sure	Results in Year
1.	Total clients (SBDC & APEX)	655
2.	Total business counseling hours (SBDC & APEX)	3,381
3.	Total jobs created—technical assistance (SBDC & APEX)	180
4.	Total jobs retained—technical assistance (SBDC & APEX)	641
5.	Number of business start-ups (SBDC)	34
6.	Number of business expansions/acquisitions (SBDC)	5
7.	Amount of loans secured for clients (SBDC)	\$817,350
8.	Amount of equity secured for clients (SBDC)	\$658,150
9.	Companies assisted (IMEC)	2,890
10.	Return on investment (IMEC)	19:1
11.	Jobs created and retained (IMEC)	7,736
12.	Aggregate impact (IMEC)	\$872M
13.	Entrepreneurs-in-Residence engaged	3
14.	Number of training events (SBDC & APEX)	68
15.	Number of training participants (SBDC & APEX)	908
16.	INACE exams	17,838
17.	DSP units sold	500

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- * Received SBDC of the Year Award for the State of Illinois
- * Maintained Research Park tenancy at 100% and began working with First Southern Bank on One Innovation Place
- * Represented SIU on the SI Now Board of Directors, a success initiative focused on making Southern Illinois a great place to live, work, and do business
- * Offered a business plan competition in conjunction with Regions Bank, providing funding to local and regional small businesses
- * Completed fifth full year of operations of the APEX Accelerator, offering assistance in local, state, and federal government contracting opportunities
- * Maintained incubator capacity at nearly 100%
- * Collaborated with the City of Carbondale to offer the Carbondale Accelerator Program for new and expanding businesses with financial support for completion and business plan pitches
- * Offered 14 community engagement activities throughout Southern Illinois, many in conjunction with the SIU Foundation Saluki Takeover activities
- * Continued renovation of the first floor of Dunn-Richmond including public spaces and offices serving business owners and entrepreneurs
- * Strengthened the Saluki Entrepreneur Corps activities on campus and the Jackson CEO high school entrepreneurship program

- * Worked closely with the Illinois Department of Public Health on the initial development of the Community Health Worker registration platform for the State of Illinois
- * Administered nearly 18,000 CNA certification exams across Illinois
- * Generated nearly \$1 million in testing revenue for Nurse Aide Testing
- * Continued to sell online training and registration to Direct Support Person project in conjunction with the IDHS
- * Worked on specialized research projects with the Southern Illinois Airport, the DuQuoin State Fairgrounds, and the Shawnee National Forest
- * Served as the business development interface with the SIU System Office of Technology Management and Industry Relations
- * Provided assistance to southern Illinois high school CEO programs, promoting retention of youth entrepreneurs, through a variety of workshops and in-person activities
- * Continued collaborative relationships with other economic development agencies including local governments, chambers of commerce, regional planning agencies, educational institutions, and healthcare organizations

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Goal 4 of the Illinois Public Agenda is to better integrate Illinois' educational, research, and innovation assets to meet economic needs of the state and its regions. OIED supports this goal and it is evident through entrepreneurial training, innovation education, its business interface with technology transfer, and the creation of an overall culture of entrepreneurship and innovation on campus and in the region. Removing barriers to entrepreneurship and innovation are at the heart of what OIED does day in and day out.

Ms. Lynn Andersen Lindberg represented the Carbondale campus on several SIU System initiatives focused on business development, regional economic development, and community engagement, working closely with Dr. Connie Frey Spurlock and Mr. Jeff Franklin. Ms. Vanessa Sneed also completed Strategic Doing training with Spurlock and Franklin and will be part of the team offering this training throughout the SIU System and to Southern Illinois communities.

OIED continues to be part of the team that drives innovation and entrepreneurship on campus, as recognized by the Carnegie Foundation designation as a Community Engagement Institution. The Office is represented on the reapplication team by Ms. Lynn Andersen Lindberg. The Association of Public and Land-grant Universities has also designated SIU as an innovation and Economic Prosperity campus. Both designations demonstrate evidence of the University's goal of enhancing our value to and our collaboration with the broader community in our mutual goals of research translation, workforce education, and economic development. Ms. Lynn Andersen Lindberg serves as the co-delegate to the APLU for this activity. The reapplication for this delegation was submitted during the year and received.

SIU plays a prominent role in the vitality and stewardship of the economy and culture of the region by: maintaining the positive symbiosis with the community and region; maintaining the positive relationship through time, energy, and resources; and serving as leaders and resource providers as appropriate. OIED will continue to play an important role in business, economic,

and community engagement throughout the region, building upon the Research and Innovation pillar of Chancellor Lane's Imagine 2030 strategic plan.

11.4 Evidence of Support for Center/Institute Objectives

The Office of Innovation and Economic Development and "The Center" are one in the same. Examples of support for objectives enumerated above follow.

- Create an entrepreneurial culture on campus—The Saluki Entrepreneur Corps expanded its
 activities to include in-person events with a variety of entrepreneurs from the region as
 well as SIU alumni
- Integrate activities within the SIU Research Park with the campus community—Developed
 the Business Annex at BioLaunch where researchers and scientists interested in starting or
 expanding their technology-based businesses can receive assistance and begin their
 entrepreneurial journeys
- Optimize economic development services for the broader community—offered small
 business development and procurement assistance services to regional businesses
 throughout Southern Illinois. In addition, received funding to develop an Economic
 Empowerment Center to meet the needs of under- and unserved entrepreneurs as well as
 provide SNAP, TANF, and Life Skills training to residents in Jackson County and beyond.
- Become an economic development leader in Southern Illinois—started or completed indepth research projects with the Southern Illinois Airport, the DuQuoin State Fairgrounds, and the Shawnee National Forest; brought together University researchers, regional businesses, and other organizations to support the development of the iFERM Hub, a part of the Illinois Innovation Network and the soon-to-be-completed BioLaunch facility; participated in the development of SI Now, a 17-county success initiative that fills in the economic development gaps throughout the region, with an emphasis on business attraction.

11.5 Evidence of Organizational Effectiveness

OIED/Research Park had several major staff changes during the year. A full-time incubator director left and was replaced by another OIED staff member, which then required filling that person's position. The team that subsequently has been developed is very strong with each member bringing a unique set of skills to the organization. This leadership team has quickly streamlined organizational processes and looked for ways to increase the impact of the organization on campus and throughout the region. Staff continue to serve on various boards, committees, and working groups and provide leadership in many of these activities. The organizational effectiveness of OIED and the Research Park are built upon the foundation of providing services and resources that are needed and have impact. These successes are evidenced through the metrics provided above.

12	Institutiona	l Assessment
1/	institutiona	LASSESSMENI

12.1	Date of Last Review	None
12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: Office of Innovation & Economic Development

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	\$552,853	\$289,320	\$282,029	\$276,499	\$379,370
Income Fund	338,219	571,895	239,941	205,476	196,470
Grants & Contracts	4,715,088	2,553,709	2,499,400	2,450,391	2,282,524
SBDC Generated Income	0	0	0	0	700
Other Course Revenue	131,576	109,350	129,741	95,500	117,250
Total Revenues	\$5,737,736	\$3,524,274	\$3,151,111	\$3,028,297	\$2,976,314
Expenditures					
Salaries/Wages & Benefits	\$2,526,607	\$2,186,727	\$2,047,285	\$2,007,142	\$2,133,956
Building Maintenance	71,047	76,989	27,270	15,043	24,898
Internal Roof Loan	0	0	0	0	0
Contractual	806,706	655,819	390,101	382,451	345,452
Supplies & Commodities	28,693	31,650	19,258	14,315	31,643
Miscellaneous	617,681	445,508	591,765	593,296	597,251
Total Expenditures	\$4,050,734	\$3,396,693	\$3,075,679	\$2,997,204	\$3,133,200
Revenue Minus Expenditures	\$1,687,002	\$127,581	\$75,432	\$30,093	\$-156,886

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	0	0	0	0	0
Staff	28	23	18	21	21
Total Staffing	28	23	18	21	21

RESOURCES: SIU Research Park

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Devenue					
Revenues					
State Appropriations	\$0	\$0	\$0	\$0	\$0
Income Fund	0	0	0	0	0
Grants & Contracts	262,088	248,563	253,291	202,549	255,295
Budget Allocation from SIU	98,871	96,892	94,702	82,518	98,556
Interest Income	4,011	559	9,108	1,746	1,815
Award Income	0	0	153,183	56,817	40,000
Total Revenues	\$364,970	\$346,014	\$510,284	\$343,630	\$352,406
Expenditures					
Budget Expended at SIU	\$98,871	\$96,892	\$94,702	\$82,518	\$98,556
Management and General	123,545	99,020	101,241	262,429	255,456
Depreciation	13,172	119,220	118,367	13,525	12,046
Amortization Expense	118,287				
Interest Expense	27,481				
Total Expenditures	\$381,356	\$315,132	\$314,310	\$358,472	\$366,058
Revenue Minus Expenditures	\$-16,386	\$17,151	\$195,974	\$-14,842	\$-5,855

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	0	0	0	0	0
Staff	1	1	1	1	1
Total Staffing	1	1	1	1	1

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Paul Simon Public Policy Institute
3.	Date	02/21/2025
4.	Director	John T. Shaw
ᅻ.	Director	JOHN 1. Shaw
	4.1 Telephone	618-453-4003
	4.2 E-mail	john.shaw@siu.edu
5.	Year Established	Approved 1996, opened 1997
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Office of the Chancellor
•	reporting one	Office of the Officeroon
8.	Туре	Activity
О.	Type	(check all that apply)
	Instructional	X
	Research	Х
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Paul Simon Public Policy Institute was opened in January 1997 to fulfill the following overarching objective summarized in the New and Expanded Program Request (NEPR) approved by the Illinois Board of Higher Education at the Institute's founding in 1996.

"The guiding principle of the Institute will be the premise that rational scholarly analysis contributes to the making of more effective and more efficient public policy and contributes to elevating the level of public discourse in this country "(NEPR, 1996, 2).

9.2 Mission

The Institute's mission statement is as follows:

The Paul Simon Public Policy Institute acts on significant and controversial issues impacting the region, the state, the nation, and the world. The Institute is committed to developing and working to implement approaches that bring concrete, positive results in tackling some of the most difficult challenges in the public policy arena.

The Institute focuses its efforts on fostering:

- *Ethical conduct in government.
- *Opportunity and fair treatment for citizens in America and throughout the world.
- *Promoting responsible citizenship for all Americans- but particularly for young Americans.

9.3 Objectives

The Institute executes its mission by working on a variety of specific annual objectives. Those include:

- Working on our "Better Politics, Smarter Government Agenda," which includes the Renewing Illinois Student Summit, Simon-Edgar Award, Paul Simon Democracy Prize, and Understanding Our New World virtual series.
- Analyzing public policy through wide-ranging discussions with leading experts and occasional papers.
- Providing and supervising paid internships and other learning opportunities for university students.
- Hosting lectures and conferences with noted leaders in public policy, journalism, and other fields.

10. Advisory Board

10.1 Advisory Board - Membership

The Board of Counselors are:

Reilly Bowler (Simon family)

Nancy Chen (member at-large)

Ross Glickman (State Democratic Party appointment)

Matt Kupec (ex officio member, Vice Chancellor for Development & Alumni Relations)

Austin Lane (ex officio member, SIU Chancellor)

Bill Norwood (member at-large)

Vicki Otten (member at-large)

Howard Peters (member at-large)

Martin Simon (Simon family) - Chair of the Board

John Trasviña (member at-large)

Lance Trover (State Republican Party appointment)

Paula Wolff (member at-large)

David Yepsen (past director)

Vacant (member at-large)

Vacant (member at-large)

10.2 Number of Meetings (In This Year) 1 meeting per year

11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year
1.	The Simon Review (Published Papers)	3-4	3
2.	Public Events (in-person)	6	9
3.	Public Events (virtual)	12	12
4.	Internships Filled	8	8
5.	Graduate Fellowships funded/filled	2	0

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

We held 12 virtual events in a wide variety of topics that were free and open to the public. These events included Understanding Our New World, Meet the Mayor, and Illinois Authors.

Nine in-person events that were open to the public were held in FY24.

We published three academic *Simon Review* papers. There were 4,169 total downloads during FY24.

We placed five interns in Springfield for the spring 2024 legislative session, one intern at Jackson County States Attorney's Office for fall 2023, one intern at SIUC Small Business

Development Center for fall 2023, and one intern at the Carbondale City Manager's office for spring 2024.

We awarded the Jeanne Hurley Simon Memorial Scholarship, Barbara Brown Memorial Scholarship, Edwin D. Phillips Memorial Scholarship, Mike Lawrence Scholarship, and David Yepsen Director's Scholarship to SIU Students.

The Director, John T. Shaw; University Professor, Dr. Linda Baker; Visiting Professor, Dr. John S. Jackson; are frequently called on by local, state, and national media, both print and electronic, to comment on, and analyze a broad range of governmental, political, and public policy issues. In each of these cases, their affiliation with the Institute is prominently displayed.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Institute's mission and activities support Goals 1-4 of the Illinois Public Agenda either directly or indirectly. Our guiding principle is "the premise that rational scholarly analysis contributes to the making of more effective and more efficient public policy and contributes to elevating the level of public discourse in this country." We focus on public policy and encourage university students, faculty, and staff to consider and analyze public policy issues.

The Institute has organized and sponsored conferences on college affordability, the funding of K-12 education, the necessity of workforce development and the healthcare system in Illinois. We value and emphasize the importance of public service. We encourage university students to consider careers in public service. Through our paid internships, fellowships, and other work opportunities, students earn critical on-the-job training. Many of our former interns have had productive careers in local, state, and national government jobs, as well as non-profit organizations.

The Institute's mission and activities also support SIU Carbondale's strategic plan. Specially,

Student Success and Engagement: The Institute remains keenly focused on providing opportunities for students through internships, scholarships, fellowship, ambassadorships, work opportunities, and mentoring.

Diversity, Equity, and Inclusion: The Institute supports and implements this value in all our work, including the selection of speakers and program participants.

Branding and Partnerships; The Institute has developed a focused agenda that reflects the values of Paul Simon and elevates and enhances SIU. Leaders on campus and in public life in Illinois and across the country refer to the Institute as a "jewel" of SIU. The Institute actively seeks out partnerships that enhance our work and advance the vision of Paul Simon.

Research and Innovation: The Institute supports and undertakes research, especially research that bridges the gulf between policymakers and scholars from the academic world. Since 2020, the Institute has created several innovative virtual programs that have elevated the Institute and SIU and significantly expanded our geographical reach.

Sustainability: The Institute supports this value and seeks tangible ways to support it in our work.

Institute staff have also contributed by teaching at SIU. John Shaw has taught classes on Congress and Statesmanship. Linda Baker taught a health policy course to fourth year SIU School of Medicine students. John Jackson has taught various "Learning in Retirement" courses.

We constantly stress the need for higher education and university-based research to make Illinois more competitive in an increasingly interdependent global economy.

Ideally, education illuminates the political process and the operation of government. This ambition is consonant with and reinforces the four major goals of the Illinois Public Agenda, the SIU system, and SIUC campus priorities.

11.4 Evidence of Support for Center/Institute Objectives

Strong support for the Institute is reflected by lavish public praise of our work by political, business, and academic leaders, hundreds of emails expressing gratitude, compelling letters of appreciation, and generous contributions by regular donors and new supporters. We seek feedback from those who attend our events and carefully consider these responses and use them to fine-tune future programs.

We enjoy good attendance at our in-person and virtual events. Audiences include students, faculty, and staff from SIU, area K-12 students and teachers, interested citizens and media outlets. For example, events with Ban Ki-moon, Temple Grandin, Richard Russo and Scott Simon drew standing room only audiences.

More than 100,000 people in the last four and a half years have viewed our virtual events on YouTube. People from 44 states and 28 countries have registered for these virtual events. These programs give the Institute a reach and an audience that it has never had before in its more than 25-year history. The comments we have received about our virtual events have been deeply gratifying. Some are included in this report.

Simon Review papers are widely downloaded. Through the OpenSIU service at Morris Library, there have been thousands of downloads of these papers by people in the US and internationally.

The Institute's policy experts are frequently interviewed by the media. John Shaw, John Jackson, and Linda Baker have been interviewed by The New York Times, Wall Street Journal, The Washington Post, Newsweek, Politico, National Public Radio (NPR), Chicago Tribune, The Chicago Sun Times, The St. Louis Post-Dispatch, The Southern Illinoisan, and other outlets. Our staff also work with WSIU for radio and television segments and appear on WSIL, KFVS, and WPSD television.

11.5 Evidence of Organizational Effectiveness

For more than a quarter century, the Institute has promoted strong public policies and helped launch the careers of students and other young people. Our research, commentary, and conversations have earned praise in Illinois, across the US, and internationally.

Some of the Institute's effectiveness can be easily quantified—reports issued, internships offered, scholarships and prizes awarded, audiences reached, and plaudits received. However, some of the significant accomplishments of the Institute do not lend themselves to simple quantification.

We continue to successfully place SIU undergraduate students in the state capitol in a variety of offices as interns during the spring legislative session. These interns are supervised by Linda Baker. She teaches a course for the interns through the political science department. The Institute continues to place Demuzio interns in local government offices in Southern Illinois. These interns are supervised by John Jackson.

The Celia M. Howard Foundation partnership provides fellowships for graduate students. They are impressed by the work of our past and current fellows.

12.	Institutiona	l Assessment

12.1	Date of Last Review	FY23	
12.2	Decision at Last Review	X	Center/Institute in Good Standing Center/Institute Flagged for Priority Review
12.3	Explanation	N/A	Center/Institute Suspended

RESOURCES: (Paul Simon Public Policy Institute)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	391,502.20	327,655.13	340,444.74	379,847.12	415,165.12
Income Fund	001,002.20	02:,000::0	0.0,		,
Grants & Contracts					
Total Revenues	391,502.20	327,655.13	340,444.74	379,847.12	415,165.12
Expenditures*					
Salaries-Staff/Faculty	391,141.20	366,830.30	344,097.56	376,801.92	378,587.52
Wages	0	0	0	0	8,969.17
Equipment	0	22.70	0	0	0
Employer Group Cont	5,404.00	0	0	0	0
Travel	0	0	0	0	0
Commodities	0	0	0	249.23	1,033.95
Contractual Services	3.48	121.71	108.54	2,036.68	7,295.65
Telecommunications	0	0	0	644.25	959.46
Total Expenditures	396,548.79	366,974.71	344,206.10	379,732.08	398,426.83
Revenue Minus	- 5,046.59	- 39,319.58	- 3,761.36	115.04	16,738.29
Expenditures					

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	.77	.77	.77	.77	1
Staff	4	4	3	4	4
Total Staffing	4.77	4.77	3.77	4.77	5

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023- June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University School of Medicine
2.	Center/Institute	Simmons Cancer Institute at SIU
3.	Date	March 3, 2025
4.	Director	Aziz Khan, MD
	4.1 Telephone	217-545-7969
	4.2 E-mail	akhan@siumed.edu
5.	Year Established	Academic Year 2000
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Southern Illinois University School of Medicine
	1 0 -	
8.	Туре	Activity
	71	(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

Overview

9.1 Description

The Simmons Cancer Institute at SIU (SCI) is a multi-disciplinary cancer center based in Springfield, IL to serve the population of central and southern Illinois. SCI provides access to state-of-the-art treatment and promising new clinical trials to the residents of central and downstate Illinois. The Institute works collaboratively with local hospitals and other community providers in the region to share technology, broaden research, and raise treatment standards and expands the region's ability to attract research and programmatic funding that builds the infrastructure necessary for sophisticated research programs and excellent patient care. In addition to this, the Institute augments medical student, resident, fellow and graduate student training in cancer/oncology care, and provides patient and physician education across the region.

SCI features a comprehensive approach to patient care organized around organ site care teams which are designed to enhance effective, efficient treatment of the whole person and not just the disease. Modeled on best practices promoted by the National Cancer Institute, these care teams include physicians, nurses, psychologists, navigators, pharmacists and other specialists, such as pathologists and radiation oncologists, who work together to provide high-quality patient care and complementary therapies to address the patient's needs.

SCI provides a variety of cancer screenings working in partnership with other health care professionals and organizations. As an ongoing effort to raise awareness and prevention, SCI maintains a strong outreach and referral program, including patient education and health screenings in the community. Physicians and scientists perform cancer related discovery research, applied research and, population health research. Cancer clinical trials are available at SCI through the National Community Oncology Research Program, pharmaceutical sponsors and the medical school's physicians' personal research.

The Simmons Cancer Institute is housed in a 63,000 square foot facility on the Springfield clinical campus at SIU that was funded in part through state-appropriated capital funds. This facility features an infusion center, nearly three dozen exam rooms, minor procedure facilities, the nationally accredited breast center (National Accreditation Program for Breast Centers or NAPBC), nationally accredited oncology services (Quality Oncology Practice Initiative or QOPI), nationally accredited retail pharmacy (Accreditation Commission for Health Care Centers or ACHC), as well as x-ray, ECG, and laboratory services.

9.2 Mission

To serve the people of central and southern Illinois by addressing their present and future cancer care needs through medical education, biomedical research, patient care, and community service.

9.3 Objectives

Objectives	
Objective Number	Objective Description
1	To markedly reduce the burden of cancer on patients, their families, and the community by using innovative strategies developed from collaborations with researchers and healthcare workers.
2	To advance knowledge about cancer awareness, prevention, early detection, care, and treatment.
3	To provide preventative screenings to promote early detection and treatment.
4	To enhance a population science program in rural areas to assist with cancer prevention.
5	To provide the latest cutting-edge treatment and research that translates new scientific findings into therapies (i.e., bench-to-bedside) so as to improve care to patients regardless of their ability to pay.
6	To develop highly functioning Cancer Care Teams for all major cancers that employ a multidisciplinary approach to comprehensive patient care of the highest quality, and "cutting edge" treatments. To develop within each working group, mature and relevant translational research program.
7	To develop strategies for pursuing available funding streams from the federal and state governments as well as opportunities for philanthropic donations.
8	To advance our hematology-oncology fellowship program to help address the national shortage of hematology–oncology physicians with a focus of local recruitment and retention.
9	To continue to provide oral cancer treatment therapies through our retail pharmacy to assist with patient treatment and provide convenience for care.
10	To expand our infusion services by building out a non-chemo infusion unit.
11	To develop a Melanoma Center, complete with new clinic space, as well as collaborative efforts with dermatology, plastic surgery, surgical oncology, and medical oncology. Efforts include recruitment of a discovery scientist with a concentration in melanoma or immunology related research.

10. Advisory Board

10.1 Advisory Board - Membership

<u>SCI Steering Committee</u>: provides recommendations to the SCI Executive Director on matters concerning the goals and performance of the institute in accordance with its mission. FY2024 members were:

- Aziz Khan, MD, Executive Director, Simmons Cancer Institute
- Jerry Kruse, MD/MSPH, Dean and Provost, SIU School of Medicine; and CEO SIU Medicine
- John Flack, MD, Professor and Chair, Internal Medicine, SIU School of Medicine
- Michael Neumeister MD, Professor and Chair, Surgery, SIU School of Medicine
- Laurent Brard, MD, Professor, Obstetrics and Gynecology, SIU School of Medicine
- Don Torry, Associate Dean of Research, SIU School of Medicine
- Charles Callahan, MD, President and CEO, Springfield Memorial Health
- Kevin England, Senior VP and Chief Administrative Officer, Springfield Memorial Health
- John Horvat, Associate Provost of Finance and Administration, SIU School of Medicine
- Lisa Daniels, Director of Administrative Services, Simmons Cancer Institute
- Mary Haley-Emery, Healthcare Administrator III, Simmons Cancer Institute

<u>SCI Management Committee:</u> established to oversee the strategy and direction of the institute. This committee reviews the SCI's clinical, charitable, educational, research, and community service activities. In FY2024, the members were:

- Lisa Daniels, Director of Administrative Services, Simmons Cancer Institute
- Mary Haley-Emery, Healthcare Administrator II, Simmons Cancer Institute
- Lori Barker, Senior Business Manager, Simmons Cancer Institute
- Aziz Khan, MD, Executive Director, Simmons Cancer Institute
- Kathy Robinson, Director of Clinical Research, Simmons Cancer Institute
- Kissindra Moore, Healthcare Administrator I, Simmons Cancer Institute

10.2 Number of Meetings (In This Year)

<u>SCI Steering Committee – four (4) meetings in</u> FY2024 (meetings are held quarterly)

<u>SCI Management Committee – twenty-four (24)</u> <u>meetings in FY2024 (meetings are held semi-</u> monthly)

11. Annual Performance

11.1 Performance Measures *

	-	5 1/ 1 1/
sure	Target for Year	Results in Year
Total Patient Visits, Served by SCI-Total	23,000	25,423
Patient Visits		
Total New Patients Served by SCI-Total	500	287
New Patient Visits		
Total Infusion Patient Visits Treated by SCI	7,300	9,415
Clinical Trial Studies-Open Studies-	125	131
(NCORP Studies and SCI Clinical Trials)		
Clinical Trial Participation-(NCORP studies	164	172
and SCI Clinical Trials)		
Cancer Related Research-Funded	20	12
Discovery Science and Translational		
Projects and Non-Clinical Trial IRM		
regulated Studies.		
Published Articles-Number	6	11
Patient/Community Education Programs	2,500	2,383
Outreach Programs/Screenings	500	1,389
	Patient Visits Total New Patients Served by SCI-Total New Patient Visits Total Infusion Patient Visits Treated by SCI Clinical Trial Studies-Open Studies- (NCORP Studies and SCI Clinical Trials) Clinical Trial Participation-(NCORP studies and SCI Clinical Trials) Cancer Related Research-Funded Discovery Science and Translational Projects and Non-Clinical Trial IRM regulated Studies. Published Articles-Number Patient/Community Education Programs	Total Patient Visits, Served by SCI-Total Patient Visits Total New Patients Served by SCI-Total New Patient Visits Total Infusion Patient Visits Treated by SCI Clinical Trial Studies-Open Studies- (NCORP Studies and SCI Clinical Trials) Clinical Trial Participation-(NCORP studies and SCI Clinical Trials) Cancer Related Research-Funded Discovery Science and Translational Projects and Non-Clinical Trial IRM regulated Studies. Published Articles-Number 6 Patient/Community Education Programs 23,000 23,000 23,000 200 7,300 125 (NCORP Studies 125 (NCORP Studies 125 (NCORP studies 164 200 200 201 201 202 203 203 203

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

In FY2024, major accomplishments of the Simmons Cancer Institute included the following:

- SCI's retail pharmacy became accredited through the Accreditation Commission for Health Care.
- Hematology/Oncology Fellowship held its third graduation since the program began in 2019. SCI successfully recruited 2 additional fellows again in FY2024. The number of fellows being trained at SCI remains at 6.
- SCI held its seventh annual combined Summer Internship Presentation and Donor Appreciation event. Donors who contribute to Denim & Diamonds fund the paid summer internship for four college undergraduate students who are interested in cancer research. In FY24 four of the students were from the Springfield area and one was from Carbondale. Each intern gave a 15-minute presentation of their research project. The event was attended by faculty, researchers, intern mentors, family members and donors.
- The Side-by-Side exercise program was held both virtually and in person for cancer patients, survivors and caregivers. Side by Side is a grant funded exercise program that is offered regardless of where treatment is being received.
- SCI continued to participate in Mammogram Monday's outreach services that include Springfield, Lincoln, Taylorville and Hillsboro locations. Six hospitals participate in Mammogram Mondays.
- SCI offered colorectal cancer screenings and skin cancer screenings as well as participated in several community health fairs.
- SCI experienced a large increase in patient referrals and resumed services that were previously halted due to staffing shortages and COVID in FY21 and FY22 in the infusion unit.

 We were able to continue to hire clinical staff during a time of critical staff shortages nationwide. Including fully staffing the infusion unit and hematology/oncology clinic.

These accomplishments were in addition to ongoing patient care, research, educational, and outreach efforts performed by SCI in FY2024.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Simmons Cancer Institute directly supports key priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine, particularly those associated with community service as expressed through patient care and outreach, workforce development, collaboration with community partners, and research and scholarship.

SCI's educational and research activities support the Illinois Public Agenda goal calling for educational, research, and innovation assets to be used in advancing the economic needs of the state and region. The Institute's grant funded research and resident education programs are examples. Southern Illinois University system priorities, as outlined by the SIU Board of Trustees, include the call for innovation, the addressing of health care needs in the region, and the formation of partnerships with public and private entities to increase the university's outreach into the community. SCI's patient care, clinical trials, and community education and screening programs advance these priorities. SIU Carbondale's strategic plan calls for research, scholarly and creative activities that benefit the community. SCI's basic and applied research programs and its emerging work in population health science research directly support these priorities. SIU School of Medicine's strategic plan calls for clinical practice, workforce development, research, and professional engagement. SCI's clinical practice, research, and community engagement activities support the school's priorities as well.

11.4 Evidence of Support for Center/Institute Objectives

In FY2024, the Simmons Cancer Institute advanced its primary objectives of becoming the premier comprehensive cancer center for rural Illinois; enhancing research regarding the causes and treatments of cancer; and partnering with other health care, community, and educational organizations to reduce the burden of cancer on patients, their families, and the community. Significant achievements in this program year include the following:

- Provided high-quality direct patient care to cancer patients.
- SCI awarded four (4) Summer Internships to local college students to work with research mentors.
- Two (2) Team Science Grants Awarded.
- Partnered with the SIU Office of Population Science and Policy to further oncologybased population research. We hold monthly meetings to further develop population-based grants and programs in cancer.
- Continued partnerships and relationships with local communities to promote health fairs, cancer screenings, and disease management to address high-risk populations in central and southern Illinois.

11.5 Evidence of Organizational Effectiveness

12.3 Explanation

The Simmons Cancer Institute is effective as an organization. As noted in the university's most recent program review, the Institute has established excellent patient care, research, and community outreach programs which support the priorities of the State, University, and Medical School. SCI has expanded grant funding and maintained its state support during difficult economic times. This is evidence of its ability to attract key resources and demonstrates support for the institute by key constituencies. SCI is meeting its organizational objectives and the expectations of the community, university, and state; it is positioned to prosper in the future.

12. Institutional Assessment				
	12.1	Date of Last Review	2018-S	elf Study
	12.2	Decision at Last Review	Х	Center/Institute in Good Standing
				Center/Institute Flagged for Priority Review Center/Institute Suspended

RESOURCES: (Center/institute name)

N/A

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	2,065,845	2,049,770	2,017,860	1,987,845	1,955,817
Income Fund	0	0	0	0	0
Grants & Contracts	0	0	0	27,527	26,169
Grants & Contracts-Other	466,810	398,497	353,675	199,670	248,675
Total Revenues	2,532,655	2,448,268	2,371,535	2,215,042	2,248,363
				•	
Expenditures*					
Salaries	1,457,652	1,304,961	1,218,060	1,263,717	1,377,990
Travel	0	74	0	0	473
Equipment	19,343	46,385	22,705	53,818	49,782
Commodities	9,510	5,594	5,713	4,519	8,100
Contractual Services	178,601	158,259	217,119	222,594	224,506
Telecommunications	20,456	24,743	28,127	35,106	30,364
Other	38,465	21,833	17,983	2,864	15,503
Total Expenditures	1,724,027	1,561,849	1,509,707	1,582,618	1,706,718
·					
Revenue Minus Expenditures	808,628	886,419	861,828	632,424	541,645

- 1. State Appropriations include program operating fund first appropriated by the State of Illinois in FY2002 as well as the impact of state budget changes and internal reallocations since that time.
- 2. Grants and Contracts-Other includes revenue from SIU Foundation grant to SIU School of Medicine for SCI.
- 3. Contractual Services includes medical services provided to clinical trials patients, external consultant fees, and bond repayment.
- 4. Other includes indirect costs from clinical trial expenses.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	5.88	5.22	3.44	4.32	4.076
Staff	51.35	53	44.6	60.25	55
Total Staffing	57.23	58.22	48.04	64.57	59.076

- Staffing (FTE) includes FTEs of those faculty and staff receiving direct salary support from SCI.
- 2 Includes 501/504 BPs

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	STEM Education Research Center
3.	Date	March 20, 2025
4.	Director	Harvey Henson
	4.1 Telephone	618-453-4214
	4.2 E-mail	henson@siu.edu
5.	Year Established	2019 (September 10, 2019)
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Office of the Vice Chancellor for Research (as of 03/01/2021)
	1 3 -	
8.	Type	Activity
	,,	(check all that apply)
	Instructional	
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The STEM Education Research Center (SERC) at Southern Illinois University at Carbondale (SIU) is a research and public service unit of Science, Technology, Engineering, and Mathematics (STEM). SERC obtained temporary status on July 1, 2014 and was granted permanent status on September 10, 2019 by the Illinois Board of Higher Education. SERC is a diverse community of faculty, staff, educators, and industry partners working together to prepare the next generation of STEM educators, researchers and professionals. SERC addresses critical issues in STEM education at local, state and national levels through multidisciplinary and integrative strategies in research, education and service. SERC builds regional and state-wide collaborations with other institutions to strategically advance STEM literacy and learning. SERC creates new programs and develops external funding initiatives to support STEM education research and service, to provide professional development for PreK-12 educators, and to improve students' preparation and competency in STEM.

9.2 Mission

The STEM Education Research Center at SIU organizes and sustains a diverse community of educators and researchers, collaboratively prepares the next generation of STEM educators and professionals, and advances STEM literacy at the local, state, and national levels through interdisciplinary and integrative strategies in research, education, and service.

9.3 Objectives and Goals

- 1. Develop STEM education and research programs at SIU and support existing programs by obtaining grant and contract funding.
- 2. Provide professional learning, curriculum development, workshops and support for K-12 teachers and administrators.
- 3. Research and facilitate strategies of teaching aligned to the Next Generation Science Standards and Common Core State Standards for improved student and public literacy.
- 4. Build partnerships with local, state and national stakeholders to advance STEM teaching, learning and research.
- 5. Build partnerships to improve and implement state assessments.
- 6. Collaborate with the SIU community to provide students with excellent preparation for STEM programs and professions.

10. Advisory Board

10.1 Advisory Board – Membership

Internal Board of Advisors

Lingguo Bu, Professor, Math Education, School of Education
Justin McDaniel, Associate Professor, School of Human Sciences
Bruce DeRuntz, Professor, School of Applied Engineering and Technology
Sue Rimmer, Professor Emerita, School of Earth Systems and Sustainability
TBD

External Board of Advisors

Chris Midden, Science Teacher, Unity Point School, Carbondale, Illinois
Daniel Booth, Superintendent, Carbondale Community HS District 165, Carbondale, Illinois
Mark Bradley, President/CEO, Media Consultants Marketing (Retired), Carbondale, Illinois
Travis Akin, President, Catalyst Partners, LLC, Marion, Illinois
TBD

10.2 Number of Meetings (In This Year) 3	
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11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year
1.	Submit external grant and contract proposals	Submit 5 proposals	Exceeded target; 13 proposals submitted and 6 were funded; 6 prior grants continued
2.	External Funding	\$1,500,000 in funding	Exceeded target; new funding was \$7,568,080 in FY24
3.	Professional conference presentations by staff and faculty	5 national presentations and 5 regional presentations	Exceeded target; 6 national conference presentations; 2 regional and local conference presentations; 5 eclipse related presentations
4.	Publications in peer-reviewed journals by staff and faculty	3-4 articles	Exceeded target; 6 published articles; 1 book chapter
5.	Coordinate new and existing outreach activities	Add 1 new program	Exceeded target; led girls STEAM camp; participated in STEAM nights at 4 local schools
6.	Create professional development opportunities for K-12 educators	Expand existing programs to impact teachers	Completed target; wrapped up item development for the

Measure		Target for Year	Results in Year
			Illinois Science Assessment (ISA) project; led professional learning in science workshops for 58 teachers, and online webinars for 554 teachers across Illinois; hand scoring the ISA involved 200 teachers
7.	Obtain physical space for the STEM Education Research Center	Request space to accommodate growth of the Center as needed	Completed target; Space Allocation Request was submitted February 21, 2024; request approved June 5, 2024; Pulliam Hall rooms 106 and 108, and office suites 217, 218 and 219 granted
8.	External and Internal Advisory Boards	Add external board members and meet at least once per year	Completed target; two external members added; both boards met this year; one internal member needed

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In FY 2024)

The STEM Education Research Center (SERC) collaborated on multiple grant and contract proposals in FY 2024. Thirteen proposals were submitted and 6 prior grants continued. Six of these proposals were funded by state, federal, and private agencies. In total, SERC was awarded approximately \$7.6M in new external grants and contract funding during FY 2024. Dr. Harvey Henson was Principal Investigator (PI) or Co-PI on these proposals.

Science Professional Learning Initiative for Teachers

The Science Professional Learning (PL) Initiative, led and supported by the Illinois State Board of Education (ISBE) in partnership with Southern Illinois University (SIU) and the National Science Teaching Association (NSTA). ISBE provided \$400,000 to SERC at SIU to work with NSTA on program development and implementation. The program successfully engaged a total of 554 Illinois educators through targeted science PL webinars (online) in spring 2024, and a total of 58 educators were engaged through science PL workshops (in-person) during June 2024. These PL offerings were aligned with the Illinois Learning Standards in Science (ILS-S) based on the Next Generation Science Standards (NGSS). The FY2024 program comprised four webinars and one in-person workshop conducted in three locations: Bloomington (Central Illinois), Glen Ellyn (Northern Illinois), and Carbondale (Southern Illinois). Informed by the Science Professional Learning Needs Assessment (SPLNAS) survey, which identified educators' strong preferences for

assessing three-dimensional learning and implementing phenomena-driven instruction, the PL Initiative aimed to increase educators' confidence, readiness, and ability to effectively implement science teaching and learning practices aligned with the NGSS.

NSF S-STEM Program

Dr. Harvey Henson and colleagues in the School of Earth Systems and Sustainability continued recruiting and mentoring earth science students for the *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists* program sponsored by the NSF. The STEM scholarships (S-STEM) grant totaling \$1,333,365 supports geoscience majors transferring to SIU. This collaborative program provides 80 scholarships which are based upon student financial need up to \$10,000/year over the next five years. The new program initiated a recruitment plan that created the first student cohort in Fall 2023.

Illinois Junior Science and Humanities Symposium

The SERC co-sponsored and hosted the 46th annual Illinois Junior Science and Humanities Symposium (IJSHS) on February 21-22, 2024 (https://stemedresearch.siu.edu/ijshs/). The IJSHS allows high school students to present their original research at SIU and compete for an invite to the National competition. The IJSHS program promotes STEM research among 9-12 grade students across Illinois (excluding Cook County which has a separate symposium) and introduces STEM academic programs and career opportunities with support. Support and scholarships are provided by the Army, Navy and Air Force in partnership with the National Science Teaching Association, and SIU scholarships are awarded by the College of Agricultural, Life and Physical Sciences. Students who qualified for participation included several Illinois high schools; 35 students (21 presenters, 14 guests), and 10 teachers and parents. A delegation of 5 students were selected to represent Illinois at the National symposium.

Eclipse Research and Outreach (https://eclipse.siu.edu/eclipse-research/)

SERC sponsored and coordinated multiple activities and led funded programs and projects to support the Annular Eclipse and Total Solar Eclipse events as a part of *SI Eclipse Crossroads of America*.

For example, **SolarSTEAM** (Science, Technology, Engineering, Arts, and Mathematics) (https://solarsteam.siu.edu/) is a highly talented and experienced team of researchers, educators, and NASA



scientists from across the US, led by Principal Investigator Dr. Harvey Henson and supported by NASA. SolarSTEAM seeks to advance national STEM goals with a focus on heliophysics, a critical science that impacts daily life. We start with a basic goal: making heliophysics a householdword in America. We seek to move the public from a state of recognizing the Sun, Moon, and planets to an understanding of what they are and how they impact our lives. We will empower Americans, nationwide to walk with NASA, to be a part of historic events and discoveries, as personally invested partners in the story of NASA Heliophysics. SolarSTEAM is a nationwide-impact, multifaceted, multicultural heliophysics science engagement and community building program using a hybrid Big Events-based engagement strategy.

Our team builds on 20+ years of experience in public engagement through highly successful programming, such as the Transit of Venus, the 2017 Solar Eclipse, Sun Earth Days, and

exemplary large scale public astronomy and outreach programs conducted at Southern Illinois University Carbondale (SIU) and in collaboration of The Adler Planetarium of Chicago.

The **Dynamic Eclipse Broadcast (DEB) Initiative** is a nationwide citizen science team led by Co-Pls Bob Baer, Dr. Harvey Henson and Dr. Cori Brevik at SIU Carbondale to broadcast new and exciting views of eclipses. Funded by NASA SMD, the DEB Initiative created a North American network of volunteer citizen scientist solar observation teams. Teams received training and became part of the network that conducted coordinated solar observations leading up to and during the Annular Eclipse event on October 14, 2023 and 2024 Total Solar Eclipse event on April 8, 2024, and web produced broadcast images from observing sites in near real-time. Compelling images from the partial phases of the eclipses, and science quality data from the path of totality, were collected from 82 sites from Mexico, Canada and across the USA. Inexpensive camera and telescope systems, combined with new data analysis techniques, enabled unique observations of these solar eclipses.

Another program is the exciting **Einstein's Incredible** Universe (EIU), a space science outreach program aimed at inspiring young women in STEM. The EIU project is led by Dr. Harvey Henson, Interim Director of the STEM Education Research Center and Bob Baer in the School of Physics/Applied Physics and supported as a NSF subaward on project directed by Cosmic Picture. "Einstein's Incredible Universe," a major media and outreach program is designed to catalyze interest in space science and spark scientific curiosity in learners worldwide, but especially young girls. Additional funding from NASA for the **Dynamic Eclipse Broadcast Initiative** (DEB-I) led by Bob Baer, Dr. Harvey Henson and Dr. Corrine Brevik provided 20 imaging setups for the girl groups nationwide through an application process administrated by the National Girls Collaborative Project (NGCP). NGCP engages young women nationwide in exploring STEM



EIU Eclipse team of girls at SIU

topics such as space, time, and gravity. The 20 girl groups participated in 2024 total solar eclipse observations that investigated the nature of the solar corona. The centerpiece of the project is a film for giant screen and IMAX theaters that will celebrate the groundbreaking work of Albert Einstein, the curiosity that drove him to explore space and time, and the scientific creativity that led to his most revolutionary ideas.

Clean Soll Collaboration

The SERC and School of Education (SOE) continued to partner with the Clean SoIL (Clean Southern Illinois) initiative, a non-profit organization with the goal to eliminate litter in southern Illinois through education, community action, and aggressive marketing. The founders and charter members of Clean SoIL are Dr. Glenn Poshard, a former U.S. Congressman and past President of SIU, and Les Winkler, Southern Illinoisan Outdoors writer. Dr. Harvey Henson, an invited member of the Board of Directors, serves as the Co-Chair of the Education Committee. Clean Soil provided two 25% graduate assistantships to SIU STEM education students supervised by Dr. Henson. The SERC staff and faculty worked with SOE Dean Cecil Smith and pre-service teacher candidates to develop new curriculum, learning resources, and

placed the lessons and resources online for teachers to use (https://stemedresearch.siu.edu/clean-soil/).

American Mathematics Olympiad

The SERC continued development and expansion of the American Mathematics Olympiad (AMO) in partnership with the Scholastic Trust Singapore, LLC, which is directed by SIU alumnus Mr. Henry Ong. Teams of faculty, staff and students in SERC developed hundreds of math problems designed to engage students in each grade 2 through 12. The AMO competition was delivered globally during October and November of 2023 for a third. The AMO competition included 38,000 students from 45 countries including the US. About 1,100 students from local schools across southern Illinois competed and 15% of these local participants earned medals.

Expanding Your Horizons in Science and Mathematics

For the past 30 or so years, SIUC has hosted the Expanding Your Horizons in Science and Mathematics (EYH) conference designed especially for young women in grades five through nine in southern Illinois. The conference is comprised of workshops that encourage the participants to explore careers in science, mathematics, engineering, and technology. The goal is to show what careers are available in science-related fields; to educate students about classes to take in high school and college; and to encourage consideration of careers that might never have been contemplated without exposure through experiences such as these. Since its inception, EYH has depended on funds from various campus offices, local community colleges, regional offices and supporters of education, and from the nominal registration fee paid by the participants. The organizers, 20-30 workshop presenters, and 20-30 assistants all volunteer their time. SERC supported EYH again and participated in 31st annual conference during November 2023. Approximately 100-200 junior high students and high school freshmen attend each year.

Other Community Service

The STEM Education Research Center participated in The Great ShakeOut and promoted earthquake awareness and safety to students on campus, at local schools, and among southern Illinois residents in October 2023. The SERC team directed by Dr. Harvey Henson continued the earthquake awareness and preparedness program and was featured in multiple TV and radio interviews.

"News Radio WJPF Interview with Harvey Henson", WJPF Morning Newswatch, April 29, 2024, https://www.wjpf.com/episode/newsradio-wjpf-interview-with-harvey-henson-april-29-2024/

"Expert says small earthquakes in Southern Illinois are common", WSIL-TV3, April 22, 2024, https://www.wsiltv.com/news/expert-says-small-earthquakes-in-southern-illinois-are-common/article 80608ed8-0143-11ef-b4bc-0bed80e55cff.html

"SIU gets \$2.6M grant to use celestial marvels as inspiration to study the sun", SIU News, January 11, 2024, https://news.siu.edu/2024/01/011124-siu-gets-2.6m-grant-to-use-celestial-marvels-as-inspiration-to-study-the-sun.php

"SIU expert discusses southern Illinois earthquake"
WSIL-TV3, December 18, 2023, https://www.wsiltv.com/video/siu-expert-discusses-southern-illinois-earthquake/video a84238f3-b8bf-5880-b596-9660d8f873c7.html

"Harvey Henson, associate professor, curriculum and instruction, geology, and interim director, STEM Education Research Center, discusses the region's seismic activity and the upcoming annular solar eclipse on Oct. 14", WJPF Morning Newswatch, October 4, 2023, https://www.wjpf.com/episode/newsradio-wjpf-interview-with-harvey-henson-october-4-2023/

"SIU team uses low-tech sun funnel to capture unique eclipse image" SIU NEWS, September 20, 2023, https://news.siu.edu/2023/09/092023-SIU-team-uses-low-tech-sun-funnel-to-capture-unique-eclipse-image.php

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

Support for SIU Campus Priorities

"SIU embraces a unique tradition of access and opportunity, inclusive excellence, innovation in research and creativity, and outstanding teaching focused on nurturing student success. As a nationally ranked public research university and regional economic catalyst, we create and exchange knowledge to shape future leaders, improve our communities, and transform lives." (source: https://imagine2030.siu.edu/mission-statement.php)

The SIU strategic plan, **Imagine 2030** (https://imagine2030.siu.edu/) includes *five strategic pillars* to guide the SIU campus community and our partners in identifying areas to prioritize in planning and funding. These five themes are:

- 1. **Student Success and Engagement:** What does student success mean to us, and how can we improve our metrics for success and engagement among the student body?
- 2. **Diversity, Equity and Inclusion:** How can we become a more inclusive and welcoming institution that values and respects individual differences?
- 3. **Branding and Partnerships:** How can we elevate awareness and regard for the SIU Carbondale brand, and build strong partnerships with other organizations in the region, state, and nation?
- 4. **Research and Innovation:** Where can we be even better in our research capabilities, and on what new innovations will SIU Carbondale lead the way?
- 5. **Sustainability:** In what ways can SIU Carbondale build on its legacy of sustainability and position itself as a leading voice for sustainability in institutions of higher learning?

The SERC goals are aligned to the objectives and key initiatives outlined as part of these five strategies of the new SIU strategic plan, **Imagine 2030** (https://imagine2030.siu.edu/). The following priorities are most aligned with the STEM Education Research Center (SERC) mission and goals as described in the following outcomes and contributions.

Student Engagement, Scholarship, and Success: Universities are increasingly expected to provide students with additional (co-curricular) experiences and opportunities that help them

develop skills to better prepare for their chosen careers. These professional development and supplemental learning experiences are important to students' success and are precisely aligned to the SIU Mission and new strategic plan as well as the SERC goals outlined above. During FY 2024 the SERC provided financial support and work experiences in STEM research, service, outreach, and education for undergraduate student workers, undergraduate volunteers, and graduate students within the Center.

Faculty and staff collaborated to obtain external contracts and grants (see Performance Measures 1 & 2 in section 11.1, and Objective 1. in section 11.4) that provided undergraduate student scholarships and support through research and professional development projects such as the NSF S-STEM program and initiatives. SERC colleagues continued to seek additional external funding for other STEM scholarships and internships in academic units collaborating with SERC. These grant-funded opportunities provided professional development, hands-on learning, and career readiness, and essential financial support for first-generation and disadvantaged students. Support from SERC programs and projects increased recruitment, retention, graduation, and career success of STEM students across four colleges at SIU.

Research and Innovation: In FY 2024, SERC secured a total of \$7,568,080 in external funding for STEM education service, training, and research. These grants, contracts and donations, together with indirect cost recovery funds, were strategically allocated to propel the research mission forward, cover operational expenses, and deliver services to SIU, Illinois schools, and community partners. Indirect cost recovery funds from grants and contracts were allocated to support student recruitment, retention, and degree completion, as well as to furnish faculty, staff, and students with resources for research supplies, equipment, and travel.

SERC collaborated closely with SIU faculty and instructors to enhance teaching methodologies, procured instructional materials, and provided support for science content and methods courses tailored for pre-service teachers. Additionally, summer internships and undergraduate research experiences were offered to undergraduates, providing valuable work exposure during their college tenure.

Looking ahead, SERC is exploring the benefits of a SIU Faculty Associates program, or possibly a Faculty Fellowship initiative that would provide faculty professional development and increase research collaboration. This program could offer faculty release time for collaborative efforts in grant and contract proposal development and support for research in curriculum enhancement and education at SIU. This collaborative effort may involve developing and testing innovative instructional approaches, with the potential to bolster student retention and success.

Diversity, Equity and Inclusion: To fulfill the SERC mission and realize our objectives of advancing STEM literacy, embracing diverse and inclusive approaches is indispensable. The complexities of our world demand integrative strategies that incorporate diverse skill sets and perspectives across the human spectrum. Understanding and navigating our intricate reality necessitate the inclusion of varied viewpoints and experiences. In essence, fostering diversity and inclusivity not only enriches our understanding of STEM subjects but also enhances our ability to address complex challenges effectively. By valuing diverse perspectives and skill sets, we can better cultivate innovative solutions and broaden participation in STEM fields.

Leadership and staff at SERC are committed to promoting diversity and inclusiveness as fundamental principles in our pursuit of advancing STEM literacy and driving positive change in

our society. Further, SERC embodies a collaborative spirit among faculty, staff, and students, dedicated to advancing STEM learning equitably, inclusively, and strategically for all individuals. Our collaboration is built on principles of diversity, equity, and inclusion, where intentional efforts are made to recruit talent from diverse backgrounds, including those from underserved groups. At every operational level, our staffing reflects diversity, encompassing minorities, women, and individuals with disabilities. We prioritize diversity in leadership within our partnerships and collaborations, aiming for representation that mirrors our commitment to inclusiveness. Through collaborative efforts, SERC actively supports faculty in developing interdisciplinary research projects targeting underrepresented groups. We cultivate partnerships with private, state, and federal agencies, prioritizing funding opportunities that promote diverse participation and foster inclusion and equity.

Additionally, SERC faculty and staff serve as Principal Investigators or Co-Principal Investigators on numerous successful contract and grant proposals, many of which have been funded (refer to section 11.4 for details). We serve as partners and mentors to STEM faculty seeking funding from various agencies, enhancing the competitiveness of their proposals. Our collaborative efforts extend to presenting and publishing research alongside faculty, staff, and students. Moreover, the Center facilitates networking opportunities between faculty and local education agencies, youth organizations, community partners, and the broader public, fostering service and community engagement. SERC's support, training, and mentorship of diverse graduate and undergraduate students were impactful again in FY 2024, reflecting a commitment to nurturing a diverse talent pool in STEM fields.

Branding and Partnerships: SERC continued both new and established partnerships throughout FY 2024 across various areas, including campus leadership, external funding agencies, and influential alumni networks. By strategically leveraging these connections, we successfully forged robust collaborations with key stakeholders at the regional, state, national, and international levels. These partnerships played a pivotal role in our efforts to enhance student recruitment and success at SIU, aligning closely with the overarching goals of both the University and the SERC. Through these strategic alliances, we were able to tap into valuable resources, expertise, and networks that facilitated the achievement of our shared objectives. The SERC remains committed to nurturing and expanding these partnerships as integral components of our mission to advance STEM education and research. By continuing to cultivate meaningful relationships with our stakeholders, we aim to further strengthen our impact and contribute positively to the academic and research landscape at SIU and beyond.

The SERC remains dedicated to its role as an outreach provider for PreK-12 schools and a collaborative partner for teachers and administrators. In FY 2024, through our partnership with the Illinois State Board of Education (ISBE) on the Illinois Science Professional Learning program, we provided professional development and support to over 600 teachers statewide. Our faculty and staff, engaged within the SERC, continued to cultivate partnerships with local education agencies and community organizations. Our undergraduate student ambassadors and graduate students, under faculty and staff supervision, actively participated in these service activities. They contributed to community outreach during new student recruitment events, campus tours, off-campus showcases, conferences, and STEM nights at schools. Beyond developing and coordinating outreach programs for the regional community, the Center facilitated teacher professional development through workshops and meetings while managing equipment loans. SERC remains committed to advancing STEM education and outreach efforts,

but additional resources will be essential to accomplish our goals. We have requested additional space to facilitate service and training activities, to expand the loaner program for regional educators, and to enhance the range of educational materials available.

The collaboration with Mr. Henry Ong, President of Scholastic Trust Singapore, LLC (STS) and SIU alumnus, the SIU Center for International Education (CIE), and the SIU Foundation continued to advance the STEM Olympiad Initiative in FY 2024. This partnership, particularly with STS, expanded STEM competitions across 42 countries globally, fostering increased student learning and engagement in STEM fields. In FY 2024, Mr. Ong and STS generously contributed \$30,000 to support SERC to develop and help execute the 3rd annual American Mathematics Olympiad (AMO) in October and November 2023. The event attracted nearly 30,000 students spanning grades 2 through 12 worldwide to compete. Approximately 1,100 students from Illinois participated in the AMO, with numerous local students achieving gold, silver, and bronze medals, and others received honorable mention.

STS has further committed to a substantial scholarship donation to SIU, supporting the establishment of a new Professor Jared Dorn international scholars program. Through this collaboration, SIU is being actively promoted to students, parents, teachers, and leaders both regionally and globally. Additionally, support generated from this partnership serves to benefit regional students and schools by eliminating participant costs, providing student engagement, teacher professional development, and creating new scholarship opportunities for international students to enroll at SIU. Indeed, this international partnership exemplifies SERC's unwavering commitment to advancing STEM education while championing principles of equity and diversity. Through collaborative efforts and strategic initiatives, SERC continues to make significant strides towards fostering excellence and inclusivity within the academic community at SIU and beyond.

Sustainability: During FY 2024, SERC played a pivotal role in advancing the university's sustainability objectives through various initiatives and endeavors

A collaborative effort by an interdisciplinary team of scientists, educators, and administrators developed an innovative earth science and sustainability (ESS) education and scholarship program funded for \$1.33 million by the NSF. The team's Scholarships in STEM (S-STEM) grant proposal titled *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists* started in January 2023. (For more details, refer to https://news.siu.edu/2022/08/082422-SIU-research-team-wins-1.33M-NSF-grant-to-train-sustainability-focused-geoscientists.php). This ESS S-STEM initiative is designed to recruit geoscience community college students to SIU and provide 80 scholarships of up to \$10,000 per year to support student's cost of education. The leadership team includes Dr. Ruopu Li, Dr. Harvey Henson (SERC Director), Dr. Leslie Durham, and Dr. Justin Schoof, all esteemed faculty members of the School of Earth Systems and Sustainability, along with Wendell Williams, Associate Vice Chancellor for Enrollment Management. The ESS and program Together the SIU team are helping prepare the next generation of sustainability minded graduates and STEM professionals.

Another example program is SERC's collaboration with the CLEAN SoIL organization. CLEAN SoIL, a non-profit organization dedicated to eradicating litter in southern Illinois through education, community action, and proactive marketing. The group was founded by Dr. Glenn Poshard, former President of SIU and ex-U.S. Congressman, alongside Les Winkler, a renowned

Southern Illinoisan Outdoors writer. In an effort to bolster their mission, CLEAN SolL invited SIU to join forces in their endeavor to clean southern Illinois. Responding to the call, SERC and the School of Education (SOE) continue to collaborate closely. Dr. Henson, spearheads this collaboration and was serves as the Education Committee Co-Chair on the board of directors for CLEAN SolL. Additionally, CLEAN SolL extended support to SIU through a graduate assistantship, aiding in the pursuit of educational objectives. Under Dr. Henson's supervision, the graduate student and the curriculum development team are actively engaged in curriculum development. Moreover, SERC staff and faculty, in collaboration with Dean Cecil Smith, SOE faculty, and preservice teacher candidates, are diligently crafting new curriculum materials, learning resources, and a dedicated website (https://stemedresearch.siu.edu/clean-soil/). This collaborative effort underscores the commitment of all stakeholders to combat litter and promote environmental stewardship in southern Illinois.

Support for IBHE "A Thriving Illinois" Strategic Plan Goals and Core Principals

Students are our priority.

The SERC is actively addressing the STEM workforce pipeline in Illinois by offering instructional support aimed at enhancing student outcomes across various educational levels, including PreK-12, undergraduate, and graduate programs. Through established partnerships with numerous PreK-12 teachers and administrators in public schools, as well as fruitful collaborations with STEM faculty and staff at SIU, SERC has fostered highly successful, funded, and productive projects. The SERC has spearheaded regional, state, national, and international projects and programs aimed at bolstering STEM education and literacy. These collaborative efforts are instrumental in enhancing academic preparation and fostering motivation in STEM disciplines, facilitating a smooth transition for Illinois students from high school to higher education and eventual careers in STEM fields. Further, SERC diligently provides student work, scholarships, waivers, and graduate assistantships to bolster students' academic achievements.

One notable scholarship initiative, Pathways to STEM Leadership, spearheaded by PI Dr. Bruce DeRuntz and Co-PI Dr. Harvey Henson, cultivated STEM leaders throughout FY 2023 and into FY 2024. This scholarship program, supported by the NSF S-STEM program, caters to academically gifted, low-income, and underrepresented students pursuing STEM majors. The scholarship addressed students' unmet financial needs by offering support of up to \$10,000 per year. Student participation in the leadership program reflects the diversity of the university population. Success metrics for the STEM leadership program are remarkable, boasting a 96% student graduation rate and a 94% placement rate in STEM careers. The Pathways to STEM Leadership initiative, through its comprehensive training and co-curricular activities, is instrumental in nurturing the next generation of critical STEM leaders. Plans to transform and continue the program through grant funding and industry sponsorship are being considered for FY2025 and beyond.

The Illinois Science Assessment (ISA) partnership, part of the federal government mandate administered by the Illinois State Board of Education (ISBE) to evaluate science learning among students in grades 5, 8, and 11, ended in fall 2023. Since March 2017, SIU SERC served as the principal partner to ISBE for executing this assessment through a substantial multi-year contract. The partnership achieved remarkable student assessment objectives, and also delivered impressive results aligned with the Illinois Learning Standards for Science,

based on the Next Generation Science Standards (NGSS). The SIU assessment team at SIU, comprised of education and STEM experts, developed an equitable and inclusive large-scale summative assessment that not only meets assessment goals but also promotes enhanced STEM teaching and learning statewide. We successfully partnered with over 400 hundred Illinois teachers each year since 2017. Teachers overwhelmingly report that standards training, professional development, and financial support provided by SIU SERC in partnership with the ISBE transformed their classroom teaching and increased student success as well.

Through these educator-focused and student-centered initiatives and others, SERC steadfastly upholds its commitment to advancing STEM education and ensuring the success of students not only in Illinois but also beyond its borders.

Equity drives our system.

As a dedicated service unit, SERC is deeply committed to fostering partnerships and initiatives that offer support and opportunities to a diverse range of learners and educators. This commitment is manifested through various avenues such as scholarships, co-curricular experiences, internships, graduate assistantships, student employment, teacher fellowships, independent contractor opportunities, and tuition waivers. SERC recognizes the significant financial obstacles faced by students, parents, teachers, and administrators in pursuing and achieving academic and scholarly success. This challenge is particularly pronounced among underserved groups including students of color, first-generation college students, lowincome students, adult learners, rural students, veterans, and others.

To address these challenges, SERC collaborators and researchers are diligently working to secure support funding through external grant and contract awards, as well as through partnerships with regional community organizations. Notably, SERC's interim director, Dr. Harvey Henson, served as a Co-PI on 2 NSF S-STEM (Scholarships for STEM students) grants and led other grants that are currently funded or pending approval (refer to section 11.4 for details). Dr. Henson is discussing a collaboration with faculty colleagues in the School of Aviation to propose another S-STEM to the NSF. Such grants represent a substantial investment, providing millions of dollars to support student scholarships, PreK-12 teacher fellowships, waivers, supplemental salaries, and enhancements to academic programs across the region and state.

The SIU partnership with STS in Singapore is providing opportunities for STEM engagement, promoting scholastic equity, and offering scholarship opportunities to students and families globally. SERC is working with Mr. Henry Ong and STS of Singapore to use these scholarships to support international students to apply and enroll at SIU Fall 2024.

Higher education is a public good that enriches life.

The SERC is dedicated to supporting evidence-based, hands-on education and professional development initiatives for both current and aspiring science and math educators. Collaborating closely with the School of Education (SOE) and the College of Agricultural, Life, and Physical Sciences (CALPS) at SIU, SERC facilitates partnerships that enhance teacher training and development. The SERC provides services to the community, supports and

participates in multiple events and activities on and off campus, strives to enhance student learning and success, and generates innovation and new knowledge through research.

For example, the Center offers financial assistance to various initiatives including the Regional and State Science Fair, the Science in the South regional teacher conference, the Teen Science Café, the Illinois Junior Science and Humanities Symposium, Expanding Your Horizons, and Registered Student Organizations. Additionally, the Center provides support in the form of student scholarships, tuition waivers, supplemental teacher salaries, and research grants for undergraduate and graduate students. Throughout the year, SERC's faculty, staff, and students leverage their expertise to make meaningful contributions to the community, local schools, and civic partners, enriching the educational landscape and fostering engagement in STEM disciplines.

As noted earlier, the SERC, School of Education (SOE) and Touch of Nature Outdoor Education Center (TNOEC) joined efforts to support the CLEAN SoIL (Clean Southern Illinois) initiative. CLEAN SoIL is a non-profit organization striving to eliminate litter in southern Illinois through education, community action, and aggressive marketing. CLEAN SoIL founders are Dr. Glenn Poshard, past President of SIU and former U.S. Congressman, and Les Winkler, Southern Illinoisan Outdoors writer. CLEAN Soil provided support to SIU in the form of a graduate assistantship. SERC staff and faculty are working with Dean Cecil Smith, faculty, and pre-service teacher candidates in the SOE to develop new curriculum, learning resources, and a website (https://stemedresearch.siu.edu/clean-soil/). Dr. Henson serves on the board as the Education Committee Co-Chair, supervises graduate students, and leads the curriculum development team.

SERC faculty and staff actively engage with colleagues across various programs at SIU. In addition to ongoing partnerships with colleagues in SOE, College of Engineering and CALPS, collaboration extended to include the College of Health and Human Sciences, College of Liberal Arts, and the Center for International Education (CIE). Plans are underway to establish additional collaborations with colleagues in other STEM schools and colleges. These efforts aim to diversify student enrollment and create opportunities to cultivate a highly qualified workforce of STEM educators and professionals, not only in Illinois but also beyond.

Our diverse institutions work in concert.

SERC continued its pursuit of partnerships aimed at fostering student success in STEM fields, submitting proposals to secure funding for new research initiatives and discoveries that contribute to the growth and vitality of local, regional, and state economies. Collaborating with SIUE and eight other universities and community colleges in Illinois, SIU SERC expanded the FLIP classroom teaching model to enhance STEM learning experiences for on campus. Additionally, a multi-institution collaborative proposal was submitted for funding to the NSF.

STEM faculty and staff at SIU secured a significant amount of new revenue in FY 2024, reflecting the success of collaborative efforts across the SIU campus and beyond in obtaining competitive external funding for research, service, and educational program development (refer to section 11.4 for details). These funds played a crucial role in supporting faculty, staff, and students to work collaboratively towards achieving the goals of SERC, SIU, and the funding agencies.

In FY 2024, SERC wrapped up the ISA project in collaboration with the Illinois State Board of Education, to recruit, train, and engage nearly 400 STEM educators and professionals across

Illinois schools to develop the ISA. STEM content and education experts from seven esteemed higher education institutions, including Lewis University, University of Illinois Chicago, Illinois State University, Southern Illinois University Edwardsville, McKendree University, University of Illinois Champaign-Urbana, and Southern Illinois University Carbondale, collaborated during FY 2021 to FY 2024 to develop the large-scale science assessment on the ISA project which ended fall 2023.

11.4 Evidence of Support for Center/Institute Objectives

Objective 1. Develop STEM education and research programs at SIU and support existing programs by obtaining grant and contract funding.

The SERC faculty and staff collaborated to obtain external funding to advance STEM education and research at SIU. Center faculty and staff served as principal investigator (PI) or Co-PI on 13 grant proposals submitted in FY 2024. Seven of these proposals were awarded, total \$7,568,080 as noted below, and were implemented in FY 2024. Seven previously funded grants and contracts continued in FY 2024.

Grant Proposals Funded During FY 2024

1. "Veterans Research Supplement: Rural Veteran Personality, Delay Discounting, and the Interference Preservation Hypothesis"

PI: Justin McDaniel Co-PIs: Harvey Henson & Yvonne Hunter-Johnson

Agency: NSF Dates: 05/23/24 - 08/31/26 (\$32,654)

2. "Program Evaluation - Firearm Violence Prevention"

PI: Harvey Henson Co-PIs: Daniel Brown, Wasantha Jayawardene, Minghui Hou, Amanda Weidhuner, Jennifer Rhodes, Duane Lickteig & Jenna Jamieson Agency: Illinois Dept of Human Services Dates: 05/01/24 - 04/30/27 (\$2,323,671)

3. "Illinois Science Professional Learning – IGA FY2024"

PI: Harvey Henson Co-I: Angela Henson

Agency: ISBE Dates: 11/22/23 - 6/30/24 (\$400,000)

4. "Illinois Junior Science and Humanities Symposium"

PI: Harvey Henson Co-PIs: Amanda Weidhuner, Angela Henson & Duane Lickteig Agency: National Science Teaching Association Dates: 10/01/23 - 07/31/24 (\$17,960)

5. "BCSER: Rural Veteran Personality, Delay Discounting, and the Interference Preservation Hypothesis"

PI: Justin McDaniel Co-PIs: Harvey Henson & Yvonne Hunter-Johnson Agency: NSF Dates: 09/01/23 - 11/13/26 (\$341,617)

"SolarSTEAM (Science, Technology, Engineering, Arts, & Mathematics) Eclipse Initiative"
 PI: Harvey Henson Co-Is: Robert Baer, Justin McDaniel, Corrine Brevik, Blair Allen
 & Michelle Nichols Agency: NASA (Invited) Dates: 8/21/23 - 6/30/26 (\$3,987,178)

7. "REAL Field Trip Model for the 2023 Annular and 2024 Total Solar Eclipses"

PI: Corrine Brevik Co-PI Harvey Henson, Bob Baer, Karla Berry & Michelle Nichols

Agency: NSF Dates: 07/01/23 – 6/30/25 (\$465,000)

Grant Proposals Submitted During FY 2024 and Not Funded

1. "Collaborative Proposal: Embedding Artificial Intelligence and Machine Learning into the Cybersecurity Curriculum - AIM Cyber"

PI: Henson, Harvey Co-PIs: Jennifer Rhodes & Duane Lickteig
Agency: NSF SaTC Dates: 7/01/24 – 6/30/27 (\$100,000)

2. "Collaborative Research: Developing STEM Education Reform Leaders through a Multidisciplinary and Cross-Institutional Community of Transformation"

PI: Henson, Harvey Co-PIs: Kevin Smith, Lori Armstrong, Senetta Bancroft, Mark Byrd

Agency: NSF IUSE Dates: 5/16/24 – 5/15/27 (\$261,438)

3. "DVL-STEM: Data Visualization Literacies in STEM"

PI: Robin Warne Co-PI: Harvey Henson, Jennifer Weber, Craig Engstrom

Agency: NSF Dates: 1/01/24 – 12/31/26 (\$292,855)

4. "Does a Universal Iron Concretion Formation Model Exist?"

PI: Sally Potter-McIntyre Co-PI: Harvey Henson, Poopalasingam Sivakumar

Agency: NSF Dates: 8/01/23 – 7/31/26 (\$789,313)

5. "Illinois Science Assessment Partnership – Item Development & Scoring"

PI: Harvey Henson Agency: ISBE Dates: 7/01/23 - 6/30/27 (\$34,928,962)

6. "Illinois Tobacco Quitline - Evaluation Service"

PI: Harvey Henson Co-PIs: Jennifer Rhodes, Wasantha Jayawardene, Jenna Jamieson & Amanda Weidhuner Agency: IDPH Dates: 7/01/23 - 6/30/26 (\$100,000)

Grant Proposals Funded and Continuing During FY 2024

1. "Illinois Junior Science and Humanities Symposium"

PI: Harvey Henson Co-PIs: Duane Lickteig & Angela Henson

Agency: National Science Teaching Association Dates: 10/01/22 - 07/31/23 (\$17,665)

2. "Citizen Science for 2024: The Dynamic Eclipse Broadcast Initiative"

PI Robert Baer Co-ls: Harvey Henson, Corinne Brevik, Matt Penn Heidi Bjerke, David

Gerdes Agency: NASA Dates: 4/25/23 – 4/24/25 (\$314,440)

3. "Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists"

PI: Ruopu Li Co-PIs: Harvey Henson, Leslie Durham, Justin Schoof & Wendell Williams Agency: NSF S-STEM Dates: 01/01/23 - 12/31/27 (\$1,333,365)

4. "Einstein's Incredible Universe: A Media Project Engaging Girls in Astrophysics during the 2024 Total Solar Eclipse"

PI: Harvey Henson Co-PI: Robert Baer

Agency: NSF AISL - Cosmic Pictures - Subaward Dates: 01/01/23 - 9/30/24 (\$268,008)

"Collaborative Research: CyberTraining: Pilot: Research Workforce Development for Deep Learning Systems in Advanced GPU Cyberinfrastructure"

PI: Ruopu Li Co-PI: Iraklis Anagnostopoulos Evaluator: Harvey Henson Agency: NSF Dates: 12/01/22 – 11/30/24 (\$63,783)

- 6. "Illinois Science Assessment Partnership Item Development & Scoring"
 PI: Harvey Henson Agency: ISBE Dates: 07/01/22 09/30/23 (\$6,033,245)
- 7. "Special Education Behavior Assessment Training Project"
 PI: Harvey Henson Co-PIs: Daniel Brown, Deb Bruns, Louise Yoho & Justin McDaniel
 Agency: Illinois State Board of Education Dates: 6/08/22 6/30/24 (\$5,841,527)

Direct External Support: The university and the SERC received external support for funded programs through contracts and grants as listed above.

Indirect Cost Recovery Funds: These contracts and grants listed above generated indirect cost recovery funds, which were used by the Center to cover operational costs and to support STEM faculty, staff, students, and other programs on and off campus.

Examples: Faculty collaborators received comprehensive support from SERC grant funding, including assistance with conference travel, student assistantships and waivers, research support, and summer salary, which benefited their departments and academic programs. For instance, SERC allocated resources for the procurement of 3D printers and supplies to bolster research, teaching, outreach, and service initiatives within the mathematics education program. This investment facilitated the advancement of innovative projects and contributed to the overall enhancement of educational and research endeavors at SIU. Indirect costs from SERC grants and contracts were shared with academic units (programs, schools and colleges).

Dr. Harvey Henson served as Principal Investigator (PI) for the *Illinois Junior Science and Humanities Symposium* (IJSHS) project, along with Co-PIs Angela Henson and Duane Lickteig. The SERC extended support by providing matching funds, while its staff contributed in-kind efforts to bolster the program. Additionally, the SERC facilitated a teacher cash award and offered assistance for participants' travel to the National competition. The IJSHS program, a triservice initiative sponsored by the U.S. Army, Navy, and Air Force, is coordinated through the National Science Teaching Association. Objectives include fostering original STEM research and learning at the high school level, acknowledging exceptional student accomplishments, and granting scholarships. Furthermore, the SERC played a pivotal role in recruitment, organization, and adjudication for the symposium.

The SERC staff recruited qualified students and partners to judge the *Illinois Junior Academy of Science Region 8 Science Fair* on the SIU campus. SERC provides financial support for multiple awards in recognition of student projects that exemplify STEM innovation or creativity to encourage interest in STEM. The SERC staff also participated in *Expanding Your Horizons* conference, which provides hands-on enrichment for girls in grades five through nine. SERC staff collaborated with pre-service STEM education students who served as student ambassadors at multiple SIU *Open House, SIU Day,* and other new student recruitment events. SERC provided training, meals and SIU polo shirts for these ambassadors. SERC provided preservice teachers enhanced STEM education experience in science and math methods courses by

purchasing equipment and materials, presenting STEM research and results, inviting guest speakers, and supporting graduate student presentations such as CLEAN SoIL, *Project Wild*, Digital Sandbox and 3D mapping.

Both graduate and undergraduate students benefited from teacher professional development workshops, engaged in STEM research endeavors, and gained exposure through emerging programs such as the Illinois Science Assessment (ISA) Partnership. SERC secured a \$13 million, five-year contract with the Illinois State Board of Education (ISBE) in 2018 to spearhead the ISA collaboration. This collaboration expanded significantly in FY 2022, encompassing state-wide assessment item development involving experts from six universities besides SIU Carbondale. Pre-service teachers and graduate students actively contributed to project planning and development, participating within a network comprising over 400 in-service teacher partners and leaders collaborating with the ISBE initiative.

The *Pathways to STEM Leadership* project, supported by the National Science Foundation (NSF), enhanced the Leadership Development Program (LDP) overseen by Dr. Bruce DeRuntz. This initiative provided scholarships to financially disadvantaged and underrepresented STEM majors. The program, which engaged STEM faculty and scholars from various disciplines across SIU, emphasized the cultivation of STEM leaders through peer mentoring and co-curricular activities. Within this framework, the SERC employs select students and sponsors co-curricular projects led by student leadership teams. A collaborative proposal, led by Dr. Bruce DeRuntz, was developed to explore the implementation of an expanded leadership development curriculum. This research project will involve adapting and implementing the LDP model across multiple institutions and several years. Submission of the proposal to the NSF is being considered.

Objective 2. Provide professional learning, curriculum development, workshops and support for *K-12* teachers and administrators.

Science Professional Learning (PL) supported by the Illinois State Board of Education (ISBE) in partnership and the National Science Teaching Association (NSTA) provided \$400,000 to SERC at SIU to work with NSTA on program development and implementation. The program successfully engaged a total of 554 Illinois educators through targeted science PL webinars (online) in spring 2024, and a total of 58 educators were engaged through science PL workshops (in-person) during June 2024. These PL offerings were aligned with the Illinois Learning Standards in Science (ILS-S) based on the Next Generation Science Standards (NGSS). The FY2024 program comprised four webinars and one in-person workshop conducted in three locations: Bloomington (Central Illinois), Glen Ellyn (Northern Illinois), and Carbondale (Southern Illinois). Informed by the Science Professional Learning Needs Assessment (SPLNAS) survey, which identified educators' strong preferences for assessing three-dimensional learning and implementing phenomena-driven instruction, the PL Initiative aimed to increase educators' confidence, readiness, and ability to effectively implement science teaching and learning practices aligned with the NGSS.

In FY 2024, SERC supported and participated in Science in the South, a premier professional development conference tailored for educators from southern Illinois. Its core mission is to augment teaching skills, deepen content knowledge, and facilitate networking opportunities among educators to share innovative STEM teaching strategies. The conference, which typically draws an average attendance of around 200 participants, provides a diverse array of

workshops led by peers, STEM faculty, administrators, scientists, and other subject matter experts. SERC staff played integral roles within the Science in the South steering committee, spearheading efforts to organize and help host the conference. By collaborating closely with other stakeholders, SERC ensured that Science in the South offered a rich tapestry of relevant, informative, and stimulating workshops, fostering an environment conducive to professional growth and collaborative exchange among educators passionate about STEM education.

Nearly 200 teachers from across Illinois and higher education researchers and experts assisted in the further development of the Illinois Science Assessment (ISA) as mentioned earlier. This significant undertaking offered participating teachers valuable opportunities for professional growth, fostering the establishment of collaborative relationships, expanding content knowledge, enhancing standards expertise, exchanging teaching insights, and assessing their instructional approaches aligned with the Illinois Learning Standards in Science. The ISA partnership extended beyond professional development to foster professional buy-in, empowering teachers to shape the large-scale summative science assessment process. Through their involvement, teachers played a pivotal role in ensuring that rigorous measurement and psychometric practices were upheld in the development of ISA test items. They gained insights into acceptable rates of item difficulty and item discrimination, thereby enhancing their understanding of sound assessment practices. Furthermore, teachers and item developers alike delved into the characteristics of effective item development and the critical importance of alignment with NGSS content standards during the ISA partnership. SERC, ISBE, and the National Science Teaching Association (NSTA) collaborated to host workshops on ISA item development. These workshops provided valuable opportunities for educators and developers to exchange ideas, refine methodologies, and ensure alignment with best practices in science education assessment. Through these collaborative efforts, the ISA partnership facilitated the continuous improvement of science assessment processes while empowering educators to actively contribute to the enhancement of educational standards and practices. The ISA project ended in fall 2023.

Objective 3. Research and facilitate strategies of teaching aligned to the Next Generation Science Standards and Common Core State Standards for improved student and public literacy.

Graduate students supported by SERC in collaboration with faculty and colleagues conducted STEM education research. Research findings from these endeavors were disseminated through presentations at numerous national and regional conferences, enriching discourse within the educational community. Collaborators contributed research articles to esteemed journals, including *Critical Issues in Teacher Education, Journal of Addiction Medicine, North American GeoGebra Journal, Environmental Health Insights, American Society of Engineering Education.*One area of research concentrated on STEM teacher development within pre-service education, particularly examining the evolution of pre-service elementary teachers' conceptual grasp of scientific literacy. Furthermore, SERC faculty and graduate students undertook investigations into the Impact of Scoring the Illinois Science Assessment on K-12 Science Teachers' Instructional Design. By analyzing data collected from ISA scoring participants, the study aimed to delineate how their experiences influenced science instruction and engagement within K-12 classrooms.

Currently, SERC staff are in the planning stages of a groundbreaking study involving ISA teacher participants. This initiative aims to gather additional data, enabling a deeper understanding of teacher experiences and instructional design nuances, thereby facilitating the development of

targeted interventions to enhance student achievement and bolster teacher knowledge and pedagogy. Grant and contract-funded projects were initiated by SERC to assist educators in comprehending the Next Generation Science Standards (NGSS) and Common Core State Standards. SERC offered resources and opportunities aimed at enhancing understanding and alignment with these standards. SERC faculty crafted research-based learning experiences within grant programs, supported educators in crafting standards-based lessons and assessments, and provided guidance and mentorship in action research development, writing, and presentation.

For instance, SERC personnel developed training sessions for educators involved as hand-scorers as part of the ongoing ISA Partnership. These workshops were shaped by feedback from educators through surveys developed by SERC, as well as participant performance data and identified gaps in NGSS content and Science and Engineering practices. These practices include Engaging in Argument from Evidence, Analyzing and Interpreting Data, Constructing Explanations, Developing and Using Models, and Obtaining, Evaluating, and Communicating Information. Notably, SERC staff demonstrated the Scientific Explanation Framework model and pertinent disciplinary core ideas. Through participation in the ISA Partnership, educators witnessed improved understanding of NGSS content and enhanced their instructional practice.

Objective 4. Build partnerships with local, state and national stakeholders to advance STEM teaching, learning and research.

Faculty and staff at SERC continued to foster partnerships with the Regional Offices of Education (ROE) and school districts within the SIU service area and beyond. These partnerships facilitated avenues for service and have been instrumental in securing grants and targeting professional learning initiatives for teachers through workshops and STEM education programs, as discussed in various sections of this report. As discussed previously in sections 11.2 and 11.3, and further outlined in Objective 5, the SERC served as the primary partner of the Illinois State Board of Education (ISBE) for the Illinois Science Assessment. The SERC collaborated on subaward proposals with STEM faculty members from seven Illinois universities as part of the ISA. Furthermore, the National Science Teaching Association (NSTA) once again collaborated with the SERC to review assessment items and offer workshops, training sessions, and other forms of professional learning for educators.

SERC researchers and earthquake experts, under the leadership of Interim Director Henson, spearheaded community outreach and education efforts focused on natural disaster mitigation and preparedness in the Midwest region. This initiative included an ongoing earthquake awareness and preparedness partnership with Scott Hodgson at the University of Oklahoma, the Central United States Earthquake Consortium (CUSEC), the Illinois Emergency Management Agency (IEMA), and the *Great ShakeOut*, which persisted throughout FY 2023.

Interim Director Henson actively engaged in television and radio news programs, offering insights and discussions on earthquake awareness and preparedness. Furthermore, outreach activities involved the explanation and practice of the Drop, Cover, and Hold On drill with students, teachers, and faculty members. The earthquake informational kiosk developed for the Arkansas Division of Emergency Management (ADEM), The kiosk was developed to facilitate outreach and public education regarding earthquake threats to the Midwest. SERC hopes to obtain funding to deploy additional portable kiosks in other states, further expanding outreach efforts and raising awareness about earthquake preparedness across the US.

Objective 5. Build partnerships to improve and implement state assessments.

The SERC continued the seventh year of the *Illinois Science Assessment Partnership*, an intergovernmental agreement (IGA) and contract with the Illinois State Board of Education (ISBE) to develop, implement, score, and report the Illinois Science Assessment (ISA). SERC coordinated the large-scale program, which included higher education faculty, researchers, and experts from seven universities, over 400 K-12 educators, numerous school districts, and regional offices of education from across the state, to develop the ISA items and test bank aligned to the Illinois Learning Standards in Science based upon the NGSS. A partnership with the National Science Teaching Association (NSTA) was established by SIU to support the project, train our teacher partners, and ensure standards alignment. The ISA project created a network for teachers to access STEM resources and receive professional development related to assessment. Teachers working with the SERC on the ISA gained confidence, knowledge and buy-in regarding assessment and standards, and they learned about available services and as they were engaged by SERC faculty and staff.

The ISA is an online science learning assessment of 425,000 5th, 8th and 11th grade students in Illinois public schools. Some test questions provide an opportunity for students to write extended responses to questions. SERC staff recruited, managed, and evaluated the ISA hand-scoring process which required qualified raters. Recruitment included hosting information sessions and leading presentations at teacher conferences/institutes including the Mount Vernon Conference, ROE 30 Teacher Institute, Science in the South at SIU, Northern Illinois Science Educators, Illinois Science Teachers Association, and the NSTA Annual Conference. Other recruitment efforts included state-wide dissemination via ROEs, ISBE workshops, direct invites, and attending regional public school administrator meetings across the state. Through these efforts, the SERC gathered more than 400 teachers, administrators, and STEM professionals from all over the state to join in this endeavor.

Our research results show, that curriculum, instruction and assessment are integrally related, as teachers involved in assessment development, scoring, or evaluation process are aligning their instruction to NGSS. The expectation is that student learning will increase by the experiences teachers bring back to the classroom from participation in this and other SERC programs. Illinois students' assessment scores are improving as well. The work and collaboration between the SERC, the ISBE and hundreds of educators on the Illinois Science Assessment (ISA) increased the validity and reliability of the state science assessment and will help improve student learning and teaching for years to come. The SIU-ISBE ISA partnership ended in fall 2023.

Objective 6. Collaborate with the SIU community to provide students with excellent preparation for STEM programs and professions.

The SERC has been successful in obtaining a wide range of contracts and grants to support its activities (see section 11.4). As discussed previously, these funds provided support for undergraduate and graduate students in their preparation for careers in STEM and education. Support ranged from undergraduate scholarships, student waivers, and graduate assistantships. SERC faculty and staff served on thesis and dissertation committees. The SERC also provided student mentoring to students, and student organizations including the STEM Education Ambassadors, Education Living and Learning Community, Saluki Science Ambassadors, Science Living and Learning Community, and Leadership Development Program.

The SERC partnerships continued to assist and improve students' academic preparation and increase motivation in STEM so that Illinois students successfully prepare for STEM careers.

In addition to the financial support, several undergraduate and graduate students at SIU and at seven other universities were mentored by faculty and involved in the *Illinois Science*Assessment Partnership and ISA activities as described in prior sections of this report. This experience was particularly valuable to preservice teachers and students interested in education careers. Several graduate students learned research skills related to assessment practices, data management and analysis, psychometric tasks applied in the ISA, and other skills used in general assessment and STEM education research.

Two years ago, SERC facilitated workshops for faculty interested in the NSF Scholarships for STEM (S-STEM) program in collaboration with the Office of Vice Chancellor of Research and the Office of Sponsored Projects Administration. These workshops aimed to equip participants with skills and partnerships necessary for developing S-STEM grant proposals to secure scholarships supporting STEM students at SIU. The S-STEM grant proposal, *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists*, was submitted to the NSF and selected for award. The leadership team members are Wendell Williams, Associate Vice Chancellor for Enrollment Management, and School of Earth Systems & Sustainability faculty Dr. Ruopu Li (PI), Dr. Harvey Henson (SERC Interim Director), Dr. Leslie Durham, and Dr. Justin Schoof. This S-STEM project was awarded \$1.33M by the NSF and exemplifies collaborative success and underscores the potential for future workshops based on this achievement (see https://news.siu.edu/2022/08/082422-SIU-research-team-wins-1.33M-NSF-grant-to-train-sustainability-focused-geoscientists.php).

Another noteworthy NSF-funded S-STEM initiative, Pathways to STEM Leadership, was established by PI Bruce DeRuntz and Co-PI Henson. Originating in 2007 with a focus on engineering majors, the program expanded to encompass all STEM disciplines with additional NSF funding. The program boasts a remarkable 96% graduation rate and an impressive 94% placement rate in STEM careers. Program outcomes and experiences were shared with the wider academic community through presentations at national conferences in Engineering and STEM education during FY 2022 and FY 2023. Additional presentations were made this year, and manuscripts are in preparation to further disseminate the program's impact and insights.

Throughout FY 2024, SERC developed collaborations among faculty and staff across various disciplines, including science education, math education, engineering, quantitative methods, geography, geology, anthropology, health and human services, and others. These collaborations aim to advance STEM research, plan new education initiatives, foster interdisciplinary approaches to research, and exchange and enhance knowledge. Looking ahead, plans are underway to broaden and enrich STEM research and education efforts by involving faculty and students from the College of Arts and Media, School of Aviation, and other academic units at SIU.

The SERC continued partnerships with STEM and education faculty to help improve students' educational success. The SERC purchased resources, helped create innovative materials, and offered ancillary support to STEM courses and instructors. Working with colleague Dr. Lingguo Bu, materials were supplied to create STEM-Art and 3D designs for math and STEM education in the 3D Printing Lab. Dr. Bu has developed and released hundreds of designs as of FY 2024 (see https://www.thingiverse.com/lgbu/designs).

SERC has served public school teachers and provided access to the dynamic resources, vast expertise, and dedicated personnel at SIU. The SERC aims to be a hub of support and innovation for the STEM community at SIU, and to serve other campus educators, student organizations, and students when they need answers in the changing landscape of learning in today's academic environment. The objective is to provide a central point of contact for common issues such as school visits, outreach materials, and coordinating volunteers. SERC seeks to enable sharing of resources, learning materials, equipment, or personnel, and to initiate, facilitate and foster research partnerships among STEM stakeholders, educators, faculty and students.

As SERC staffing grows, we are poised to enhance engagement and foster partnerships with registered student organizations (RSOs), leveraging their potential as force multipliers in STEM education and outreach efforts. Our strategy entails strengthening communication with STEM programs throughout the campus, amplifying sponsorship of events that celebrate and promote STEM programs and professions, including sporting, media, and arts events. Additionally, we plan to extend STEM education and engagement initiatives into the residential learning communities (LLCs) on campus, ensuring a holistic approach to fostering STEM interest and participation among students. Through these concerted efforts, we aim to cultivate a vibrant culture of STEM exploration and innovation across the university community.

11.5 Evidence of Organizational Effectiveness

SERC is a research and service unit at SIU and was highly effective at achieving organizational, university and IBHE goals (section 9.3 Objectives and section 11.3) in each area this year as discussed in the previous section (11.4).

Service and Outreach Activities

See examples of professional and community service described in sections 11.2, 11.3, and 11.4.

Involvement in Instruction

Although SERC does not directly oversee academic instruction or program administration, our indirect contributions to these areas are significant. SERC facilitates faculty collaboration to enhance and research STEM education through innovative grants and contracts. For instance, Dr. Bruce DeRuntz (PI) and Interim Director Dr. Harvey Henson served as Co-PI for the Pathways to STEM Leadership grant, utilizing nearly \$1M in funding from the NSF S-STEM undergraduate scholarship program to bolster students' success in STEM and foster professional development in leadership. Dr. Henson is a Co-PI on the new S-STEM project, Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists. Both STEM grant programs significantly enhance and support academic student success. Faculty members who collaborate within SERC spearhead innovative formal and informal education and outreach programs, direct academic programs or departments, lead STEM initiatives, and instruct undergraduate and graduate courses in STEM and STEM education. SERC continues to offer undergraduate and graduate students meaningful service experiences in STEM, mentoring them to contribute to teaching, research, and service endeavors. Through external grant and contract funding, five graduate students and eight undergraduate students were directly employed within SERC. These students were supervised by SERC faculty and staff and received

mentorship or advisement from STEM faculty members. Their involvement provided valuable co-curricular exposure to STEM education and research, equipping them with professional and academic skills while offering financial support.

Staffing Updates

Staffing for SERC increased slightly by 0.75 FTE to 21.0 FTE during FY 2024. Two half-time staff, additional undergraduate students, and several replacement graduate assistants were hired in FY 2024 using external contract and grant funds. Mr. Stephen Gariepy was hired as Researcher I to continue developing and implementing non-formal education and outreach.

Grant and Contract Applications and Research

The FY 2024 goal for grant and contract proposal submissions was exceeded by 8. Center faculty and staff served as principal investigator (PI) or Co-PI on 13 grant and contract proposals submitted in FY 2024, and 6 of these proposals were funded for a total of \$7,568,080.

The dissemination of research conducted through external contract and grant funding remains a priority for SERC, facilitating broad access to findings among scholars and practitioners alike. Sharing research and teaching outcomes at conferences and professional meetings is integral and expected among SERC colleagues, staff, and students, and the center remains committed to supporting faculty, staff, and students in achieving this objective.

Included in the table below are only peer-reviewed presentations, peer-reviewed publications, books, chapters, and invited presentations produced by faculty and staff employed or contracted within SERC. Dissemination activities of other collaborative faculty and staff who may receive support from SERC are not included in this report.

This approach ensures a focused overview of the impactful contributions and scholarly endeavors directly associated with SERC staff and faculty, while acknowledging the broader collaborative efforts that enrich the academic landscape within and beyond the institution.

STEM Education Research Center Dissemination Activities

Year	# Peer-Reviewed Publications and Creative Works	# Peer-Reviewed Presentations	FTE Research Faculty & Staff
FY 2024	6	7	4.00
FY 2023	9	11	2.50
FY 2022	12	15	2.50
FY 2021	8	11	2.25
FY 2020	10	11	1.75
FY 2019	8	18	1.75
FY 2018	8	20	3.25
FY 2017	9	13	2.25
FY 2016	5	17	0.25
FY 2015	11	9	0.25

12	Inctitutional	Assessment
1/	Institutional	Assessment

12.1	Date of Last Review	09/10/2019 (see 12.3 Explanation)			
12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended			
12.3	Explanation	New unit permanent status was granted by IBHE on 09/10/2019. The next review will occur during 2027-2028. A self-study report was completed May, 2018 while the center was on temporary status.			

RESOURCES: STEM Education Research Center

Financial	FY2024	FY2023	FY2022	FY2021*	FY2020	FY2019	FY2018
Resources							
Revenues							
State Appropriations	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Income Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants & Contracts (less Indirect Costs)	\$4,020,547	\$7,946,852	\$2,841,104	\$1,422,455	\$2,443,299	\$1,700,957	\$1,183,580
Other Internal Salary/Startup	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Indirect Cost Recovery	\$188,436	\$46,708	\$42,657	\$26,258	\$24,047	\$35,187	\$42,650
Total Revenues	\$4,208,983	\$7,993,560	\$2,883,761	\$1,448,713	\$2,467,346	\$1,736,144	\$1,226,230
Expenditures*							
Faculty & Staff Salary	\$1,266,383	\$1,000,263	\$355,347	\$284,302	\$308,117	\$300,311	\$242,436
GA support & Student Worker	\$94.262	\$202,959	\$164,077	\$116,342	\$126,682	\$122,991	\$66,956
Supplies, Services, Equip	\$3,359,167	\$5,297,699	\$2,321,217	\$1,029,925	\$2,020,317	\$1,304,021	\$891,207
Travel	\$63,018	\$39,554	\$16,873	\$1,640	\$18,650	\$6,500	\$9,000
Total Expenditures	\$4,782,830	\$6,540,475	\$2,857,514	\$1,432,210	\$2,473,766	\$1,733,823	\$1,209,599
Revenue Minus Expenditures	(\$573,847	\$1,453,085	\$26,247	\$16,503	(\$6,420)	\$2,321	\$16,631

Expenditures are categorized in easily understood, consistent categories (e.g., salaries, Graduate Assistant support).

Additional rows added as necessary. * Corrections were made to financial revenues and expenditures reported for FY 2021.

Staffing (FTE)	FY2024	FY2023	FY2022	FY 2021**	FY2020	FY2019	FY2018	FY2017	FY2016
Faculty	2.0	1.75	1.5	1.5	.75	0.5	0.5	0.5	0.25
Staff	10.5	9.0	4.75	2.0	1.75	1.75	1.75	1.75	0
Graduate	4.5	4.5	3.5	2.0	2.0	2.0	2.0	2.0	0
Assistants									
Student	4.0	4.0	1.75	1.0	1.0	1.0	0.75	0.25	0
Workers									
Total Staffing	21.0	19.25	11.5	6.5	5.50	5.25	5.0	4.5	0.25

^{**} Corrections were made to FTE reported for FY 2021.

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	SIU Carbondale				
2.	Center/Institute	Touch of Nature Outdoor Education Center				
3.	Date	March 8, 2024				
4.	Director	Brian Croft				
	4.1 Telephone	618-453-3942				
	4.2 E-mail	bcroft@siu.edu				
5.	Year Established	Land acquired 1949. First programs in 1952.				
6.	Illinois State Statute (if pertinent)	N/A				
7.	Reporting Unit	Student Affairs				
8.	Туре	Activity (check all that apply)				
	Instructional	X				
	Research	X				
	Public Service	X				

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

Touch of Nature is an outdoor education center providing outdoor learning opportunities to the University and the community since 1952. The Center is almost 3400 acres and provides facilities ranging from rustic cabins to an 18-room hotel. Dining halls, meeting spaces, hiking trails, biking trails, beaches, archery range, sports fields, etc., are all included. Program offerings include Leadership Development and Trainings, Recreation Therapy camps and programs, Veteran programs, Environmental Education Programs and Trainings, and general Hospitality Services.

The Center also supports and participates in Outdoor Recreation, Recreation Therapy, Forestry, Wildlife Biology, Agricultural Sciences, and Architecture academic programs and research.

9.2 Mission

The mission of Touch of Nature Outdoor Education Center is to enhance the lives of all people through outdoor experiences.

9.3 Objectives

Values:

- Experiential Learning
- Environmental Stewardship
- Health and Wellness
- Equity/Inclusion/Diversity

10. Advisory Board

10.1 Advisory Board - Membership

Touch of Nature does not have an official advisory board but does have a friends board that is primarily a fundraising board but does some of the work of a traditional advisory board. We also have created a specific advisory committee for Camp Little Giant

10.2 Number of Meetings (In This Year) 6

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year	
1.	Program Participation	40,000	50,000	
2.				
3.				
4.				
5.				

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- Acquisition of Student Fees (approx.. 650k in additional funding)
- Creation of a 5 year facility improvement plan
- Restructuring and consolidation of Programs
- Continued growth in each program areas

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

- Increase in Outdoor Education Programming to local schools
- Continued Growth in Dawg Days Freshman Orientation Programs
- Continued Growth in Outdoor Education Programs from K-12 schools
- Increase in Community Programs

11.4 Evidence of Support for Center/Institute Objectives

- Dawg Days donations receive over \$20,000 per year from departments on the main campus to support the Dawg Days New Student Program
- Multi-use Trail project this project has received over \$450,000 in grants and donations to date
- SIU Credit Union Donates \$15,000 per year to support SIU student focused programs at the Center
- River Radio Donates over \$53,000 per year in radio advertising to the Center to support all Community Programs and Camp Little Giant

	•			ceives 1000s of volunteer hours per year to support building, program support, a community event
1	1.5 E	vidence of Organizational	Effectivene	ss
	Restr	ion of a better and more e uctured Organizational Cha ted Policies and Procedure	art	
12.	Institut	ional Assessment		
	12.1	Date of Last Review	2020/20	21
	12.2	Decision at Last Review	X	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
	12.3	Explanation	NA	

RESOURCES: Touch of Nature Outdoor Education Center

Financial Resources	FY2024	FY2023	FY 2022	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues								
State Appropriations	463,557.34	461,844.75	386,000	483,319.03	512,026.65			
Income Fund	665,109.62	613,773.50	410,796	286,772.14	406,054.46	967,738.88	856,531.58	861,241.79
Grants & Contracts								
XXX								
XXX								
XXX								
Total Revenues	1,151,343.72	\$1,075,618.25						
Expenditures*								
Salaries	766,385.34	588,069.35	\$674,397	\$619,952.78	\$814,244.19	\$803,672.45	\$653,778.37	\$477,910.59
Wages	33,222.77	\$6,713.53	\$7,826	\$1,041.76	\$30,870.49	\$62,751.84	\$64,569.92	\$52,157.13
Travel	2028.80		0	\$0.00	\$847.31	\$55.00	\$291.35	\$457.24
Equipment	3,484.54	\$3,000.83	\$19,475	\$41,491.51	\$24,217.74	\$291.56	-\$5,850.00	\$46,721.41
Commodities	136,907.18	\$41,041.53	\$100,260	\$66,920.35	\$130,609.94	\$100,801.91	\$84,360.94	\$60,879.59
Contractual Services	380,442.55	\$216,883.51	\$209,990	\$154,355.15	\$235,121.65	\$224,564.99	\$316,080.56	\$220,288.87
Operation of Auto	20,657.97	\$20,450.02	\$20,029	\$18,818.57	\$35,639.19	\$42,388.36	\$35,027.28	\$18,221.93
Operation of Auto	13,403.67	Ψ20,430.02	\$15,148	710,010.57	733,033.13	742,300.30	755,027.20	710,221.33
Telecommunication s	10,400.07	\$39,122.03	713,140	\$30,458.68	\$14,548.54	\$16,526.18	\$15,573.72	\$95,498.95
Employer Contributions	13,092.97	\$11,889.18	\$13,006	\$16,159.58	\$11,640.85	\$11,941.64	\$8,036.04	\$7,752.36
General Administration	0	\$2,012.34	\$20,331	12,106.16	\$5,887.53		2910.00	2957.00
Refunds					\$1,250.00			
Awards and Grants	1080	\$90	\$990	187.32		1105.98	328.50	683.28
Office Expense	0	\$20.88	\$1,172					
NonMandatory Transfers Out	261,200							
Permanent Improvements	2244.90							
Total Expenditures	1,643,478.15	\$1,282,664.50	\$1,095,1 25	961,679.18	\$1,304,737.43	1,264,099.91	1,172,196.68	983,528.35
Revenue Minus Expenditures	-492,134.43	-207,046.25	-298,329	-191,588.01	-386,656.32	-296,361.03	-315,635.10	-122,286.56

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY24	FY2023	FY2022	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty			2@25%	2 @ 25%	2 @ 25%			
Staff	13	11	2@75 11@100%	11 @ 100% 2 @ 75%	12 @ 100% 2 @ 75%	13	13	9

Staffing (Full Time Equivalent)	FY24	FY2023	FY2022	FY2021	FY2020	FY2019	FY2018	FY2017
Total Staffing		11	13	13	14	13	13	9

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	WSIU Public Broadcasting
3.	Date	March 5, 2025
4.	Director	Fred Martino
	4.1 Telephone	618-453-6181
	4.2 E-mail	fred.martino@wsiu.org
5.	Year Established	Academic Year established as recognized by the SIU President, - 1958
6.	Illinois State Statute	
	(if pertinent)	N/A
7.	Reporting Unit	Office of the Chancellor
8.	Туре	Activity
		(check all that apply)
	Instructional	X
	Research	
	Public Service	Х

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

Licensed to the Board of Trustees of Southern Illinois University, WSIU Public Broadcasting is an integral partner to the College of Mass Communication & Media Arts on the Carbondale campus. Since 1958, WSIU has provided trusted programming and services that inspire personal growth, community engagement, and a love for learning in people of all ages.

The WSIU stations serve nearly five million people across seven states and beyond through five digital television stations, three radio stations, a website, local production units, social media channels, and an education and community outreach department. Additional services include the Southern Illinois Radio Information Service (SIRIS), operated by WSIU Radio, which helps over 1,000 individuals who are blind or whose physical condition prevents them from reading stay connected to the world. WSIU also offers professional development in the broadcast industry to hundreds of students each year.

9.2 Mission

WSIU Public Broadcasting exists to improve the quality of life of the people we serve. Through programs, services, and outreach, WSIU partners with other community organizations to promote positive change, and to support the academic and public service missions of Southern Illinois University Carbondale.

9.3 Objectives

Provides experiential learning opportunities for students at Southern Illinois University in a wide variety of areas including broadcast, journalism, digital media, community engagement, marketing, and promotions. WSIU provides free over-the-air educational broadcast service to the region with a specific focus on universal access, particularly in rural areas.

10. Advisory Board

10.1 Advisory Board - Membership

WSIU is served by a Friends Board with a primary objective of advocating on behalf of the stations. While the group may provide advice from time to time, we do not refer to them as an advisory board which has a specific definition under grant guidelines with the Corporation for Public Broadcasting.

10.2 Number of Meetings (In This Year) 6

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	SIRIS (Southern IL Reading Info. Serv.) Subscribers	1,000	1,200
2.	PBS Kids Library Reading Days	100	100
3.	Family Day Attendance at Cedarhurst Mt. Vernon		
	& Henson Robinson Zoo Springfield	1,000	1,100
4.	Indie Lens Pop Up Attendees	100	100
5.	Individual Outreach contacts	1,000	1,500

 ^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- * Worked with WSIU staff and area schools to schedule more than 40 Top Teens interviews. Teens were nominated by their respective high schools. Top Teens recordings were uploaded to a WSIU playlist on YouTube, a permanent archive. Interview segments were also broadcast on WSIU's PBS channel
- * PBS KIDS Family Days were held at Cedarhurst Center for the Arts in Mt. Vernon, Illinois, Henson Robinson Zoo in Springfield, Illinois, and Madison Park Christian Church in Quincy, Illinois. Hundreds of families were given books provided by sponsors and received various educational materials while participating in learning activities and engaging with WSIU staff
- * Indie Lens Pop-Up is a neighborhood series that brings people together—virtually and inperson—for film screenings and community-driven conversations. WSIU presented five screenings at the Carbondale Public Library. Indie Lens Pop-Up draws residents, leaders, and organizations to discuss what matters most, from newsworthy topics and social issues to family and community relationships. These film screenings are free and open to the public
- *Hosted several groups from SIU's Center for English as a Second Language. The visits included presentations and tours from WSIU employees and television interviews to provide valuable experience for the international students, while providing engagement for the region through a television broadcast that is also available in an online archive
- *Expanded educational outreach to area high schools, including school visits and WSIU tours, with the goal of recruiting interns who can gain valuable editorial and technical training
- *Held media training events for area middle and high schools with the Marion Public Library
- * WSIU PBS partnered with Molina Healthcare on seven free literacy events to provide children and families with resources at seven local libraries—Brehm Memorial, Olney Public, Lincoln, Jacksonville Public, Rochester, Quincy Public, and Carbondale Public Libraries. The goals of these events were to help increase reading proficiencies by distributing free books and hosting reading events to encourage an affection for literacy. The total number of attendees at these events equaled 260
- * To help increase awareness of healthy eating and diets, WSIU partnered with Kroger. We visited Kroger groceries throughout southern Illinois with our PBS Kids character 'Super Why'. We provided recipes taken from the PBS Kids 'Healthy Eating' website, and we gave out these

recipes to families. These efforts were aimed at steering families towards cooking home-cooked meals as opposed to purchasing fast food. The total number of attendees receiving recipes equaled about 200. The recipes were also available in the Kroger stores for additional distribution

* WSIU participated in outreach events at Southern Illinois University's Banterra Center on April 8th in celebration of the solar eclipse. WSIU met with over 1500 attendees throughout the day, explaining the PBS and NPR programs we offer, the PBS Kids shows available, and more. WSIU was also excited to relay to the attendees that we were broadcasting full coverage of the eclipse event on WSIU-TV

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Student Success: WSIU Radio and Television offered students experiential learning opportunities in all aspects of the media industry. WSIU also worked with many community volunteers as part of our radio service for the visually impaired. Diversity and Inclusiveness: Held documentary cinema screenings and facilitated discussions at the public library to promote awareness of community issues. Community Relations: WSIU maintained a network of strategic community partners to promote education, outreach, and inclusiveness in our communities.

11.4 Evidence of Support for Center/Institute Objectives

WSIU worked with students from throughout the university, including the SIU College of Arts and Media to provide hands on, experiential learning through multiple broadcast productions throughout the fiscal year. These included daily radio newscasts and various video projects, full-length audio programming, Scholastic HiQ, and CapitolView. WSIU Radio, in cooperation with the SIU University Press, and students in the SIU Creative Writing program provided the weekly Blanket Fort Radio podcast that serialized readings of University Press books. The series involves students and community volunteers.

WSIU Radio continued to provide service to some 1,200 subscribers to SIRIS (Southern Illinois Reading Information Service) for the blind and visually impaired. Maintained and operated five full-power television transmitters and three full-power radio transmitters servicing approximately 5-million people in seven states with free over-the-air educational media including local news and information, a full schedule of children's television, and documentary content. WSIU student employees and volunteers played significant roles in content production to augment professional staff in our public service mission both on campus and through remote work opportunities.

WSIU continued working with the Carbondale Public Library to host film screenings and discussions on social issues that impact our viewers and listeners; served as a platform for local voices that reflect our region's unique personality; historical legacy, values, and diversity of opinion through episodes of Scholastic Hi-Q, Eye on Education, In Focus. and the CapitolView series; facilitated educational opportunities for children at local libraries.

WSIU-TV provided production support for the SIU Foundation's annual Day of Giving for University scholarships and programs. The event featured on-camera appearances by representatives from over 20 colleges, institutes, and other University agencies. Students in the SIUC Department of Radio-Television, and Digital Media operated cameras and other technical equipment for the daylong event.

11.5 Evidence of Organizational Effectiveness

WSIU serves nearly five million people stretching across a seven-state region on a variety of platforms including multiple digital television channels and radio stations, interactive web platforms, social media and mobile applications. WSIU operates with approximately 64% fewer full-time staff than it employed 20 years ago (down from 50 to 18). WSIU generates \$1.7 million in outside grant funding and nearly \$1.5 million in local community support to compliment \$790,000 in University operating cash support.

12.	Institutional Assessment					
	12.1	Date of Last Review	2023			
	12.2	Decision at Last Review	X	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended		
	12.3	Explanation	(briefly provide any explanation necessary of the institu assessment or plans for pending program review)			

RESOURCES: (WSIU Public Broadcasting) (Connie)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	790,202	784,881	784,447	690,292	764,306
Operating Grant – CPB	1,437,192	1,379,414	2,242,801	2,534,849	3,118,965
Operating Grant – State of IL	271,737	255,800	276,690	254,045	245,705
Project Grants	21,353	21,350	21,353	159,943	43,355
Membership Income	769,212	1,625,048	816,373	878,336	875,819
Underwriting Income	687,895	639,292	546,137	429,774	422,404
Production Income	11,380	80,885	33,396	3,429	5,408
Tower Income	54,841	64,891	63,700	62,267	115,260
Royalties (EBS, PBS)	76,469	74,905	76,629	103,502	0
Federal Work Study	8,734	5,241	8,403	7,892	10,932
Direct University Support	386,945	335,597	432,574	313,521	436,399
Indirect/In-Kind SIU Support	723,403	771,079	1,212,146	1,136,524	1,040,528
Other Indirect Support	24,961	38,998	20,735	13,901	39,996
Investment Income	110,896	65,376	17,093	33,761	1,999
State Benefit Payments	301,158	147,949	1,281,168	1,789,142	685,074
Miscellaneous Income	0	7,367	0	0	0
FCC Repack Funding	0	0	88,398	205,769	1,961,710
Total Revenues	5,656,378	6,298,073	7,922,043	8,616,947	9,767,860
Expenditures*					
Programming & Production	2,408,744	2,591,436	3,617,319	3,779,875	3,247,965
Broadcasting & Engineering	1,445,959	1,437,021	1,916,685	2,131,353	1,998,224
Program Info & Promotion	168,241	132,004	155,285	174,093	206,545
Fundraising & Membership	289,751	423,761	485,991	522,980	548,936
Underwriting & Grant	253,606	339,580	582,463	609,248	381,188
Management & General	729,979	727,580	969,448	1,098,556	1,053,794
Loss-Disposal of Equipment	0	0	0	257,937	0
Total Expenditures	5,296,280	5,651,382	7,727,191	8,574,042	7,436,652
Revenue Minus Expenditures	360,098	646,691	194,852	42,905	2,331,208

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty-Full Time	0	0	1.40	1.40	1.40
Staff-Full Time	17.08	20.72	33.55	32.03	25.60
Student Employees-FTE	.81	.71	3.26	8.88	14.69
Total Staffing-FTE	17.89	21.43	38.21	42.31	41.69
Student Employees Number/Yr	17	14	31	29	40

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	Center for Crime Science and Violence Prevention
3.	Date	2-20-2025
4.	Director	Dennis Mares
	4.1 Telephone	618-650-5114
	4.2 E-mail	dmares@siue.edu
5.	Year Established	2023
6.	Illinois State Statute	N/A
	(if pertinent)	
7.	Reporting Unit	Graduate School
8.	Туре	Activity
		(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

Overview

9.1 Description

The Center for Crime Science and Violence Prevention (CCSVP) is a primarily research/service-oriented center that broadly seeks to improve data-driven criminal justice and violence prevention efforts in the Southern Illinois/Metro-East region. CCSVP is housed on the Belleville Justice and Workforce Development campus and serves students, faculty and the community.

9.2 Mission

The Center's primary mission is to contribute to understanding and preventing crime and violence in the Greater St. Louis region and Southern Illinois.

9.3 Objectives

- 1. Conduct and encourage research on all aspects of crime and violence, including its prevention and equity.
- 2. Assist regional agencies in obtaining funding for the implementation and evaluation of prevention efforts and contribute to technological innovation.
- 3. Assist in improving accountability and transparency of all stakeholders in the criminal justice process. Serve as a regional clearinghouse for granular Criminal Justice data, improving access to data across agencies, researchers, and the public.
- 4. Provide educational opportunities and training for students, faculty, practitioners, and community members
- 5. Provide training and technical assistance (TTA) to regional criminal justice agencies in all aspects of their operations, including policies, practices, and recruitment, training and retention

10. Advisory Board

10.1 Advisory Board - Membership

Currently CCSVP was run under interim leadership in FY24. Upon establishment of formal leadership an Advisory Board will be assembled. The interim director has regularly met during FY2024 with fellow center directors and university administrators who have assisted them in setting up procedures and operational practices.

10.2 Number of Meetings (In This Year) 0

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Experiential learning opportunities	n/a	2
2.	Grants/Contracts	n/a	4/2**
3.	Engagement of Faculty/Community	n/a	3
4.	Products	n/a	2
5.	Engage Criminal Justice Agencies	n/a	3

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

CCSVPs main accomplishment has been to formally begin physical operations on its permanent location in Belleville. Doors were informally opened March 2024.

Staff were hired, with a Full-time analyst added in Nov 2023 and a PT administrative assistant in May 2024.

Two students received fellowships at CCSVP, one working on geospatial elements and measurement of police sentiments in social media and one working on 3D VR modeling

CCSVP received a \$500,000 contract at the end of FY2024 (to commence inFY2025), administering, supervising and evaluating the implementation of an alert notification system for public schools (911 Real Time Alerts).

Grant Projects Initiated: (awarded in FY2024).

- 1. Alton, an \$800,000 DOJ award to improve police technology, and data-driven policing.
- 2. Collinsville, a nearly \$300,000 DOJ award to enhance public safety with license plate cameras.

Grant proposals:

- 1. DOJ VR center grant (4M). Partners: SIUE (IRIS), SIUC, Police Executive Research Forum
- 2. DOJ School Violence prevention grant (.5M). Partners: Collinsville CUSD10 (Lead), CCSVP (Partner).
- 3. DOJ Gun Crime Information Center Grant (.5M). Partners: St. Louis Metropolitan Police Department (Lead), CCSVP (Partner)
- 4. National Endowment for the Humanities (.15M). Partners: SIUC (Lead), CCSVP (Partner).

Two projects closed out:

- 1. DOJ Body-Worn Camera grant with East St. Louis and Alton PDs was completed with CCSVP producing the final report
- 2. An evaluation study of the ShotSpotter system in Winston-Salem was conducted and report released.

Reports produced by CCSVP are available here: https://www.siue.edu/ccsvp/projects-research/index.shtml

^{**} applied/awarded

CCSVP has reached out the criminal justice community and generated excitement and active cooperation from several law enforcement agencies, providing us access to operational data.

Engagement of faculty/community is difficult to quantify, however, in its most narrow form we recruited faculty to participate on two grant proposals and provided a lecture for the SIUC law school during their continuing educational lecture series on the Belleville campus.

It is the center's expectation that our performance measure results will exceed current year results.

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

(1) Support for SIUE Campus Strategic Plan

Student Success and Inclusive Excellence: CCSVP trained 2 students (FY24) through experiential learning tied to funded projects from BJA and through State Appropriation funds. Students get practical experience solving real world problems with technology. Such fellowship projects help prepare students technically, mentally, and socially to be part of a team to solve problems. CCSVP is committed to help prepare students to be the best they can be.

Change Agent: CCSVP strives to work for the greater public good by reducing the impact of crime and violence in our region is certainly part of this role and being a driver of data-driven criminal justice practices. The center also plays a key role in strategic programming in collaboration with community partners in Belleville and will progressively begin to work with new SIUE units as they come online on the Belleville campus in FY25 (e.g. forensic science, educational outreach). An important role of the center is to increase campus and external awareness of University accomplishments, this is a role primarily for the director. The interim director of CCSVP interviewed with several media outlets, spoke at St. Louis city board of aldermen meetings, and met with numerous external partners and groups explaining the work of the center.

Access and Opportunity: CCSVP aims to provide experiential learning opportunities to students from diverse backgrounds. Although it was not yet able to do so directly, the center supported a cohort of CODES students (IRIS center) studying community impacts of violence in Alton.

Excellent and Diverse Faculty and Staff: The Center's focus also encompasses helping faculty, staff and student pursuit of external funding. To that aim, CCSVP partnered with faculty from SIUE and SIUC on grants, but also directly supported work by faculty in Computer Science and Criminal Justice that may lead to further grant writing.

(2) Support for IBHE State Goals

Equity, Sustainability & Growth: The Center's mission is focused on helping students get experiential learning opportunities that are an important, but often missing component in their

traditional educational experience. While the center is new and has had limited opportunity to do so in FY2024, the center has established a GIS lab with state-of-the-art computing resources and began in planning in FY2024 to create a Virtual Reality development lab in Belleville and purchased covering a majority of the equipment needed. These lab spaces will provide opportunities to work on Criminal Justice related projects. CCSVP also is expanding its fellowship opportunities so they may serve a greater number of students in FY 2025. The experiential opportunities will not just be important for students themselves but make additional contributions that will strengthen workforce development that will spur innovation, job growth and economic growth in the Metro East region. In addition, CCSVPs core mission (reducing the impact of crime and violence) is itself an important contribution to regional economic viability as the St. Louis area has long been hampered by an imposed image that it is a high crime region.

Encourage partnerships outside higher education (see p. 18 of "A Thriving Illinois"): This is one of the key assets CCSVP. As a center with a strong service-oriented focus, the center is currently working with numerous criminal justice agencies in the region to unlock the potential of criminal justice data. Opening up such data resources serves not only the agencies and communities directly, it also provide critical data for grant applications and research opportunities for SIUE faculty, staff and students.

Partnerships should also extend to industry partners and CCSVP has already cultivated contacts with Utilitra, SirenGPS and SoundThinking and developed informal agreements to help assist the criminal justice community.

11.4 Evidence of Support for Center/Institute Objectives

1. Conduct and encourage research on all aspects of crime and violence, including its prevention and equity.

Since operations started in earnest in FY2024 CCSVP has conducted multiple practitioner-oriented studies as part of our mission. We completed an evaluation of Alton's implementation of its Body-Worn Cameras. Secondly, we conducted an evaluation of the impact of gunshot detection technology in Winston-Salem, which found that the technology may be linked to substantial reductions in gun violence. One student fellows at CCSVP conducted research on sentiment toward police following fatal police shootings, indicating that such events reduce positive public views on police. Center research should be easily accessible, and we aim to make all of our reports publicly accessible where feasible.

2. Assist regional agencies in obtaining funding for the implementation and evaluation of prevention efforts and contribute to technological innovation.

Two of our grant applications during the fiscal year were directly in support of public safety (SLMPD and Collinsville). All of our currently active grants include an evaluation component. We aim to support all of our public safety research that aims to be: (1) data-driven/evidence based (2) transport, and (3) cost-efficient.

3. Assist in improving accountability and transparency of all stakeholders in the criminal justice process. Serve as a regional clearinghouse for granular Criminal Justice data, improving access to data across agencies, researchers, and the public.

During FY2024 CCSVP worked on developing connections with Metro-East police departments. The center has begun working with three agencies (Alton, Collinsville and Fairview Heights) and are trialing crime analysis and data transparency with these agencies. What this means is that CCSVP figures out how to ingest their data and create tangible products from this (e.g. dashboard). This is a complex process as the data and the data recording practices vary from agency to agency. Additionally obtaining the data in the first place creates hurdles as most of the records vendors for law enforcement often do not allow easy data exports. During FY2024, CCSVP has created trial internal dashboards for the agencies mentioned.

4. Provide educational opportunities and training for students, faculty, practitioners, and community members

CCSVP had two student fellows during FY2024, that worked with the center on VR and crime data analysis. Both students were working on solving practical problems using technological solutions. Analyst Buettner contributed a lecture to the continuing education credit at the SIUC law school and provided GIS training for about 25 new dispatchers in Madison county.

5. Provide training and technical assistance (TTA) to regional criminal justice agencies in all aspects of their operations, including policies, practices, and recruitment and retention.

The center has not yet fully been in operation to tackle these goals in FY2024 as these require substantial and detailed operational data.

11.5 Evidence of Organizational Effectiveness

CCSVP began its operations during this FY, opening its doors on a brand new campus location and staffing the center. Much time was spent getting equipment and services set up, so as a center not all time was yet going to the larger goals of the center, but rather becoming operational.

That said, CCSVP has a relatively lean operating structure, consisting out of 2.5FTE and has operated within its operating budget during the FY. It is anticipated that during FY 2025 an additional FT employee will be hired to assist with research and outreach.

12.	Institutional Assessment			
	12.1 Date of Last Review	N/A		

12.2	Decision at Last Review	Center/Institute in Good Standing
		Center/Institute Flagged for Priority Review
		Center/Institute Suspended
12.3	Explanation	First full year in operation as center IBHE temporary approval was granted in June 2023

RESOURCES: <u>Center/institute name</u>

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues		n/a	n/a	n/a	n/a
State Appropriations	302,000				
Grants & Contracts	10,000				
Total Revenues	312,000				
Total Nevertues	072,000				
Expenditures*		n/a	n/a	n/a	n/a
Salaries	200,000				
Fellowships	24,000				
CODES cohort	10,000				
Faculty Research Support	15,000				
VR lab equipment	60,000				
Travel	3,000				
Total Expenditures	312,000				
Revenue Minus Expenditures	0				

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	1				
Staff	1.5				
Total Staffing	2.5	n/a	n/a	n/a	n/a

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	Center for Predictive Analytics
3.	Date	February 23, 2025
4.	Director	Carolyn Butts-Wilmsmeyer
	4.1 Telephone	618-650-2682
	4.2 E-mail	<u>cbuttsw@siue.edu</u>
5.	Year Established	April 30, 2020 (received permanent approval from IBHE) 2018 (established through Chancellor's Innovation Proposal)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Graduate Studies and Research
8.	Туре	Activity (check all that apply)
	Instructional	
	Research	X
	Public Service	

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Center for Predictive Analytics was founded in response to a growing need for data science expertise across all sectors. The Center fosters relationships with faculty and external partners across a broad range of disciplines to support the application and development of state of the art mathematical, statistical, computational, and machine learning techniques to meet complex data challenges and train the next generation of data scientists through hands-on experience.

9.2 Mission

The Center for Predictive Analytics is dedicated to the development and novel application of innovative data analysis solutions that enable our industry, government and academic partners to utilize their data to its fullest potential while also providing real-world training opportunities to the next generation of data scientists.

9.3 Objectives

- 1. Foster multidisciplinary and multi-institutional collaborations that promote data science and data-driven research through externally and internally funded projects.
- 2. Create the computational infrastructure and access to computational expertise necessary for the successful pursuit of external funding opportunities by SIUE faculty.
- 3. Support student retention and academic success through predictive modeling and the development of intervention strategies.
- 4. Provide real-world experiences and mentorship to students through externally funded research partnerships.
- 5. Promote the ethical use of predictive analytics on campus and in the St. Louis region.
- 6. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars, and conferences.
- 7. Develop partnerships with local businesses and government agencies to produce high impact community engagement products.

10. Advisory Board

10.1 Advisory Board - Membership

Internal Members

Greg Budzban, Professor Emeritus, Department of Mathematics and Statistics
Janice Joplin, Associate Dean and Professor, School of Business
John Matta, Chair and Associate Professor, Department of Computer Science
Andy Neath, Professor, Department of Mathematics and Statistics
Jon Pettibone, Professor, Department of Psychology
Jerry Weinberg, Associate Provost for Research and Dean of the Graduate School,
Professor of Computer Science

External Members

Alex Burkhart, Director of Marketing, America's Central Port Paul Sorenson, Director, Regional Data Alliance

10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Development of grant proposals as PI and/or collaborator with SIUE or external partners.	3	11
2.	Active projects underway supported by grants and contracts.	4	14
3.	Submit peer-reviewed articles for publication	2	2
4.	Collaboration across campus through the C-PAN Faculty Fellows, Faculty Affiliates, and Ambassadors program.	3 fellows/ affiliates/ ambassadors	7 fellows/ affiliates/ ambassadors
5.	Assist other SIUE academic and administrative units with student retention and student success projects or other data analysis projects that support campus functions.	1 project	3 projects
6.	Monitor and track the progress of the SIU System Strategic Plan.	1 Written Report & Updated Online Dashboard	1 Written Report & Updated Online Dashboard
7.	Train students in data science through experiential learning opportunities.	1 grad, 3 undergrads	2 grads, 12 undergrads
8.	Promote the ethical use of data science within the SIUE Campus community through workshops, seminars, etc.	3 workshops, 45 participants	17 workshops, 436 participants
9.	Promote the ethical use of data science within the region through the offering of continuing education courses in data science for the public.	5 courses	5 courses Received approval to design & begin offering 11 new microcredentials in data science in FY25
10.	Disseminate Center for Predictive Analytics activities through press releases.	3	8
11.	Presentations at conferences or other scholarly venues.	2	10

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

The Center for Predictive Analytics (C-PAN) focused its efforts in FY24 in three areas: research in and continued pursuit of external support for research in data science, expanding capacity to support data science research and data-driven strategic initiatives at SIUE, and support of student success initiatives and training in data science at SIUE. Looking first at research in data science and continued pursuit of external support for research in data science, C-PAN addressed this goal in a variety of ways. First, the Center submitted grant proposals and contracts in which Center personnel were listed as either PI or Co-PI. These submissions totaled \$51,815,969 in submissions, with C-PAN personnel leading \$1,211,641 of those

submissions. Of the submissions that C-PAN led, a total of \$1,195,500 was awarded. This represents a 98.7% success rate. This was in addition to \$4,265,449 in active awards that C-PAN was managing at the start of FY24. As can be seen by the magnitude of the submissions values where C-PAN personnel are serving in supporting roles, C-PAN has solidified its value on the SIUE campus as a partner to support faculty in securing external funding. This is a major accomplishment, as it highlights that the SIUE community views C-PAN as a resource that they can leverage in pursuit of their scholarly activities. Furthermore, C-PAN staff also supported large projects on SIUE's campus as key personnel, totaling approximately \$2,000,000 in Center-supported projects, by performing federally or state mandated program reviews.

As C-PAN had over \$4 million in active research grants in FY24, as well as over \$1 million in submissions that were funded, many of C-PAN's accomplishments focused around successfully carrying out research and project tasks. A true measure of a research center is not only its ability to secure funding, but also its ability to successfully produce deliverables. In FY24, every grant and external contract that C-PAN led or supported was in good standing at the time of the annual report for each project. The highest complement that could have been paid to us was that multiple funding sponsors reached out to us and communicated their amazement at what we had accomplished on these grants, and that we had created a far greater product than they had anticipated. Some grants also led to the creation of tools that are in the process of being catalogued and disseminated to multiple stakeholder groups across Illinois, the Midwest, and the nation.

In accordance with its mission, C-PAN focuses on research projects and external contracts that directly align with the research and development, as well as the training needs, of the St. Louis region. Briefly, these projects include topics such as the establishment of a risk score for opioid overdose based on machine learning models; machine learning to evaluate disease risk and minimize crop loss; evaluating and mapping broadband accessibility across Illinois; the use of natural language processing (NLP) tools to assess threats across a geospatial landscape in partnership with the National Geospatial-Intelligence Agency (NGA); supporting education and training in STEM, including data science training; and supporting projects aimed at improving educational opportunities in underserved communities. At least one student was involved in each of these research projects, thereby enabling them to gain real-world experience working with data skills. One of the greatest success stories for C-PAN in FY24 is that all students who were either working as part of the research team on one of C-PAN's various projects or who were a member of the Experiential Learning In Applied Statistics (ELIAS) Fellowship Program were placed in their career field or a graduate program of their choosing. This 100% placement rate is a rarity, is cause for celebration, and clearly highlights the desirability of the skills students are learning through C-PAN activities.

C-PAN also continued its support of the SIU System Strategic Plan. C-PAN, working with the Office of the SIU Vice President for Academic Innovation, Planning, and Partnerships, continued to collaborate with all 15 Implementation Teams in the collection of quantitative metrics and qualitative data that highlight progress toward system-wide strategic goals and objectives. C-PAN staff worked with the SIU Executive Director of Marketing and Communications to produce a written report that celebrated the accomplishments of the SIU System. This report, in addition to the quantitative dashboard, can be found at https://siusystem.edu/about/strategic-plan/index.shtml.

As indicated last year, as C-PAN has matured and has continued to grow, it has amassed a sizeable research and projects portfolio. Until midway through FY24, C-PAN only had two fulltime staff to carry out its mission and activities. To ensure C-PAN could continue to support the needs of the faculty, students, and communities that it is responsible for serving, C-PAN worked with SIUE's Office of Human Resources to post, interview, and hire additional staff. During FY24, C-PAN hired a program director, a researcher, an office support specialist that was shared between C-PAN and another SIUE research center, and an offer was extended to hire an additional faculty fellow to begin in FY25. This expanded C-PAN's capacity from its director, senior research fellow, and part-time staff to include personnel that could assist in successfully accomplishing research activities. This accomplishment was pivotal not only for carrying out C-PAN research activities, but also in better positioning C-PAN to serve the needs of other faculty at SIUE. To continue to support the needs of the SIUE campus community, C-PAN hired 7 faculty fellows, affiliates, and ambassadors. In addition to conducting research in data science or data- intensive areas, these 7 individuals also helped to provide services to the SIUE campus such as: mentorship of students in experiential research learning environments, hosting of workshops based on their respective disciplines' needs, and data consultation. Together with the director, the faculty fellows and ambassadors worked together to host a total of 17 workshops and serve 436 participants. These workshops were open to all faculty, staff, and graduate students at SIUE. Furthermore, all workshop recordings and resources are not available to the general public at https://www.youtube.com/playlist?list=PLuJ3pjSP1N7-Ra0JI1M-8d3Qazl 5lPWd.

C-PAN continues to support student success on SIUE's campus and to engage in projects in this arena. Although positive work was accomplished in this area, including a new study on student belonging that informed work that is currently being undertaken in FY25, some significant hurdles emerged that unfortunately dampened the impact the center could provide during FY24. Prior to FY24, student data for analyses was shared with C-PAN by staff who had access to these data points in Banner. When these staff retired, the offices that had once shared these data were running short-staffed and did not have the bandwidth to provide C-PAN with the data requested until replacements could be found. Unfortunately, as is the natural course of things, it often takes some time to find these replacements, and then these individuals still must become oriented with the campus environment. The fortunate outcome to this challenge is that it highlighted a need for better data-sharing pipelines with C-PAN so that the center can accomplish its IBHE mission. To meet this need, C-PAN worked with the Office of Institutional Research and Studies to create a memo of understanding that should create a more efficient data sharing strategy. These two outcomes were instrumental in providing the foundation for work that is currently taking place. In addition to these new projects, C-PAN also validated our previous study on direct entry thresholds for each college/school at SIUE. The validation studies were summarized into reports, including Excel spreadsheets, for ESRA. ESRA then shared these reports directly with each college/school upon request, providing information to all programs who had questions regarding direct entry thresholds.

Additionally, C-PAN partnered with the Office of Research and Projects to explore methods for the automation of real-time expense reporting on all grant and contract accounts. During FY24, this team successfully developed and beta tested a script that automates the sharing of weekly expense reports for all accounts. This was further used to create a dashboard template in Power BI that would enable principal investigators to view expenses in graphical displays.

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

(1) Support for SIUE Campus Priorities

- a. Prepared and Committed Students: The Center, through experiential learning and applied analysis, provides real-world data science experiences for undergraduate and graduate students. These students come from all departments at SIUE, and collaborative discussions with other units on campus are underway to identify potential mechanisms to help support student research.
- b. Innovative High-Quality Programs: The Center partners with ESRA, IR, and other administrative units on campus to identify student needs across campus and devise creative solutions for needed student support. The Center also works with SIUE faculty and staff to provide data science resources, including training resources and information that helps to promote data ethics and data literacy at SIUE and beyond. In an ever-progressing digital world, it is our intention that access to training and these educational resources will enable our faculty to help prepare students for the digital landscape of their future careers. Students also have the opportunity to gain work experience while in college, and they can receive credit for this work through a number of mechanisms.
- c. Dedicated Faculty and Staff: The Center collaborates with faculty from all units on campus, including in the areas of grant development and scholarly support. This Center helps to support interdisciplinary research projects, including those with "Big Data" or data science components. The availability of C-PAN's resources to our faculty helps to increase the competitiveness of research proposals submitted by faculty at SIUE by demonstrating to funding agencies that faculty have access to the necessary facilities and personnel to complete proposed work in data science.
- d. Outreach and Partnerships: The Center has established partnerships with multiple academic institutions, industry partners, and government partners in Illinois and the St. Louis Metropolitan region. These partnerships are centered around the goal of providing real-world data science experiences for our students at SIUE and collaborating institutions, as well as supporting data literacy and knowledge through non-credit educational offerings.
- e. Physical and Financial Stability: In its first five years of operation (FY20 FY24), C-PAN has successfully secured and led \$4.7 million in funding, with approximately \$700K in additional funding secured to begin in subsequent fiscal years. This places C-PAN in the top 33% of all units across SIUE during that time period. In addition to the \$4.7 million in funding where staff at C-PAN served as PI, C-PAN staff have served as either PI or Co-PI on \$6.1 million in funded external awards since the center's inception, and has assisted in approximately \$2 million in additional funding as key personnel. Through its commitment to pursuing external funding for research and scholarly activities, the center has supported a large number of faculty and students in their scholarly endeavors. Grants provide indirect cost recovery for SIUE and the Center, thereby also ensuring fiscal sustainability of operations. Furthermore, centralized access to data science and statistical consulting support on campus reduces support service costs that

academic departments at SIUE would otherwise be required to pay to external vendors, and it provides ease of access to these services for faculty and students.

(2) Support for IBHE "A Thriving Illinois"

- a. Equity: The Center is directly working to address educational attainment discrepancies among underserved populations, including minorities, women, and students from impoverished backgrounds, among others. We understand that the pathway to success is different for each student, and that the support mechanisms necessary for the success of students is not a one-size-fits-all solution. In identifying critical time points for intervention and by mining data to understand what interventions are most likely to lead to success, it is the goal of C-PAN and our partners at SIUE to provide the support infrastructure needed to assist students of all backgrounds in attaining their educational aspirations. To this end C-PAN has conducted modeling that creates direct entry thresholds that incorporate factors such as unmet need to develop more equitable direct entry practices. Additionally, C-PAN culled all DFW rates at the institution and utilized data modeling practices that enable analysis of specific courses serving as prerequisite courses for large numbers of other required courses across various programs. This enabled the Center to quickly identify sites where student success was disproportionately impacted by diminished success rates in a limited segment of courses.
- b. Sustainability: To sustain the people of Illinois, it is imperative that that we remove unnecessary barriers to college education and training, and that we tie our training strategies directly to workforce needs. Without the removal of unnecessary economic barriers to obtaining a college education, students from disadvantaged backgrounds will continue to struggle to achieve their educational and career aspirations. This creates a systemic cycle that persists across generations. We are directly invested in efforts to provide financial support mechanisms that improve college affordability for our students. As an example, our center has made an internal commitment to include funding for either student fellows or student employees on every grant or contract we submit for which such costs are allowable. Student fellows are provided with a stipend of \$8,000 per year, typically, although this may vary depending on the length of time students work with the center. During FY24, grant funding provided financial support through stipends or employment to 9 undergraduate students at C-PAN, as well as stipends and tuition waivers for two graduate students. We also partner with the Office of Enrollment Management to identify mechanisms for supporting student success that are tied to addressing unmet need.

However, we are not sustainable ourselves. C-PAN receives \$100,000 per year in state dollars from SIUE. Much of our mission is in direct service to the SIUE community. However, our support lines do not reflect this mandate. The core center staff at C-PAN consists of three employees: the director, the senior research fellow whose salary is partially supported at the system level, and the office support specialist shared between C-PAN and another research center at SIUE. C-PAN is responsible for a portion of that salary. The center views the need to hire a program director as additional essential financial commitment that the center must navigate.

The funding (external, state, and system) must also be supplemented by C-PANs ability to secure external funding, which it does with significant success (see above). However, the rate at which the C-PAN needs to secure external funding in order to continue with this funding model is increasingly unsustainable. We are concerned as our mission to support the previously described efforts involving equitable student research and training opportunities, support of faculty and staff scholarship through the C-PAN Faculty Fellows/Affiliates/Ambassadors program and through workshops, the research efforts that our center has been charged with accomplishing, or workforce training in the region, depends on our ability to build and support a robust staff of highly trained professionals.

c. Growth: The economic and humanitarian growth of our state builds directly upon the pillars of equitable and sustainable educational training. Our training models meet students at multiple points along their career trajectories, from within the traditional classroom to within the current workforce. The model employed by C-PAN for our undergraduate and graduate student population is that the Center acquires research projects, and then trains students in different data science techniques based on the available research projects and the interests of the students. One of the greatest critiques of data science education is that classroom exercises, while formational and important, are also too simplistic for complete preparation of our data scientists for the real-world. Classroom examples are often "scrubbed", meaning that the datasets used are too idealistic for what is commonly encountered in the real-world. The Center strives to immerse our students fully, providing them with access not only to the analytical techniques often employed during data analysis, but also the tools needed to prepare data for analysis and to mitigate potential sources of error. In service to the non-traditional workforce, we received approval in FY24 that focused on data science skillsets that will enable individuals to upskill or enter the data science profession. These 11 alternative digital credentials were built out in FY24 and were launched in FY25.

We also believe that it is highly important that education, research, and innovation be linked together to support economic growth. The availability of C-PAN facilities and personnel increases SIUE's competitiveness for federal and contractual funding in applied research and educational proposals. Selection for funding for these proposals creates potential for innovations, which in turn creates potential for commercialization. Furthermore, and perhaps more importantly, Illinois and the St. Louis bi-state region have historically been technology hubs in the nation, and appear to be advancing in that arena. To support that continued growth, it is vital that the emerging workforce be trained in the area of data science, which C-PAN strives to do through experiential learning opportunities for its own students and through access to data science resources for the greater SIUE community.

11.4 Evidence of Support for Center/Institute Objectives

Broad Objective 1: Pursuit of Multidisciplinary and Multi-Institutional Funded Projects

A primary objective of C-PAN is to facilitate interdisciplinary grant and contractual applications. Data science is a need in all disciplines, and we use our expertise to assist all faculty and students across a broad range of projects. In FY24, we partnered with 8 other departments/units at SIUE and across the SIU System, as well as multiple external partners, for submission of \$51,815,969 in external proposals and contracts. This does not include collaborations in which C-PAN served as key personnel on proposals.

Program Area/Sponsor	Partnering Units/Institutions	Amount
U.S. Environmental Protection Agency (EPA-R-OEJECR-OCS-23-03)	SIU: OCE SIUE: C-PAN EPIC Network	\$50,000,000
Madison County	SIUE: C-PAN, CHEM, OSEO	\$375,000
State of IL	SIUE C-PAN; SIU OCE	\$75,000
Illinois Innovation Network (Water Quality Project)	SIUE: C-PAN, CHEM ISU: Agriculture	\$40,000
Illinois Innovation Network (Environmental Messaging Project)	NIU: Political Science SIUE: ENSC, C-PAN	\$17,871.49
Illinois Innovation Network (Landsdowne Up Project)	SIUE: C-PAN, ORP, OSEO	\$30,000
U.S. Environmental Protection Agency (Jackson State Project)	SIUE: C-PAN, ORP Jackson State	\$20,000
U.S. Economic Development Administration	SIU: OCE SIUE: C-PAN	\$491,456
American Association of Colleges of Pharmacy	SIUE: C-PAN, BIOL	\$500
USDA-NIFA	UIUC: CPSC, NRES SIUE: C-PAN	\$16,141.13
USDA-NIFA	SIUE: C-PAN, ENSC, CHEM, CS	\$750,000
Total		\$51,815,968.62

Broad Objective 2: Support Faculty Research and Access to Expertise
Since C-PAN's establishment and formal recognition as a center by the IBHE in FY20, the Center
has progressively moved from submission and acquisition of external funding to capacity
building, and now campus and community impact. In FY24, C-PAN continued expansion of its

operational capacity through the hiring of additional center staff, including a program director, a researcher, and an office support specialist. Faculty Fellows, Faculty Affiliates, and C-PAN Ambassadors, these individuals being already employed at SIUE, continued to serve a pivotal role at C-PAN. These individuals dedicate their time to service to the university through internal consulting and projects, as opposed to faculty having to pay for those consulting services. The Fellows, Affiliates, and Ambassadors were also instrumental in presenting workshops that were offered freely to the campus community, and we continued extending these to all SIU faculty and staff in FY24.

Broad Objective 3: Student Retention and Success

In FY24, C-PAN was involved in three projects pertaining to student retention and student success. The first of these was a validation study based on direct entry analyses previously provided by the center. Upon request of College and School Administrators, ESRA reached back out to C-PAN to verify thresholds for direct entry into academic programs and students' corresponding likelihood of success. Using the most recent data, C-PAN performed both empirical and simulation analyses to identify the thresholds at which students were likely to be successful in different major programs across each of the Colleges/Schools at SIUE. These updated analyses were shared with ESRA, and ESRA then disseminated the resulting spreadsheets to academic units who wished to view the analyses. We also understand fully that this new admissions policy will uncover new challenges, particularly as it relates to student advising needs; it is our intention to monitor this process constantly over the next few years and to help identify challenges as they begin to emerge.

The second project undertaken by C-PAN staff was to address data sharing hurdles by working with IR to develop a memo of understanding that would allow expeditious sharing of data with C-PAN staff. The first MOU is now in place, and its efficacy is being evaluated to determine whether this is a tenable solution to the data sharing challenges at SIUE. The third study conducted by C-PAN in this area revolved around the concept of student belonging. There is a perception that student success at SIUE may be, at least in part, dictated by a student's feeling of belonging on campus. In a preliminary study, we coordinated with faculty in introductory STEM courses at SIUE, as well as the Interim Vice Chancellor for Student Affairs, to conduct surveys and focus groups of first-year and second-year students on campus. These results paved the foundation for a larger study on student belonging that is being conducted in FY25.

Broad Objective 4: Real-World Experiences and Mentorship for Students

Previous studies conducted by C-PAN indicated that mentorship and feeling of belonging can have drastic positive impacts on student success. This knowledge guides all student training experiences offered by the Center, and it also drives our approach to interacting with students as part of community outreach projects. Research students at SIUE gained experience working with real-world datasets and in generating reports for collaborators, which helped them learn how to communicate complex data science findings. All students are paired with at least one mentor to help guide them with research. This also helps support students' educational careers through the formation of a trusting mentor-mentee relationship in which students can ask a variety of educational and career questions. During FY24, in addition to continuing the highly successful Experiential Learning In Applied Statistics (ELIAS) fellowship program, C-PAN staff committed to incorporating student research experiences into every project proposal submitted, when appropriate. This inclusion of student research experiences as part of grants

and contracts has opened the door for real-world training and mentorship and has allowed us to reach a greater number of students. This has a secondary impact of allowing students to work within a multidisciplinary team and enabling them to learn a combination of skills within their own discipline and within data science.

In addition to working with undergraduate and graduate students currently enrolled at SIUE, C-PAN collaborated with the TRIO/Upward Bound program to offer robotics classes to students from historically underserved backgrounds. The director and two fellows alternated classes and taught students the fundamentals of robotics components and programming. The hope of C-PAN is that such outreach activities can help students form an interest in STEM careers, and also feel like they are learning in a fun and supportive environment.

11.5 Evidence of Organizational Effectiveness

Organizational Effectiveness in Achieving Predetermined Goals

As shown in Section 11.1, we met or exceed all targets for our 11 metrics. Since C-PAN's inception, the center has shifted from the establishment of physical infrastructure (Year 1 – FY20) to operational infrastructure (FY21 through FY23), and has now moved into operationalization and organizational impact (FY23 and continuing). Through this progression of physical infrastructure to operational infrastructure to operationalization and organizational impact, our metrics have sometimes updated to reflect our changing capabilities. The operationalization, activities, and infrastructure built to date are reflective of the expressed desires of SIUE's faculty, and C-PAN serves as a centralized data science resource that meets the needs of a large portion of the campus community. Additionally, C-PAN is set to hold a campus-wide town hall in FY25 so as to better learn more about the evolving needs of the campus community.

Research & Grant Applications

In FY24, C-PAN boasted \$51,815,969 in submissions and \$4,710,949 in active grants by the end of the fiscal year. This included \$445,500 in awards that began in FY24. Many of these are multi-year awards, with an anticipated increase in expenditures during FY24 – FY26 relative to FY23. In FY24, C-PAN managed the spending of \$1,245,099 in grant activity. This represents a 40.6% increase over FY23's grant expenses (\$885,398.80), and a 528% increase over FY22 grant expenses (\$198,175.50), and does not include grants and contracts where the PI is from another unit. Thus, the FY24 value of grant expenditures represents a 12.5 fold return on investment (ROI) for SIUE, just based on grants that C-PAN manages and not including grants that the center supports across campus. Also striking, the FY24 grant activity generated \$217,271.25 in ICR alone. In ICR dollars alone, this represents 96.5% of the core 3 staff members' salaries and 71.5% of the core 4 staff members' salaries. Furthermore, in just ICR dollars, C-PAN is currently generating more than twice as many ICR dollars as the \$100,000 it receives from SIUE each year. Furthermore, the ICR generated by C-PAN in FY24 was the second highest of all units across all of SIUE during the fiscal year. We anticipate maintaining these levels of revenue and expenditures for the foreseeable future, but this creates a substantial concern. This level of grant activity and revenue generation can only be sustained with funding for core center staff. Core center staff cannot be furloughed and rehired as grant

funding naturally ebbs and flows over time, or even for short time periods of time between secured projects; these are highly skilled individuals that will be successful in securing other employment opportunities, especially in the technology-driven St. Louis area. If core staff are not supported, we fear staff turnover will reduce the level of revenue brought to the university. We cannot emphasize the concern surrounding fiscal sustainability of C-PAN enough.

At the present, however, C-PAN's research and grant activity is prolific and is supporting the continued operation of the center and its activities. Below is a summarization of C-PAN presentations, publications, and grant dollars per FTE in FY24.

Year	# Scholarly	# Scholarly	FTE Research	Grant Dollars per
	Publications	Presentations	Faculty and Staff	FTE
FY24	2	10	4	311,274.75

12	1.4 44 44	· ^
12.	institutional	l Assessment

12.1	Date of Last Review	NA – Center Established in FY20
12.2	Decision at Last Review	Center/Institute in Good Standing
		Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(Center established in FY20. Has not yet undergone formal review.)

RESOURCES: Center/institute name

Financial	FY2024	FY2023	FY2022	FY2021	FY2020
Resources					
Revenues					
State Appropriations	\$100,000.00	\$100,000.00	\$100,000.00	\$125,000.00	\$154,168.00
Income Fund	\$150,850.00	-\$4,364.00	\$0.00	\$0.00	\$0.00
Grants & Contracts	\$1,328,531.99	\$422,384.42	\$198,175.50	\$86,069.31	\$26,500.00
Salary Transfer	\$209.88	\$2,734.92	\$1,349.95	\$2,400.00	\$0.00
Non-Recurring Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ICR	\$44,365.52	\$9,499.58	\$11,841.17	\$11,944.15	\$0 Transferred in FY21
Total Revenues	\$1,623,957.39	\$530,254.92	\$311,366.62	\$225,413.46	\$180,668.00
Total Nevenues	71,023,337.33	7550,254.52	7311,300.02	7223,413.40	7180,008.00
Expenditures	\$549,704.45	\$231,169.38	\$143,880.67	\$127,695.79	\$105,953.31
Salaries	\$16,448.40	\$6,613.25	\$4,547.25	\$728.00	\$0.00
Student Wages	\$12,680.30	\$486.72	\$540.50	\$0.00	\$0.00
Travel	\$21,818.73	\$569.83	\$1,108.00	\$1,561.28	\$28,275.07
Equipment	\$32,178.13	\$7,507.89	\$8,352.44	\$706.38	\$954.88
Commodities	\$279,838.61	\$99,819.24	\$74,898.35	\$39,808.75	\$0.00
Contractual Services	\$69,581.52	\$56,100.00	\$29,000.00	\$29,000.00	\$0.00
Awards	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Telecomm.	\$0.00	\$477.10	\$0.00	\$0.00	\$275.00
F&A	\$217,271.25	\$47,826.69	\$27,896.09	\$9,655.00	\$3,975.00
Benefits	\$84,245.88	\$25,335.10	\$10,985.00	\$943.72	\$4,725.93
Participant Support	\$201,400.00	\$40,000.00	\$94.77	\$410.00	\$0.00
Non-Mandatory Transfers	\$86.59	\$12,500.00	\$0.00	\$0.00	\$23,000.00
Total Expenditures	\$1,485,253.86	\$528,405.21	\$301,303.07	\$210,508.92	\$167,159.19
Revenue Minus Expenditures	\$138,703.53	\$1,849.71	\$10,063.55	\$14,904.54	\$11,186.81

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	2.35	2.81	1.20	1.25	1
Academic Professionals	0.67	0	0	0	0
Staff	0.04	1	0	0.1	0
Graduate Students	1.07	1.07	1.5	0.5	0.25
Total Staffing	4.06	4.87	2.7	1.85	1.25

Note: the FY24 staffing totals include 2 full-time center faculty, 7 faculty fellows/affiliates/ambassadors, 2 academic professional staff (started in Feb. and Apr. 2024), and 1 civil service staff member (started Apr. 2024).

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

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Center/Ins	stitute	Southern Illinois University Edwardsville Center for STEM Research, Education, & Outreach		
. Center/Institute		Center for OTEM Nesearch, Education, & Odireach		
. Date		February 28, 2025		
. Director		Sharon Locke		
4.1	Telephone	618-650-3452		
4.2	E-mail	slocke@siue.edu		
5. Year Established		2012 (received temporary approval from IBHE); September 19, 2017 (received permanent approval from IBHE)		
i. Illinois State Statute (if pertinent)		N/A		
7. Reporting Unit		Graduate Studies and Research		
3. Туре		Activity		
		(check all that apply)		
Instructio	nal	X		
Research		X		
Public Ser	rvice	X		
	Date Director 4.1 4.2 Year Esta Illinois Sta (if pertinent) Reporting Type Instruction Research	Date Director 4.1 Telephone 4.2 E-mail Year Established Illinois State Statute (if pertinent) Reporting Unit Type Instructional		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

6. Overview

6.1 Description

The STEM Center provides centralized leadership and support for STEM education activities and research. The Center brings together practitioners and researchers from a broad range of disciplines to achieve its goals of improving STEM (science, technology, engineering, and mathematics) understanding and achievement in K-12 and higher education and increasing STEM literacy in communities.

6.2 Mission

The SIUE STEM Center brings together researchers and educators to lead inventive approaches in engaging students and the public in STEM. Our goal is to enhance STEM education, inspire curiosity, and contribute to advancing knowledge.

6.3 Objectives

- 1. Build and support interdisciplinary teams of SIUE faculty to conduct STEM education projects and seek and secure external and internal funding.
- 2. Provide access to equipment, facilities, and expertise from STEM education research to SIUE faculty and students and the broader community.
- 3. Facilitate and promote innovations in SIUE undergraduate and graduate STEM teaching.
- 4. Enhance teaching and learning of STEM for pre-service and in-service teachers.
- 5. Develop, enhance, coordinate, and promote new and existing STEM-related outreach in the southern Illinois region to enhance STEM literacy.
- 6. Develop and maintain a comprehensive STEM resource and equipment center for in-service and pre-service teachers, SIUE faculty, and other local stakeholders.

7. Advisory Board

7.1 Advisory Board - Membership during FY 2024

Internal Advisory Group:

Chris Gordon, Associate Dean & Professor, School of Engineering

Kelly Jo Hendricks, Director, Kimmel Student Involvement Center

Terri Poirier, Professor, School of Pharmacy

Chaya Gopalan, Professor, Applied Health and Nursing

Barb Nwacha, Professor, Department of Art and Design

Vance McCracken, Associate Dean & Professor, College of Arts and Sciences

1

Nicole Klein, Director & Professor, Psychology & Faculty Development

Elizabeth Cali (ex officio)

10.2 Number of Meetings (In This Year)	
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8. Annual Performance

8.1 Performance Measures¹

Meas	ure		Target for Year*	Results in Year
1.		Develop grant proposals as PI/collaborator with SIUE units or external partners (Sec 11.4)	3	8 submitted
2.	Research	Submit manuscripts for peer-reviewed publications	3	2 journal articles 1 book chapter 1 curriculum
3.		Scholarly presentations	5	14
4.	Instruction	Provide instruction for SIUE academic departments	3 credit hours	13 credit hours
5.	Public Service	Promote use of STEM Resource Center lending library	790 direct impact	716 direct impact

6.	Offer educator professional development	3 programs	5 programs
7.	Develop new community partnerships	2 new partnerships	3 new partnerships
8.	Coordinate STEM community outreach activities	25 outreach events	94 outreach events

¹ Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

8.2 Major Accomplishments (In This Year)

The STEM Center managed six federal grant awards, one private grant, two local government contracts, and one internal grant in FY24, achieving multiple goals for improving STEM education in the region.

NEW GRANTS - \$1,697,549

Increasing High School Student Social Capital for Success in Health Professions (funded by National Institute of General Medical Sciences)

In June 2024, the STEM Center was awarded a \$1,320,209 NIH-funded Science Education Partnership Award (SEPA) for a project in collaboration with SIU School of Medicine. This multi-institutional project will expand SIUSOM's four-year medical pathway program for high school students in the Metro East. This project combines Social Capital Theory (SCT), an evidence-based mentorship structure, and best practices for designing and implementing pathway programs. At the project's completion, the research education program will have supported 70 high school students, 10 undergraduate students, and 15 medical students to progress in their education and career goals. Expected outcomes are to spark and sustain high school and undergraduate students' interest in health careers; to increase participants' application and acceptance into health-related programs; to increase medical students' professional self-efficacy; and to establish a sustainable mentoring network of high school, undergraduate, and medical students, and physicians.

Inclusive Biology Impacts on Students (funded by National Science Foundation)

Through this \$340,528 award, the STEM Center is participating in timely research on making life science education more inclusive for all students. The project works with high school teachers and students to design changes to remove bias from outmoded biology curriculum content and study the impact of these interventions on student attitudes. The award, designed for early career

^{*}Targets reflect the STEM Center's Strategic Plan

researchers, also includes funding for training and professional development for the PI Charlie Blake.

Graduate Internships Contracts (East West Gateway Regional Council of Governments & City of Alton)

The STEM Center received two graduate internship contracts totaling \$20,654 to complete local greenhouse gas emissions inventories.

Software for Qualitative Data Analysis: Supporting Faculty and Student Qualitative Research for SIUE Research Competitiveness (SIUE Graduate School)

The STEM Center received \$11,500 for ATLAS.ti software licenses, which we use internally and also distribute to faculty members across SIUE who are conducting qualitative research.

ONGOING GRANTS - \$4,170,038

Environmental Health Investigators (funded by National Institute of General Medical Sciences)

In cooperation with area middle and high schools, STEM Center staff implemented the Environmental Health Investigators program, funded by a \$1.3 million NIH-funded Science Education Partnership Award (SEPA). This program used engaging student-centered, data-driven activities developed by the STEM Center to help students gain experience with their environment and environmental health. Through this project, the STEM Center, in collaboration with the SIUE Departments of Environmental Sciences and Applied Health, continues to implement student programming that connects area youth with exposure sciences. Through Environmental Health Investigators, STEM Center faculty and staff developed and provided innovative, relevant programming that helps youth explore technologies and concepts leading to a greater understanding of their environments.

At the Confluence: Supporting Critical Transitions for Graduate Students in Sustainable Watersheds Research (funded by National Science Foundation)

The STEM Center, partnering with SIUE Departments of Biology, Chemistry, Civil Engineering, Environmental Sciences, and Geography is administering a National Science Foundation S-STEM award for \$1,500,000. The award supports scholarship funds for low-income graduate students pursuing their master's degree at SIUE and with an interest in watershed sciences. The S-STEM award also supports co-curricular activities for the students accepted into the program intended to increase their capacity as students at SIUE and emerging scholars. Further, the team is offering professional development opportunities for SIUE faculty to support research-informed best practices in mentorship and graduate education.

GP-EXTRA: Personal Relevance, Global Significance: Building Geoscience Education and Career Pathways (funded by National Science Foundation)

The geoscience disciplines have strong employment growth and offer rewarding careers, but geosciences is one of the least diverse STEM disciplines. Through a \$432,038 grant from the National Science Foundation, the STEM Center is leading a project that raises SIUE student awareness and preparation for graduate school and/or employment in the geosciences. The STEM Center and faculty in Geography and Environmental Sciences are offering intensive research and field experiences for a cohort of 21 science-interested undergraduates.

A Course Scaffold for Integrating Science and Culture: Exploring Faculty Adaptations Across Disciplines and Institutions (funded by National Science Foundation)

The STEM Center continued to lead a \$300,000 grant awarded in FY23 to integrate history and culture into undergraduate science courses to promote student critical thinking and perspective-taking skills. The grant is a collaboration of SIUE, Colorado State University, and the University of Texas-El Paso. Through this grant, SIUE developed a new environmental sciences course in Sustainable Watersheds that was taught in June 2023 and Spring 2024.

Inclusive Excellence 3 (funded by Howard Hughes Medical Institute, private)

The STEM Center is leading SIUE's Howard Hughes Medical Institute's (HHMI) Inclusive Excellence 3 project, which was awarded funding in November 2023. This \$575,000 grant supported 11 undergraduate STEM Student Ambassadors in FY24 to develop faculty and staff-mentored action projects to improve learning in introductory STEM courses, which can be a barrier to student retention and advancement in their degree program. The grant also supported faculty learning communities in Fall 2023 (with two facilitators and nine participating faculty) and Spring 2024 (with two facilitators and 17 participating faculty).

EDUCATION and COMMUNITY ENGAGEMENT

Robotics Competitions

In September 2023, the STEM Center again hosted the First Lego League Kickoff with community partner Southern Illinois FIRST Robotics. Over 70 children and adults visited the STEM Center and SIUE to learn about ocean exploration and engineering.

Staff Fellow – SIUE Residential Focused Interest Communities

For FY24, Program Coordinator Emily Wonnacott-Stanley continued as the staff fellow for the Engineering Focused Interest Community (FIC). The STEM Center partnered with the FIC Faculty Fellow to create a new tradition with student housing: a planetarium show/LARP (Live Action Role Playing) experience. Students spent an evening playing an interactive game and met their fellow

players at the planetarium, where STEM Center staff relayed stories of constellation origins based on the curriculum *One Sky*. Other meetings of the FIC included robot races and Lego brick building competitions.

STEM Center Eclipse 2024 Tour

In anticipation of the April 2024 Total Solar Eclipse, the STEM Center partnered with area schools and community groups to present 89 planetarium shows to 1,975 participants. In Triad School District, the planetarium conducted shows in all the primary and elementary schools as well as the middle school. Topics covered how to safely view the eclipse, the movements of planetary bodies, tours of the solar system, and common night sky viewing.

STEM Center Partnership with SIUE Head Start

Candice Johnson and Emily Wonnacott-Stanley led a grant from The Meridian Society to introduce robotics to preschoolers enrolled in the SIUE Head Start program. The program gave a hands-on demonstration to 158 students ages 3-5, where they learned how robots follow directions and how to create and debug their own programs. The grant provided one Kibo Preschool Robot set to each Pre-Kindergarten class at each Head Start location (eight kits total). Johnson and Wonnacott-Stanley led professional development for 19 instructors in Head Start.

Lending Library Accessibility and Inclusivity Efforts

Using the advice and practical knowledge of Community Fellow Pat Galligan, STEM student workers and Emily Wonnacott-Stanley evaluated the accessibility of popular equipment used by SIUE students and faculty and area teachers. Items were adapted for users who require tactile interaction such as braille and then tagged in the online inventory system with the keyword "Accessible." This effort will expand in FY25 as staff become more familiar with a thermoform machine and braille labelers.

8.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

(I.) Support for SIU System Priorities (2021-2026 Strategic Plan)

Goal Theme 1: Academic Innovation and Student Success

The Center provides work and internship experiences in STEM for undergraduate and graduate students, and in collaboration with academic departments provides NSF S-STEM graduate scholarships. Financial support through scholarships and internships increases the likelihood of retention and graduation of STEM students. Funded programs in environmental health (e.g., Environmental Health Investigators) connect graduate students with real-world opportunities for

research and analysis. The Center's GEOPATHS program provides undergraduate research experiences, internships, professional skills training, and mentorship for undergraduates who identify as underrepresented in the geosciences. Participation in undergraduate research predicts retention and success for underrepresented STEM students. The Center also supports annual cohorts of undergraduate students through the STEM Student Ambassador Program, funded by the Howard Hughes Medical Institute's (HHMI) Inclusive Excellence 3 grant. STEM Student Ambassadors develop projects to improve the student experience in introductory STEM courses at SIUE. The STEM Center supports the laboratory classroom management for Science 241a and Science 241b, which are science courses for SIUE pre-service elementary, preservice, and special education teachers.

Goal Theme 2: Anti-Racism, Diversity, Equity and Inclusion

The Center plays an important on-campus role in providing opportunities for those traditionally underrepresented in STEM fields. The STEM Center faculty and staff regularly participate in professional development to ensure a welcoming and safe space for SIUE students, community members, program participants, and partners. Four Center faculty/staff and three graduate students completed the NSF-funded Inclusive STEM Teaching Project course (ISTP), a six-week online course designed to improve awareness, self-efficacy, and ability of students, faculty, and staff to create inclusive STEM learning environments for their students. One faculty member completed 120 hours of training through the IMPACT Academy to become a facilitator who will train others on campus in diversity, equity, and inclusion topics. The STEM Center is listed as a Safe Zone on campus, with four faculty/staff members having completed the Safe Zone training (supporting the LGBTQ community) and registered as university allies. Additionally, three faculty/staff members have completed the Green Zone training (supporting military veterans), one faculty completed the Global Zone Ally training (supporting international students), two staff/faculty completed the Mental Health First Aid training, one staff member completed a blind ally training and sign language communication primer, and one faculty served as the emcee for an affinity graduation ceremony (Hispanic/Latinx Graduation Celebration - Spring 2024). The STEM Center's community engagement primarily supports students and teachers of majority lowincome districts, with the goal of increasing access to STEM education and cultivating a diverse technical workforce in southwestern Illinois. The STEM Center also supports affinity groups at the university level, with one of our faculty serving on the executive board of the Hispanic/Latinx Faculty and Staff Association.

Goal Theme 3: Community Impact

The Center is a leading outreach organization on campus. In addition to youth programs, we provide teacher professional development and equipment loans through the Resource Center. In FY24, we partnered with a diverse group of community organizations for K-12 and public engagement: regional libraries, AARP, Army ROTC, Bethalto 8, Boy Scouts of America, Boys and

Girls Clubs of Bethalto, Early Explorations Preschool, Edwardsville District 7, FIRST Robotics, Girl Scouts of Southern Illinois, Good Dirt Composting Collective, Granite City 9 District, Head Start, Heartland Conservancy, Highland 5 District, Lewis and Clark Community College, Madison School District, St. Clair County Transit, Upward Bound Math and Science Collinsville, Watershed Nature Center, and Willoughby Heritage Farm. The STEM Center also partners with local city governments to create internships for SIUE students in environmental education and sustainability.

Goal Theme 4: Research, Creative Activity, and Partnerships

The STEM Center leads interdisciplinary and transdisciplinary grant proposal teams on campus and with external partners each year, often serving as a mentor for early-career faculty members. Center-led grants are frequently national in scope and serve to connect SIUE faculty with other research institutions. External research partners in FY24 included Colorado State University, the University of Texas-El Paso, and the SIU School of Medicine. The STEM Center faculty is nationally recognized for the quality of scholarship through frequent participation on national grant review panels and leadership positions in regional, national, and international professional societies. In FY24, Director Locke served as a review panelist for the Science Foundation of Ireland and Vice Chair of the International Geoscience Education Organization.

Goal Theme 5: Faculty and Staff

The STEM Center collaborates with and supports faculty members on grant applications and promotes interdisciplinary research projects, which are a priority for federal funding agencies. The Center serves as a partner for broader impacts work required for National Science Foundation proposals, increasing competitiveness of proposals submitted by science and engineering faculty. The Center also presents and publishes research in collaboration with faculty and connects faculty with opportunities for community engagement with schools, youth organizations, and the public. The STEM Center supports (through the HHMI Inclusive Excellence grant) and co-facilitates an ongoing Faculty Learning Community based on the Inclusive STEM Teaching Project course, which is open to all SIUE faculty.

Goal Theme 6: Infrastructure

The STEM Center has a high return on investment from grant funding relative to state support of its faculty and staff. Grants provide indirect cost recovery for SIUE departments and the center. Fee-based programs partially support a center staff member who provides instructional support services to SIUE faculty. Central coordination for loans of STEM teaching materials reduces costs to academic departments.

(II) Support for IBHE "A Thriving Illinois" Goals

Increase postsecondary credential and degree attainment to develop the talent that drives Illinois's economy.

The GEOPATHS program is increasing undergraduates' awareness of geoscience career pathways and providing training to create a more highly skilled geoscience workforce. The HHMI program is reducing barriers to advancement in STEM degree programs by improving the student experience in introductory STEM courses.

Close the equity gaps for students who have been left behind by the higher education system.

The STEM Center is directly addressing the STEM workforce pipeline in Illinois by providing support to faculty and direct support to students to improve student outcomes and reduce equity gaps at the K-12, undergraduate, and graduate levels. We help improve academic preparation and increase interest in STEM so that Illinois students successfully transition from high school to higher education, and into careers.

Improve affordability, increasing access, and managing costs.

Center programs provide scholarships, internships, and graduate assistantships through grant awards and partnerships with communities. The NSF-funded Watershed Scholars program, a partnership with several academic units, is providing \$20,000 graduate scholarships for up to 10 master's students each year in biology, chemistry, civil engineering, environmental sciences, or geography.

8.4 Evidence of Support for Center/Institute Objectives

IBHE Objective 1: Build and support interdisciplinary teams of SIUE faculty to conduct STEM education projects and seek and secure external and internal funding.

The STEM Center faculty team uses their extensive grant experience to lead and strengthen SIUE grant applications and pursue a range of research project types and topics. We prioritize collaboration with other units and often mentor new SIUE PIs to write competitive proposals. These efforts have led to substantial indirect cost recovery to the institution and to the academic units. Additionally, faculty members in academic departments receive summer salary from grants and use their returned indirect cost funds for professional development.

In FY24, we led or co-led 8 proposal submissions requesting \$2.061 million.

Internal Proposals	Title	\$ 23,455
SIUE Research Equipment & Tools	Software for Qualitative Data Analysis: Supporting Faculty and Student Qualitative Research for SIUE Research Competitiveness	\$11,500
SIUE Innovation & Excellence in Graduate Education	Professional Development to Increase Sense of Belonging and Retention for International STEM and Health Graduate Students	\$11,955
External Proposals	Program/Title	\$ 2,037,551
National Institutes of Health (S. Locke, A. Dexheimer)	Disrupting Systemic Inequities in Health Career Preparation: Increasing Student Social Capital to Diversify Health Professions	\$1,320,209
Missouri University of Science and Technology (NSF Subaward) (PI G. Bracey)	Collaborative Proposal: IRES: Integrative Biodiversity Research and Place-Based Conservation to Empower Students as Explorers, Ecologists, and Environmentally Literate Citizens	\$60,000
National Science Foundation (PI A. Dexheimer)	BCSER: Building a Conceptual Framework for Garden-Based Science Learning among Middle School students	\$349,874
Spencer Foundation (PI C. Blake)	Convergence Climate Change Education for Hope and Action	\$249,621
National Endowment of the Arts (PI C. Blake)	Convergence Climate Change Education	\$52,672
City of Webster Groves (PI S. Locke)	City of Webster Groves Greenhouse Gas Inventory Internship	\$5,175

IBHE Objective 2: Provide access to equipment, facilities, and expertise for STEM education research, and IBHE Objective 6: Develop and maintain a comprehensive STEM resource and equipment center.

In FY24, the STEM Center's Resource Center maintained our usage rate at 15,300 STEM educators, researchers, and students. The improved and expanded STEM Center inventory website provides area preK-12 teachers with online access to a wide variety of classroom resources and STEM activities. SIUE faculty utilize the Center's equipment and classroom space for university courses and research. The resources of the STEM Center provide a variety of ways to engage with STEM, expanding the reach of STEM teaching and learning in both formal and informal educational settings while also contributing to increasing STEM literacy in southern Illinois and beyond. Additional and ongoing efforts to update the accessibility of equipment and an updated website have increased interest in equipment. This spring, a long- term project to link STEM Center curriculum to equipment descriptions in the inventory site was completed and additional materials added will have a link to the downloadable curriculum from the website.

IBHE Objective 3: Facilitate and promote innovations in SIUE undergraduate and graduate STEM teaching.

The STEM Center led an Inclusive Excellence program that has the primary goal to improve undergraduate achievement and completion for introductory STEM courses. Introductory STEM courses often serve as barriers to student advancement in STEM majors and may result in students switching out of STEM. The Center is working with an interdisciplinary team of faculty and STEM Student Ambassadors to study and redesign the introductory STEM experience at SIUE.

The STEM Center led the SIUE GEOPATHS project, which has supporting 21 SIUE undergraduates who identify as underrepresented in STEM to participate in faculty-mentored research, field excursions to the Western U.S. and El Salvador, career seminars, professional skills training, and conferences. GEOPATHS support for these activities is the equivalent of \$10,000 per student.

The STEM Center co-led the SIUE Watershed Scholars program, which has supported 14 high-achieving, low-income graduate students from five STEM departments (Biology, Chemistry, Civil Engineering, Environmental Sciences, and Geography) with a \$10,000 annual scholarship and research and conference travel funds. A STEM Center faculty member co-led a campus-wide faculty learning community centered around the topics of belonging and mentoring to build capacity among our faculty and create a space for sharing of innovative teaching and mentoring.

IBHE Objective 4: Enhance teaching and learning of STEM for pre-service and in-service teachers.

The STEM Center contributes resources and classroom space for Science 241a and Science 241b, Foundations of Science courses for SIUE pre-service teachers. Each year the STEM Center provides tours, lesson plans, and materials to pre-service teachers for use in their coursework at SIUE and encourages and supports all SIUE students considering careers as STEM teachers. In FY24, the STEM Center offered professional development for members of Kappa Delta Pi, a pre-service teacher student organization.

The STEM Center provides in-service teachers with opportunities for professional development. In June 2024, STEM Center staff held a two-day workshop for a group of 10 middle school teachers as part of the NIH-funded SEPA project. Teachers learned how to implement *Environmental Health Investigators*, a student-centered environmental health science curriculum developed as part of the project. The curriculum also includes a module that allows students to use the photovoice techniques to capture visual and narrative expressions of their perspectives on their environment. Participating teachers received copies of this curriculum, as well as handheld air quality monitors.

IBHE Objective 5: Develop, enhance, coordinate, and promote new and existing STEM-related outreach in the southern Illinois region to enhance STEM literacy.

We are a regional leader in STEM programming, partnering with more than 55 school districts and dozens of other organizations to reach students through lessons and activities. We provide outreach customized to the needs and interests of community partners. STEM Center outreach activities are aligned with Next Generation Science Standards and connected to district textbooks and curriculum goals. This ensures that the materials are relevant and complementary to what outreach participants are learning in their schools. We advertise learning opportunities through flyers, social media posts, and emails to STEM educators, parents, and administrators, prioritizing schools and communities with a high proportion of low-income families.

8.5 Evidence of Organizational Effectiveness

Organizational effectiveness in achieving predetermined goals (see Section 11.1, Performance Measures)

RESEARCH

The STEM Center *exceeded* targets for two of three research performance measures: proposal submissions and scholarly presentations. The STEM Center *achieved* its target for manuscript submissions.

In FY24, Center faculty and staff gave 15 scholarly presentations to enhance the regional, national, and international reputation of the SIU system (Table below). The Center submitted 6 external proposals requesting \$2,037,551. STEM Center FY24 revenue from grants and contracts was \$831,602, which was 69% of annual revenue.

Year	# Publications, Published ^{a,b}	# Publications, Submitted	# Scholarly Presentations	FTE Research Faculty
FY24	7	3	15	3
FY23	7	2	11	3.3
FY22	5	5	28	3.1
FY21	-	6	25	3.2
FY20	-	7	8	3.2

^a Publications were not tracked in FY20-21 BOT reports.

INSTRUCTION

The STEM Center exceeded the target for credit-bearing courses taught.

Director Locke taught 13 credit hours for undergraduate and graduate courses in the Department of Environmental Sciences. This teaching is outside her scope of responsibilities and represents contributed time by the STEM Center to the College of Arts and Sciences.

PUBLIC SERVICE

The STEM Center *exceeded* targets for three of four research performance measures for public service.

The Center outreach and community engagement staff delivered 94 outreach events, resulting in 6,478 contacts in the community. The STEM Resource Center and its lending library had 716 in-

^b Includes conference proceedings.

person visits. The slightly lower number for direct impacts (716 versus a target of 790) was due to the resignation of the resource center manager in April 2024.

The Center developed new community partnerships with Head Start, SALT (Student Athletes Leading Tomorrow), and BSI Engineering. BSI has staff who are alumni of SIUE, and the company would like to volunteer for our community engagement programs.

The FY24 target was three professional development programs for pre-service or in-service K-12 teachers. The Center offered five professional development programs in FY24, including a demonstration of the STEM Center Online Inventory system for a preservice teacher course at McKendree University, Lebanon, Illinois.

9.	Institu	tional Assessment				
	12.1	Date of Last Review	May 2018	(final program review report received)		
	12.2	Decision at Last Review	Х	Center/Institute in Good Standing Center/Institute Flagged for Priority Review		
				Center/Institute Suspended		
	12.3	Explanation		ovide any explanation necessary of the institutional nt or plans for pending program review)		

RESOURCES: SIUE Center for STEM Research, Education, and Outreach

FY2024	FY2023	FY2022	FY2021	FY2020
28,3668	294,798	293,717	289,048	283,275
2,650	3,950	3,675	1,725	3,975
0	5,080	475	1,425	1,957
0	0	400	400	28,483
37,224	35,417	20,659	300	30,872
831,602	619,665	921,632	951,996	1,229,674
46,256	75,696	61,844	92,210	156,526
0	0	4,605	0	0
1,201,400	1,034,606	1,307,010	1,337,103	1,734,761
509,897	588,677	581,554	635,901	527,316
24,582	14,304	14,554	46,333	67,557
0	0	0	,0	0
51,538	86,255	136,702	153,719	115,435
0	0	0	0	0
11,703	14,774	18,563	15,220	13,643
21,920	27,429	26,688	1,528	11,141
110	3,649	7,515	15,651	40,994
22,821	37,831	32,895	13,346	12,239
265.041	224.928	194,682	134,705	145,802
	28,3668 2,650 0 0 37,224 831,602 46,256 0 1,201,400 509,897 24,582 0 51,538 0 11,703 21,920 110 22,821	28,3668 294,798 2,650 3,950 0 5,080 0 0 0 37,224 35,417 831,602 619,665 46,256 75,696 0 0 0 1,201,400 1,034,606 509,897 588,677 24,582 14,304 0 0 51,538 86,255 0 0 11,703 14,774 21,920 27,429 110 3,649	28,3668 294,798 293,717 2,650 3,950 3,675 0 5,080 475 0 0 400 37,224 35,417 20,659 831,602 619,665 921,632 46,256 75,696 61,844 0 0 4,605 1,201,400 1,034,606 1,307,010 509,897 588,677 581,554 24,582 14,304 14,554 0 0 0 51,538 86,255 136,702 0 0 0 11,703 14,774 18,563 21,920 27,429 26,688 110 3,649 7,515 22,821 37,831 32,895	28,3668 294,798 293,717 289,048 2,650 3,950 3,675 1,725 0 5,080 475 1,425 0 0 400 400 37,224 35,417 20,659 300 831,602 619,665 921,632 951,996 46,256 75,696 61,844 92,210 0 0 4,605 0 1,201,400 1,034,606 1,307,010 1,337,103 509,897 588,677 581,554 635,901 24,582 14,304 14,554 46,333 0 0 0 0 51,538 86,255 136,702 153,719 0 0 0 0 11,703 14,774 18,563 15,220 21,920 27,429 26,688 1,528 110 3,649 7,515 15,651 22,821 37,831 32,895 13,346

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Awards	0	950	5,850	3,175	511
Scholarships	0	0	0	57,500	69,200
Automotive	740	130	0	0	278
Telecommunications	3,888	4,641	5,000	5,002	4,353
Benefits	76,834	52,688	92,421	117,054	93,949
Participant Support	226,036	162,907	158,247	55,062	77,286
Nonmandatory Transfers	(10,072)	11,4023	58,109	110,540	83,930
Total Expenditures	1,205,038	1,333,185	1,332,780	1,364,735	1,263,633
Revenue Minus Expenditures	(3,638)	(298,580)	(25,770)	(27,631)	47,1128

¹ The cyclical nature of grants means that grant revenue recorded in a given fiscal year has expenditures in subsequent years. This leads to a pattern of surplus followed by deficit in the annual reporting. For example, in FY2020 the Center received a large three-year federal grant as revenue in that year, but then had expenditures associated with that project in FY2021-FY2023.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Tenured/Tenure Track Faculty	1	1	1	1	1
Research Faculty	3	3.3	3.1	3.2	3.2
Non-Tenure Track Faculty	0	0.1	0.8	1	1
Staff	2.8	3	3.2	4	4
Total Staffing	6.8	7.3	8.1	9.2	9.2

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	SIUE East St. Louis Center
3.	Date	March 11, 2024
4.	Director	Timothy Staples, EdD
	4.1 Telephone	618-482-6904
	4.2 E-mail	tstaple@siue.edu
5.	Year Established	_(1966)
6.	Illinois State Statute (if pertinent)	(if created by Illinois state statute, list the specific statute by number and title; otherwise, list N/A)
7.	Reporting Unit	Office of the Provost and Vice Chancellor for Academics
8.	Туре	Activity (check all that apply)
	Instructional	X
	Research	
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The SIUE East St. Louis Center has provided support and services to youth, adults and families in the St. Clair and Madison Counties for more than 50 years. The support and services are implemented through Center-base programs such as Head Start/Early Head Start, the SIUE 5 High School TRIO/Upward Bound programs, a Veterans TRIO/Upward Bound, Project Success (a DCFS Program), Library Services, High School Leadership Program, and the Performing Arts. Additionally, the SIUE Charter High School, which is managed by the School of Education, Health and Human Behavior, is housed at the Center. Additionally, The Center partners with the Illinois Community College Board to provide learning services, and resources for the community.

9.2 Mission

The SIUE East St. Louis Center is dedicated to improving the lives of families and individuals - from pre-school through adult. The program and services are designed to offer opportunities to achieve and expand access to general education, higher education, and career advancement.

9.3 Objectives

Through program and services, the SIUE East St. Louis Center:

- Provides educational classes for student from pre-school age to adult.
- Assist high school in college preparation.
- Coordinate and implement adult training and certification programs which support workforce development.
- Collaborate with the Illinois Community College Board and its member institutions to provide support and provide post-secondary education and training opportunities.
- Provide library and technology support services for general members of the community.

Provide workshops and seminars for the community which promote physical, mental and financial well-being.

10. Advisory Board

10.1 Advisory Board - Membership

The plans for the Advisory Board structure are being presented to the Provost and Vice Chancellor for Academic Affairs, to present to the Chancellor for guidance and approval

10.2 Number of Meetings (In This Year) 0

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
Maintain compliance for existing grants.	100%	Establish a new quarterly meeting structure for all grants to ensure compliance with enrollments and service implementation
Increase the number of students being served in grant, university, and partnership programs.	-In collaboration with the Illinois Mathematics and Science Academy, establish a one week STEM Summer Program for middle school studentsProvide scholarship assistance for in the Center programs to attend.	-A successful model for partnership with the Illinois Mathematics and Science Academy to implement K-8 programming on the East St. Louis CampusAn established middle school program that serve as a pipeline for SIUE TRIO programs as well as collegiate matriculation.
-Increase grants awards by partnering with SIUE Faculty, and other Centers in the university and other System Centers	-Participate in at least 2 grant submissions in partnership with an SIUE Faculty Member and/or Center	Advance the impact of the SIUE East St. Louis Center within the area, university, and system.
Increase the partnership with the SIUE School of Education, Health, and Human Behavior to established greater educational opportunities for the community. This would include providing professional development for local teachers.	-Establish a faculty affiliate appointment in to support Early Childhood and Secondary Education Programs.	Strengthen the ability for the East St. Louis Center to support educational enrichment, and professional development for educators.

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (FY 23)

Building Futures

- The Building Futures program continues to make a lasting impact on foster care youth by providing career development, education, and essential resources.
- Career Success: several students have secured valuable internships that have evolved into sustainable careers, helping them establish long-term stability.
- Community Collaboration: Building Futures actively partners with organizations such as St. Clair and Madison County Housing to address critical needs, including transportation and housing, ensuring that participants have the support they need to succeed.
- Educational Achievements: Under the mentorship of the program, several students are
 actively pursuing their college degrees, demonstrating their commitment to higher
 education and career advancement.
- Youth Engagement: The program continues to grow, now supporting a total of 31 participants, expanding its reach and impact.

Head Start/Early Head Start

- Head Start staff and parents attended the National Head Start Association's Parent & Family Engagement Conference in New Orleans, Louisiana; the Annual National Conference and Expo in Portland, Oregon, as well as the Illinois Head Start Association Annual Conference in Springfield, IL.
- LaDarrian Johnson, parent from the Lovejoy Head Start center was awarded the SIUE Head Start Parent of the Year during the 2024 Parent Award Luncheon.
- JJK teacher, Deshonia Burrage, was awarded the Teacher of the Year at the Illinois Head Start Conference in Springfield, IL.
- Jackie Joyner Kersee Head Start Center, sponsored by Associated Bank, implemented a
 financial literacy program for Head Start/Early Head Start families. This is the 10th
 year that the program has been offered to the families. The financial literacy
 program focused on building a better financial future, beginning with understanding
 the basics of personal finances, types of financial institutions, opening and maintaining
 a Bank Account and understanding money. Upon graduation, each family received
 cash to establish a Great Start account for their children, the parent received a cash
 stipend, and a personal banker for as long as needed. Each financial literacy program
 lasts for a 10-week period.
- All Head Start/Early Head Start centers were provided with toys for each enrolled child.
 Toys were provided by local Toys for Tots donations.
- The St. Louis Chapter of The Links, Inc. donated wish list items to HS/EHS centers, as well as facilitated a story time event with the children.
- For the past three years, the Head Start/Early Head Start Program partnered with Kindermusik, Inc. to provide music education sessions for preschool and early children in the program.

Collinsville Upward Bound Programs

- Served 66 participants (Target goal 60 students) during 2023-2024 project year.
- 76% of participants during 2023-2024 project year were first-generation & low-income (Target goal 67%).
- 80% of participants during 2023-2024 project year were low income.
- 92% of participants during 2023-2024 project year maintained a 2.5 or better GPA (Target goal - 75%)
- 89% of Class of 2024 enrolled in post-secondary education by fall semester after high school graduation (Target goal 65%)
- 100% of Class of 2024 graduated from secondary school with a regular diploma.
- 24% of Class of 2024 earned proficient score in SAT Verbal (540) and SAT Math (540) (Target goal 20%)
- 63% of Class of 2024 completed rigorous high school curriculum (4 years English, 3 years math, 3 years science, 3 years social studies, and 1-year foreign language) (Target goal 20%)
- Two seniors were named Illinois State Scholars for the Class of 2024.
- 50% our program participants made the HONOR ROLL for the first and second semesters of 2023-2024. Students must have a 3.4 or above GPA.
- Continue collaboration with SIUE Biology Department Assistant Professor Danielle N.
 Lee in The Urban Biomonitoring Project that involves outdoor field research and lab
 research experiences for UB program participants at Collinsville High School and SIUE
 campus.
- careers in industrial engineering and maybe instill a desire to major in Industrial Engineering.
- Currently collaborating with SIUE Biology Department Assistant Professor Danielle N.
 Lee in The Urban Biomonitoring Project that involves outdoor field research and lab research experiences for UB program participants.

Veterans Upward Bound

Last year 71% met both criteria and currently 79% are both low income and first-generation college. Five veterans are enrolled in postsecondary education, four at SIUE and one at SWIC. Community partnerships yield the most participants and allow us to better target low-income and first-generation college veterans. Among our current partnerships are:

- We have partnered with the Successful Communities Collaborative on the Edwardsville Campus to provide Digital Skills Workshops free of charge to Veterans Upward Bound Participants every Tuesday at the Learning Resource Center on the East St. Louis Campus.
- We continue to partner with The Eagles Nest, the Joseph Center Homeless Veterans
 Program in East St. Louis, by providing monthly orientations to their residents and a full
 range of Veterans Upward Bound Services.
- Our Veterans Resource Fair in Florissant, Missouri was a success last year and has evolved into a yearly event. Now titled The St Louis Metro Veterans Resource Fair,

it will be conducted this June at The John F. Kennedy Community Center in Florissant, Missouri. We anticipate more than thirty Veterans and Community agencies to attend. The City of Florissant donates all space and the event is conducted at no cost to our program.

- An "Honor Day" for our veterans will be held this summer in East St Louis either on campus or at a site in the city.
- We are partnering with The University of Missouri St. Louis to deliver services there and we will participate in their Resource Fair in April.
- We are partnering with The East St Louis VFW Post to deliver services to their members.
- We are partnering with Macedonia Baptist Church in East St Louis and will again participate in their Community Outreach Day this summer.

Library/Learning Resource Center

- Provided 31,569 free prints, copies, scans, faxes, and Notaries.
- Offered 130 programs on a range of topics including movies, book club, crafts, story time, health and nutrition, financial and digital literacy, and history.
- 5,252 patron visits with 80 new library cards issued.
- Maintained collaborations with Carrollton Bank, U of I Extension Services, East St. Louis Historical Society, SIHF Healthcare, SIUE Educational Outreach and Online Services, and Broadband Ready.
- Created new collaborations with CrunchyRoll (Anime provider), SIUE STEM Center, and UniPres Kindercottage.
- Hosted a Solar Eclipse viewing party on April 8, 2024 providing sun-themed snacks, crafts, and eclipse glasses with 200+ attendees.

Performing Arts After School Program

- Students Spring, Summer and Holiday recitals showcased music, dance and art
- Student performed at the Annual Dr. MLK Luncheon
- Dance students invited to audition at the St. Louis Muny Opera

Upward Bound East St. Louis Based

- Students and staff travelled to Washington D.C/Virginia/Maryland for a Summer College Tour 2023 where we visited Howard University, Coppin State University, Bowie State University, John Hopkins University, Loyola University-Maryland and The National Museum of African American History and Culture.
- Three students attended Anytown Youth Leadership Institute which was a 7-day residential institute held on SIUE campus.
- Conducted the 4th Annual EC/MLC Blood Drive
- Two students, Paishynce Prude and Shaun Cobbs, were nominated for the Faces of America/Quest Scholarship Fund in allowing our high-achieving and highly-qualified students of color the opportunity to study abroad in the summer of 2024.
 Paishynce traveled to Egypt and Shaun to Spain Summer 2024.

- Students enrolled in SIUE's English 112 classes for college credit from Nicole Dixon, SIUE Graduate student.
- Seniors signed up to take the Lab Tech Alternative Digital Credential Course Program (Laboratory, Chemical and Food Science Technician) which will allow students to be certified Lab Technician. SIUE is offering this alternative credential program.
- Students travelled to Texas to attend the Dallas/Fort Worth Black College Expo. The students were required to complete a 500-words or less essay about Why Is a College Education Important then submit it to National College Resources Foundation for a chance to win a four (4) year scholarship. They also visited the African-American Museum of Dallas and went to Dallas Black Theatre to watch dance performance titled "Collection of Choreography." The purpose of this trip is to provide students with opportunity to visit several colleges at one location. They also had an opportunity to win scholarship money, waived college fees and be accepted into a college. This trip also provided them an opportunity to attend cultural shows/events.
- Students participated in Alabama Spring Break College Tour 2024 they we visited
 Alabama State University, University of Alabama-Tuscaloosa, University of AlabamaBirmingham, Auburn University and Talladega College. We also visited the Legacy
 Museum in Montgomery, AL and the Tuskegee Airmen National Historic Site in
 Tuskegee, AL.
- Students attended the Men of Color Summit in Greenville, SC. The mission is to boost academic achievement and encourage our young men to pursue higher education.
- Students attended the First Generations Student Career Leadership Conference in Miami, FL. The conference was created to provide first generation and culturally diverse students with a career leadership experience that is specifically geared towards helping these students position themselves for career success after graduation.
- Shaun Cobb, EC Junior, departed for Spain for two weeks via Faces of America/Quest Scholarship Fund.

Goals for the 2024-25

- Build recruitment relationship with target schools
- Frequent visits to Wyvetter H. Younge School of Excellence
- FAFSA Training for all staff
- Launch Senior Accountability Saturdays
- Staff professional development
- Parent/student community day
- Build STEM program
- Continue relationship with SIUE Computer Science Department

11.3	Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus
	Strategic Planning

The programmatic engagement and services in FY24 aimed to fulfill the mission of Southern Illinois University Edwardsville. That aim is to provide "educational opportunities that teach the values of wellness of mind, body and spirit." Additionally, "foster personal and professional development, and provides opportunities for cultural and social interaction."

11.4 E	vidence of Support for Cen	nter/Institute Objectives
All pro	ograms submit an extended	d annual report, as well as information from staff evaluations.
11.5 E	ividence of Organizational I	Effectiveness
All pro	ograms submit reports to g	granting agencies.
Institut	ional Assessment Date of Last Review	2021
12.2	Decision at Last Review	x Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

12.

The committee rates the East St. Louis Center as **satisfactory**. The center shows particular strengths in providing resources to the communities it serves and collaborating with a number of external organizations. The committee also commends the dedication and level of care shared by the center's leadership. Nevertheless, the committee also identifies some areas for growth related to transparency, consistency, and collaboration, as well as high turnover that the center has experienced in recent years. The committee believes that addressing these issues through an advisory board and strategic plan would help maximize the services that the center provides.

RESOURCES: SIUE East St. Louis Center

FY2024	FY2023	FY2022	FY2021	FY2020
640,002	681.625	762.138	1.252.054	740,715
468,721	,			693,896
	,		,	,
9,344,516	9.485.011	9.612.821	10.624.298	11,873,960
70,911	50,260	-	16.888	159,52
385,633	370,801	370,801		358,262
686,293	686,293	686,293	354,197	663,085
	288,933	263,655	305,171	279,16
		297,601	297,601	287,53
309,505	297,601	268,357	380,824	287,53
309,505	297,601	267,450	427,207	287,53
245,262	258,776	225,958	107,666	303,29
C	C	(С	
		3,750	1,335	
1,750			-	
140,540	99,663	183.976	150,080	119,38
			-	(
674,903	674,904	674,904	,	674,904
			902,000	
			-	(
			-	(
13,277,541	13,677,300	13,892,211	15,990,594	16,728,798
287,701	279,268	273,780	804,609	44,272
5,799,674	5,858,461	6,295,359	4,525,981	7,396,047
2.890.330	2.326.387	2.768.809	421,610	3,740,996
\$52,428.57	41,190	37,171	4,794	20,373
171,776	148,726	169,133	908,963	44,869
167,198	254,040	271,140	189,033	230,331
2,525,521	1,991,403	2,049,262	3,008,565	791,292
75,982	91,884	37,649	84,935	1,901,113
379,129	392,807	297,537	193,468	71,635
0.0,.20				
946,562	979,496	901,279	1,016,737	523,251
	979,496 12,363,662	901,279 13,101,118	1,016,737 11,158,695	523,251 14,764,178
	640,002 468,721 9,344,516 70,91 385,633 686,293 309,505 245,262 0 1,750 140,540 674,903 13,277,541 287,701 5,799,674 2,890,330 \$52,428,57 171,776 167,198 2,525,521 75,982	640,002 681,625 468,721 485,833 9,344,516 9,485,011 70,91 50,260 385,633 370,801 686,293 686,293 288,933 309,505 297,601 309,505 297,601 245,262 258,776 0 0 1,750 140,540 99,663 674,903 674,904 13,277,541 13,677,300 287,701 279,268 5,799,674 5,858,461 2,890,330 2,326,387 \$52,428,57 41,190 171,776 148,726 167,198 254,040 2,525,521 1,991,403 75,982 91,884	640,002 681,625 762,138 468,721 485,833 274,507 9,344,516 9,485,011 9,612,821 70,91 50,260 385,633 370,801 370,801 686,293 686,293 686,293 288,933 263,655 297,601 268,357 309,505 297,601 268,357 309,505 297,601 267,450 245,262 258,776 225,958 0 0 0 0 1,750 140,540 99,663 183.976 674,903 674,904 674,904 674,903 674,904 674,904 13,277,541 13,677,300 13,892,211 287,701 279,268 273,780 5,799,674 5,858,461 6,295,359 2,890,330 2,326,387 2,768,809 \$52,428.57 41,190 37,171 171,776 148,726 169,133 167,198 254,040 271,140 2,525,521 1,991,403 2,049,262 75,982 91,884 37,649	640,002 681,625 762,138 1,252,054 468,721 485,833 274,507 437,366 9,344,516 9,485,011 9,612,821 10,624,298 70,91 50,260 - 16,885 385,633 370,80 370,801 124,041 686,293 686,293 686,293 354,197 288,933 263,655 305,171 297,601 297,601 309,505 297,601 268,357 380,824 309,505 297,601 267,450 427,207 245,262 258,776 225,958 107,666 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

[•] Expenditures include stipends (TRIO); repair to Cahokia parking lot; and transfer funds to cover the Head Start fringe rate change that was not budgeted on grant.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty (summer teaching for TRIO programs)					6
Staff					211
Total Staffing	C	C	0	0	217

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville				
2.	Center/Institute	Environmental Resources Training Center				
3.	Date	2-22-25				
4.	Director	Matthew R. Maas				
	4.1 Telephone	618-650-2214				
	4.2 E-mail	mmaas@siue.edu				
5.	Year Established	1967				
6.	Illinois State Statute (if pertinent)	III. Rev. Stat., Ch. 144, Sec 691, et seq				
7.	Reporting Unit	School of Engineering				
8.	Туре	Activity (check all that apply)				
	Instructional Research					
	Public Service	X				

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The ERTC is the state of Illinois' training center for water treatment technology. The ERTC educates pre-service students enrolled in the one-year Water Quality Control Operations Program, who wish to enter the water industry. The ERTC also provides continuing education at the center and throughout the state for working operators, who are required to obtain continuing education units or wish to advance their professional certifications. Additionally, the ERTC provides services for IEPA via an interagency agreement, which includes coordination of water and wastewater certification review committees, certification testing management, training of cross connection control device inspectors, and management of the cross connection control program.

9.2 Mission

The ERTC Mission is to provide quality education in water treatment technology to the people of the state of Illinois. ERTC conveys knowledge and skills to drinking water supply operators to ensure that the citizens of Illinois receive safe and reliable drinking water. ERTC also conveys knowledge and skills to water reclamation plant operators to ensure that the effluent water is of the highest quality and will not degrade our nation's water sources.

9.3 Objectives

Provide a comprehensive one-year training program with the Water Quality Control Operations Program for pre-service students.

Provide continuing education and certification exam preparation for in-service students.

Ensure the availability of continuing education to all operators throughout Illinois and Missouri.

Produce up-to-date training for the water quality industry.

Deliver online/virtual courses to disseminate the knowledge and skills needed in the water treatment industry to operators and the public.

Continue to provide statewide training for the mandated Cross Connection Control Device Inspector (CCCDI) program. By Illinois statute, ERTC is the only institution that can provide the required training for CCCDI (Title 35, Subpart F, Chapter II, Part 653.802 para. F, sub para. 2.) (Nov. 1, 1985)

10. Advisory Board

10.1 Advisory Board - Membership

1. Dr. Jianpeng Zhou

Professor of Environmental Engineering, School of Engineering, SIUE

2. Dr. Zhi-Qing Lin

Professor of Environmental Sciences, College of Arts and Sciences, SIUE

3. Edward Matecki*

Assistant Director (Retired), Facilities Management, SIUE

4. Martin Reynolds

Public Works Director (Retired), Roxana, IL

5. Tim Albers

Water Utility Operations Manager, HMG Engineers Inc.

6. Patti Schaake**

Chief Operator (Retired), Edwardsville, IL

7. Penny Pinkstaff

Public Works Director, Lebanon, IL

8. Becca Coyle

Plant Manager, Metropolitan Sewer District, St. Louis, MO

9. John Leezy

Wastewater Collections Supervisor, City of Wentzville, MO

*Ed Matecki has retired and was to be replaced by the Assistant Facilities Director (Donte' Harris). Donte' has since left SIUE. The new Assistant Facilities Director is Mike Myers and the ERTC will approach him as a replacement (pending SIUE board approval).

**Patti Schaake has also asked to be removed from the Advisory Board after moving to Florida. The Advisory Board is waiting on a replacement nominee by the Governor.

10.2 Number of Meetings (In This Year) 1 (June 28, 2024)

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Maintain enrollment in one-year program between 20-30 students.	20-30	11
2.	Maintain a pass rate of greater than 80% on the state certification exams.	80%	85%
3.	Maintain an 80% job placement rate for students within 12 months of graduation.	80%	82%

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

The enrollment for the 2023-2024 class was low at 12 students. One student dropped out of the program when he was called back to his factory position with Ford. All 11 remaining students completed internships and all tasks required for graduation.

Revenue remained strong for FY24 at \$773,025. Revenue minus expenditures was exceptional with a positive balance of \$72,511. This increase was due to additional revenue from new class offerings and a decrease in expenditures. The CCCDI program added six additional training sessions throughout the year, as well as the addition of CCCDI recertification. The account was swept by the University for a total of \$16,100, which makes the net income even more impressive.

In 2019, new rules from the Illinois EPA implemented a recertification process for CCCDI licenses. The training module officially launched on July 1, 2023. Additionally, the CCCDI Director has launched in-person recertification courses as well. This offering works well for any plumbers that would prefer an in-person format to the online version. The cost of the in-person version is an additional \$100, which should increase revenue further.

The ERTC continues to self-promote our Water Quality Control Operations Program whenever possible. In September 2023, the ERTC hosted 70 Memorial Homeschool Coop students for a learning session at the ERTC. The Success Center of Edwardsville High School also brought 25 students for a learning session and tour of the SIUE WWTP in October. For three consecutive Saturdays in the Spring, ERTC staff attended the Career Pathways Showcase. These events cater to students interested in vocational/trade schools and include Eureka High School, North Tech High School, and South Tech High School in Missouri. Additionally, the ERTC Director met with HACIA (Chicago) to discuss a collaboration for Hispanic students in the Chicago area to attend the ERTC.

The ERTC interviewed two candidates for the position vacated by Kurt Neuhaus. In August 2023, Aaron Jacobs was hired as the Assistant Coordinator of Drinking Water. He was able to get up to speed quickly and taught both the classroom and hands-on portions of the Maintenance course.

The ERTC/IEPA Interagency agreement ended in September 2023 due to a date error on the contract. A one-year bridge agreement was made to cover the remaining year. A new proposal will be sent in the summer of 2024 for the next three-year period.

During FY24, the ERTC focused upgrades on the laboratories. Recent grant funds were utilized for the pilot plant, so it is in pretty good shape. Laboratory updates will be the next step in revamping the Water Quality Control Operations Program.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The ERTC has an interagency agreement with the Illinois Environmental Protection Agency (IEPA). In this agreement, the ERTC runs the Cross Connection Control Device Inspector program and the water/wastewater certification exam committee programs. Additionally, the ERTC is responsible for the grading of all Illinois certification exams in water, wastewater, and cross connection control. This agreement also provides funding for general ERTC operations, which includes salaries and equipment upgrades. The most recent interagency agreement for the period of October 2021-September 2024 was executed on 11/5/21. This agreement included funding in the amount of \$ 1,144,806 over the three-year period. Unfortunately, when the agreement was executed, the end date was incorrectly recorded as September 2023 instead of September 2024. A one-year bridge agreement for \$462,523 was agreed upon to cover expenses until the next agreement in October 2024.

The ERTC is the IEPA designated training center for water treatment technology (drinking water and wastewater) in the state of Illinois.

The ERTC also provides support to the Illinois Pollution Control Board and the Illinois Department of Public Health on drinking water, wastewater, and cross connection regulations.

The ERTC supports, presents, and assists in the development of the annual conferences for the Illinois Water Environmental Association (IWEA), Illinois Potable Water Systems Operators Association (IPWSOA), Illinois Rural Water Association (IRWA), and the Illinois Association of Water Pollution Control Operators (IAWPCO). Additionally, the ERTC supports local organizations (such as SWCWPOA and MISKA) by providing training sessions at their meetings, along with providing venues and sponsorships.

The ERTC Director of Wastewater Operations is the official Responsible Operator-In-Charge (ROINC) for the SIUE wastewater treatment plant. The ROINC is an IEPA required position of responsibility.

The Director of the ERTC is an Advisory Board Member on SIUE's Climate and Sustainability Advisory Board (CASAB).

The Director of the ERTC was a guest speaker for the Water Environmental Foundation's OAP group and discussed challenges in water/wastewater training and certification.

The ERTC had several collaborations with main campus throughout the fiscal year. The ERTC participated in the Saturday Scholars sessions that were held at the ERTC and SoE. The ERTC

Director collaborated with Dr. Serdar Celik to host the first Water-Energy Symposium in April. We had discussions with Facilities Management on potential relief operators at the SIUE WWTP. The ERTC continued hosting two sessions of training for high school students during the School of Engineering's Summer Camp program in June.

11.4 Evidence of Support for Center/Institute Objectives

The ERTC has enjoyed the full support of the Dean of the School of Engineering for the last nineteen years.

The ERTC continues to work with Job Centers in Illinois and Missouri as a WIOA approved program. Each July, ERTC staff visit eleven job centers in central/southern Illinois and Missouri to promote the ERTC's one-year program. Current agreements exist with Madison County (IL), St. Clair County (IL), Macoupin County (IL), Sangamon County (IL), Marion County (IL), SLATE in the City of St. Louis (MO), and St. Charles County (MO).

The IEPA has supported the ERTC financially by providing operating funds for over 40 years. During this fiscal year, the current agreement runs from October 2021-September 2024.

The Metropolitan Sewer District (MSD) of St. Louis hires ERTC graduates almost exclusively when recruiting new plant operators. MSD has continued their scholarship program for minority and female students enrolled in the one-year Water Quality Control Operations Program. Currently, two scholarships are offered each year with the anticipation of an increase to four scholarships.

American Water Works in both Illinois and Missouri have begun to show serious interest in our program. We have established a pipeline from ERTC to American Water for the employment of our students. We are very close to securing scholarships like those that currently exist with MSD.

The ERTC secured \$30,000 from Plocher Construction to be utilized for one ERTC scholarship each of the next three years. If it proves to be successful, there is the opportunity for a potential endowment to the ERTC.

Curry & Associates established the Patrick Curry Memorial Award scholarship in 1983.

The Sylvanus Jackson Memorial Award scholarship was established by IWEA in 1994.

The Anthony J LaRocca Memorial Award scholarship was established by John LaRocca in 2013.

Additional scholarships from water and wastewater organizations include:

IAWPCO Scholastic Award (2 students)

MISKA Scholastic Award (3 students)

SCWPOA Scholastic Award (2 students)

11.5 Evidence of Organizational Effectiveness

The ERTC graduated 11 students in FY24 (down two students from FY23). The ERTC has seen class size on the lower end of average since the pandemic's end. Early signs for the FY25 class look like there could be a substantial increase in enrollment.

The ERTC one-year program continues to provide a high-quality training in water treatment technology to future water and wastewater professionals. Pass rates for the drinking water certification (83%) and wastewater certification (75%) in Illinois were both very impressive this year. The drinking water pass rate was almost triple the average pass rate (27%) for the C exam in IL. Pass rates in Missouri were exceptional with a 100% pass rate in drinking water certification and a 100% pass rate in wastewater certification. However, it is important to note that only four students elected to take both Missouri exams this year. The overall pass rate between the two states was 89%, which is exceptional. For the year, this pass rate easily met he external credential attainment target set forth by Madison County WIOA funding (66%).

The Illinois Environmental Protection Agency and Missouri Department of Natural Resources continue to recognize the ERTC as a premier training center for water technology in the Midwest. Both regulators continue to offer simultaneous education and experience credit for the one-year program. They have also been very accommodating in hosting special testing sessions for our students.

Job placement statistics continue to be strong with 82% of students finding jobs within six months of program completion (9 of 11). Once again, the result easily met the Madison County WIOA target of 74% for the year.

The ERTC continued to provide educational opportunities for new and continuing employees in the wastewater treatment and drinking water supply industry across Illinois, Missouri, and the nation. From July 2023 through June 2024, the ERTC trained 1,289 students and awarded 31,623 continuing education and classroom clock hours. This showed an attendance increase from the previous fiscal year (1,074 students \rightarrow 1,289 students), but a decrease in hours awarded from the previous fiscal year (34,201 hours \rightarrow 31,623 hours). The number of students increased due to a year of partnering with IRWA for collaborative trainings. These trainings are usually only two hours long, which explains an increase in students with a decrease in hours awarded. Additionally, another decrease in enrollment of our one-year Water Quality Control Operations Program has a strong effect on hours. Each student accounts for 1,450 hours. Both numbers are substantially higher than typical ERTC results.

12. Institutional Assessment

12.1	Date of Last Review	<u>ERICINTE</u>	rim Review March 2024
12.2	Decision at Last Review	x	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended

12.3 Explanation

Both the Dean of Engineering and the Director of the ERTC agreed with the recommendations made in the internal review report. The Center Review recommendations included: securing additional funding, a stronger connection with industry/academia for research, investments in marketing for program expansion, more online offerings, lab certification and potential contracting, new technology/equipment for students, social media presence, and the pursuit of additional student loan options. A Program & Center Review Meeting was held via Zoom on October 29, 2020, to discuss the recommendations.

RESOURCES: ENVIRONMENTAL RESOURCES TRAINING CENTER

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	0	0	0	0	0
One-Year Program	93,337	101,558	96,268	139,696	147,292
Grants & Contracts	292,299	280,978	163,343	275,396	505,881
CCCDI Training/Symposium	141,791	102,790	84,065	73,410	80,215
CCCDI Certification	83,256	82,232	83,902	94,913	59,530
Night Courses	19,850	22,950	32,300	10,555	22,095
Workshops	132,962	137,009	163,155	103,822	65,250
Correspondence Courses	9,530	16,755	12,705	4,950	N/A
Total Revenues	773,025	745,272	635,738	702,742	880,263
Expenditures*					
Full Time Salaries	442,476	441,695	420,550	457,276	477,687
Adj Staff & Student Workers	36,380	38,218	33,928	48,773	24,289
Telecom/Communications	6,545	5,606	6,141	6,230	6,491
Commodities	28,546	30,926	33,987	33,695	46,328
Equipment	7,249	9,898	28,789	22,176	13,033
Contract Services	62,563	92,637	38,600	63,463	91,117
Permanent Improvement	0	0	0	0	242,000
Computer	0	200	0	0	0
Travel	39,823	35,863	24,701	18,941	24,930
Fringe Benefits	55,822	45,396	NA	NA	NA
Group Health & Social Sec	5,010	NA	NA	NA	NA
Refunds	0	575	525	8,665	1,275
Transfers Out	16,100	51,543	0	0	0
Total Expenditures	700,514	752,557	587,221	659,219	927,150
Revenue Minus Expenditures	72,511	(7,285)	48,517	45,523	(46,887)

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	0	0	0	0	0
Staff	7	7	7	7	7
Total Staffing	7	7	7	7	7

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville
		•
2.	Center/Institute	GeoSpatial Mapping, Applications, and Research Center (GeoMARC)
3.	Date	February 28, 2025
4.	Director	Randall S. Pearson
	4.1 Telephone	618-650-2278
	4.2 E-mail	rapears@siue.edu
5.	Year Established	July 1, 2021
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Graduate Studies and Research
8.	Туре	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

GeoMARC (formerly LASA) was created in 2021 to foster multidisciplinary and multiinstitutional collaborations that develop and promote the use of advanced geospatial technologies to conduct, lead, and influence research and innovative solutions to meet the needs of both private industry and the public sector. GeoMARC capitalizes on the specialties of its multi-disciplinary staff that encompass a wide range of geospatial expertise that includes remote sensing and digital image processing, machine learning, computer modeling, transportation network analysis, geographic information systems (GIS), and solution automation to address both cultural and environmental issue facing this world.

GeoMARC is evolving into a geospatial "think tank" that operates similar to a teaching hospital. Similar, in that GeoMARC provides technological and intellectual support to local and regional communities by engaging in geospatially related projects, educating the next generation's workforce, and providing solutions to geographic problems through applied research and development. Although GeoMARC has grown to 8 full-time employees, students are the center of everything we do.

9.2 Mission

GeoMARC's mission is to provide the university, the community, industry, and governmental agencies with access to innovative geospatial analytics/solutions for addressing spatially related problems.

9.3 Objectives

- 1. Foster partnerships with other universities, government agencies, and industry.
- 2. Pursue external funding.
- 3. Provide real-world experience and mentorship to undergraduate and graduate students through externally funded research partnerships.
- 4. Support Student Retention.
- 5. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars and conferences.
- 6. Promote the ethical uses of geospatial technologies.
- 7. Create and foster multidisciplinary collaborations across SIUE and the SIU system.
- 8. Develop partnerships with local businesses and government agencies to produce high impact community engagement projects.

10. Advisory Board

10.1 Advisory Board – Membership

Internal Members	'
Dr. Jerry Weinberg	Associate Provost and Dean, Graduate School
Dr. Earleen Patterson	Associate Vice Chancellor for Student Opportunity and ADEI
Dr. Carrie Butts-Wilmsmeyer	Director, SIUE Center for Predictive Analysis
Dr. Stacey Brown Amilian	Professor and Chair, Dept. of Geography
Dan Chase	Director, SIUE Information Technology Services
External Members	
Kathy Wever Dev)	Retired, Senior NGA Administrator (TRANSCOM; Talent
Brent Guttman	Illinois IDNR, Office of Mines and Minerals
Bill Miener	Director of Information Systems and Services,
	Edwardsville Community Unit1 District 7 Schools
Justin Donathan	Research & Partnership Manager – Technology
	Entrepreneur Center / T-REX
Dean Budzow	Geography Professor at Lincoln Land Community College
Kyle AndersenExecutiv	e Director and CEO, Leadership Council Southwestern Illinois
** Italicized indicates new men	nbers

10.2 Number of Meetings (In This Year) ** See comment below

^{**}For FY24, the Director of GeoMARC met with all but one of the GeoMARC Advisory Board members (individually and in small groups). Dr. Pearson (and staff) met with several of the Board Members on multiple occasions for technical discussions, sharing of ideas, and future planning. In many cases, Dr. Pearson interacted with Board Members Brown, Wever, Butts-Wilmsmeyer, Meiner, Guttman, and Donathan much more frequently due to special areas of interest, unique expertise, and overlap of the common circles in which we walk. As such, it became obvious that this in-person small group approach was a superior approach to that of a Zoom meeting, especially when considering quality feedback and true subject matter engagement. GeoMARC is currently trying to determine the most effective approach for gathering important feedback from its Board and is in the process of revamping its Board members to allow for improved insight into newly emerging geospatial markets. While it is important to be aware of the past and embrace the present, GeoMARC needs to be adapting to, and continually planning for, the future of geospatial possibilities. The Board members are critical for us to achieve this.

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Develop grant proposals as PI and/or collaborator with SIUE or external partners	9	10
2.	Active projects underway supported by grants and contracts	6	14
3.	Research collaborations with other universities.	5	5
4.	Research collaboration with other SIUE programs/units.	5	7
5.	Research collaboration with industry partners and other government agencies.	5	9
6.	Conference, industry, and invited presentations	3	17
7.	Train students in geospatial analysis through experiential learning opportunities.	4 graduates 4 undergrads	8 graduates 10 undergrads
8.	Exposure of underrepresented students to Geospatial Technologies careers through guest lectures.	2 guest lectures	10 guest lectures
9.	Engagement in Community-based projects.	3	5
10.	Final reports/presentations and research publications	5	9

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (FY24)

The GeoSpatial Mapping, Applications, and Research Center (GeoMARC) continued to focus its efforts in FY24 in basic three areas: (1) pursuit and maintenance of partnerships/relationships that led to external funding related to geospatial research, service, and instruction, (2) the expansion and support of relationships within the SIUE system related to geospatial technologies, and (3) an expansion of GeoMARC's role in supporting the underserved population's impact on the St. Louis area's geospatial ecosystem.

1.1 In FY24, GeoMARC continued to foster its 28-year relationship with the Illinois Department of Natural Resources. Along with significant improvements to GeoMARC's web-based mapping of underground mines across Illinois, GeoMARC continues to modernize and more heavily utilize advanced technologies for ground-based mine subsidence surveying. This included integrating the latest geospatial mapping and database technologies, along with the use of Interferometric Synthetic Aperture Radar (InSAR) and temporal sequencing of in-

house collected LiDAR as compared to state acquired LiDAR over the past 15 years. These updates provided evidence of GeoMARC's continued commitment to IDNR's long term mapping strategies which helped procure two additional three-year contracts (7-1-2022 through 6-30-2025) with IDNR totaling over \$1.28 million in FY 23. This long-term relationship relies heavily on GeoMARC anticipating IDNR's needs (in surveying, webmapping services, and database management of their massive repository of data that GeoMARC has developed).

- 1.2 Equally important, was the continued development of a significant relationship with DoD's National Geospatial-Intelligence Agency (NGA) located just across the river in St. Louis, Missouri. In FY22, GeoMARC signed a five-year agreement with NGA for the production of 1:50K scale topographic maps used by the US military for potential movement of ground troops. GeoMARC (SIUE) is still one of only two universities chosen to participate in this student-driven mapping program. During FY24, GeoMARC staff and students worked on two contracts totaling \$258,000. Since the initiation of this relationship, GeoMARC students have produced over 150 highly detailed topographic and land cover maps for Cuba, Russia, Saudia Arabia, Yemen, Oman, Mali, Chad, and Jordan (and are currently working on maps in Iran and Iraq). During FY24 a total of 7 students (including graduates and undergraduates) were fully trained in the use of NGA's intensive mapping protocols, preparing them for a direct path into NGA. During FY24, GeoMARC also continued to collaborate with NGA on its 5-year CRADA (related to global food security in Africa) and is now working collectively with other university personnel on the development of an Educational Partnership Agreement between SIUE and NGA.
- 1.3 Lastly, GeoMARC's recent collaboration with AMEREN Electric has continued to pay dividends through the development of a long-term relationship with the Electric Power Research Institute (EPRI) located in Washington DC. In FY22 GeoMARC began working closely with AMEREN Electric and EPRI to develop drone-based analytics along energy company rights-of-ways for assessing environmental sustainability and environmental diversity. This relationship evolved into a \$133,000 R&D contract with EPRI (straddling FY22 and FY23) and two follow-on contracts totaling \$199,000 for FY23/24. Furthermore, from this relationship with EPRI, GeoMARC teamed with UIUC, UIC, and EPRI, to submit a "funded" USDA grant proposal for environmental monitoring of \$2.4 million. Relationships matter. Ultimately, it is through these external funding sources and contracts that students gain the real-world experience needed to succeed outside the university system.
- 2. GeoMARC continued to foster its relationships with programs and units within SIUE. In FY24, GeoMARC continued to intensify its collaborative relationships with C-PAN, BLI, Chemistry, Biology, Environmental Science, Geography, Engineering, the Center for Crime Science, and the Office of Educational Outreach. GeoMARC is on grants with, or is supporting in some way, development activities with each of these units. Of particular note is the support that GeoMARC provides to the Department of Geography and GIS and to geospatial technologies across campus. With this said, GeoMARC personnel continue to administer all geospatial software across campus. This is a significant undertaking and involves the management of over 100 individual software licensing (every semester) for faculty and students from all departments and programs across campus. GeoMARC personnel also manages all hardware and software for the Geography Department's GIS lab and teaches critical advanced geospatial courses for the program (for a the major and the

- minor). GeoMARC has developed, and is maintaining, a broad footprint across campus with respect to geospatial technologies.
- 3. Finally, in FY24 GeoMARC continued to broaden its uniquely supportive role in helping expand the diversity in the local area workforce with respect to underserved populations. The geospatial industry has historically been (and continues to be) white and male oriented. Industry and government agencies have taken notice and are actively recruiting minorities in the geospatial field. With this in mind, GeoMARC has taken an active role in attempting to provide the foundation of a long-term pipeline for a highly diverse geospatial workforce in the St. Louis area. Certainly, and without question, GeoMARC continues to focus on (and fund) a highly diverse internal student workforce. Equally important however, is GeoMARC's new role of providing geospatial education support to the underserved and underrepresented populations in the St. Louis area. In FY23/FY24, GeoMARC began working through T-REX on an NGA Partnership Intermediary Agreement (PIA) which funded after school and summer geospatial programming designed to introduce geospatial concepts to K-8 students in North St. Loius. GeoMARC employees developed a close working relationship with Unleashing Potential (a well-established after school STEM program) to train UP staff and to develop curricula and supporting materials for this newly conceived geospatial program. The ultimate goal of NGA in supporting this program was the development of a transferable geospatial education model that could be used across the country. Additionally, during FY24 GeoMARC initiated a relationship with the Danforth Plant Science Center and the Jackie Joyner-Kersee Center to demonstrate the use and value of geospatial technology in both urban and rural settings. Through this relationship, GeoMARC has provided close to 100 students in the Metro-East with an important insight into alternative, technology-driven, career paths.

11.3 Evidence of Support for IBHE "A Thriving Illinois", SIU System, and SIU Campus Strategic Planning

(1) Support for IBHE "A Thriving Illinois"

GeoMARC is in a unique position through its multi-directional, and multi-disciplinary geospatial applications to support IBHE's "A Thriving Illinois" Strategic Plan in many ways. Examples of support for the various goals are listed below:

Equity:

- GeoMARC provides funding for 15 and 20 students each fiscal year. These students are
 highly diverse and include the range of student diversity outlined in IBHE's Equity Goal,
 including students of color, students from low-income families, students from rural areas of
 Illinois, and non-traditional students. For the past three years, over 50% of GeoMARC's
 student workforce are in one of these categories. We are proud of our diversity.
- Students working at GeoMARC get to witness firsthand our staff's broad diversity (race, gender, class, and age) and how we all come together, with our different skill sets and ideas to solve the problems at hand. This is the power of diversity in action.

Sustainability

GeoMARC serves as a student funding source and a place of "community", which fosters
engagement with students from other backgrounds. GeoMARC ultimately allows
students to both observe and be involved in "real world" projects. Both processes help
students get a peek into the future and perhaps foresee a path forward with these new
technologies. GeoMARC's approach to student involvement certainly affects retention.

Growth

- GeoMARC is a key part of the St. Louis area's geospatial pipeline that is preparing students
 through experiential learning. These students get to work on projects that are intricately
 tied to local area issues (mines subsidence, school boundary analysis, local area land use
 change, mapping of invasive species, support for the areas DoD needs (Scott and NGA), and
 much more.
- GeoMARC works across discipline boundaries and across university systems to create teams that are best equipped to address the variety of geospatial issues that come our way (engineering, C-PAN, biology, STEM, chemistry, engineering, geography, IRIS, criminal justice, etc.).
- GeoMARC, over the years, has formed long-term partnerships with local, state, and federal agencies (IDNR, USDA, DoD, Illinois State Library, County GIS programs, and School Districts). In addition, GeoMARC has formed long-term relationships with its industry partners such as T-REX, Bayer Crop Science, Climate Corp., Corteva, Illinois Corn, AMEREN, and the Electric Power Research Institute EPRI. These relationships guide and underpin our research agenda so that we can better support local area businesses.

(2) Support for SIUE Campus Priorities

Access to Opportunity / Change Agent / Sustainability

Through the "teaching hospital approach" mentioned in section 9.1, GeoMARC trained 18 students in FY24 through "experiential learning" tied to funded projects from NGA, Bayer CropScience, Illinois Department of Natural Resources, Electric Power Research Institute, and the Illinois State Library. Students get practical experience solving real world problems with technology. These students were funded through internships, student work, and graduate assistantships. It is these types of experiences that help prepare students technically, mentally, and socially to be part of a team to solve problems. GeoMARC is committed to helping prepare students to be the best they can be. As mentioned earlier, GeoMARC serves as a funding source and a place of "community" for students, enabling them to engage with students from other backgrounds. GeoMARC ultimately allows students to both observe and be involved in "real world" projects, providing them insight into potential careers. This process plays a significant role in student retention.

Student Success and Inclusive Excellence / Change Agent

One of the key issues facing the geospatial workforce is the low number of underserved students with adequate geospatial skills. GeoMARC is actively working to help address the issues related to Diversity, Equity, and Inclusion in the geospatial industry. As mentioned in the narrative on major accomplishments, GeoMARC is continuing to play a significant role in helping broaden the diversity in the local area workforce with respect to the underserved population. In FY24, GeoMARC funded a total of 18 students to work on its numerous grants and contracts, with over 50% being from underserved populations, including students of color, women, and students from rural and/or low-income backgrounds. With

that said, GeoMARC's external funding provides a wealth of opportunities for students through paid internships, student work, and graduate assistantships. In FY 24, \$117,297.73 in GeoMARC resources supported its student workforce. This funding was critical to students for whom student loans and college affordability are central preoccupations. While this funding helps, to a degree, with financial stress, it is also important to note that students engaged in campus research and employment opportunities have far higher rates of retention.

Excellent and Diverse Faculty and Staff / Change Agent

Students working at GeoMARC get to experience an "outlier" in the region's geospatial ecosystem. Students get to work with an experienced, well-seasoned staff that is highly diverse across race, gender, class, and age. As such, student interns, student workers, and graduate students get to witness – firsthand - our staff's intricate interaction as we all come together, with our different backgrounds, skill sets, and ideas to solve the new geospatial problem of the day. As mentioned before, this is diversity in action. In addition, GeoMARC's highly qualified staff support teaching and research across campus with its wealth of expertise in applied geospatial analyses. GeoMARC staff routinely support faculty and students from various disciplines in the gathering and cleaning of geospatial data and giving advice on the advanced uses of geospatial tools. GeoMARC also makes itself available to faculty across campus to brainstorm on ideas regarding new uses of the latest advancements of geospatial technology. GeoMARC personnel administers all geospatial software across campus to both faculty and staff (Engineering, Biology, Environmental Sciences, STEM, C-PAN, etc.). Additionally, GeoMARC supports the Department of Geography through teaching advanced geospatial courses (Python Programming, Remote Sensing and Digital Image Processing, and Aerial Image Interpretation), as well as through the management and maintenance of all hardware and software in its GIS laboratory. This lab is used to teach over a dozen geospatial courses that support a variety of programs across campus as well as the Departments' GIS minor.

Sustainability

There is a major regional push to develop the St. Louis metropolitan area into one of the top geospatial hubs in the nation. In fact, when one considers the significant presence of NGA, Scott Airforce Base, Bayer CropScience, Enterprise Leasing, and Climate Corp, in the area, it is already one of the top five metropolitan areas in the nation with respect to geospatial industries. As this geospatial ecosystem continues to evolve, it is critical for the Illinois side of the MSA to have a balanced role in the area workforce, in geospatial innovation, and growth of geospatial industries. GeoMARC, through its many partnerships in St. Louis, its supply of well qualified students, and its geospatial research collaboration with other academic units within SIUE, is helping keep this balance in check.

11.4 Evidence of Support for Center/Institute Objectives

1. Foster partnerships with other universities, government agencies, and industry. In FY24 GeoMARC continued to foster partnerships and research relationships with a number of government agencies, universities, and commercial companies. In total, during FY24 GeoMARC collaborated with 6 different governmental agencies (local, state, and federal), 7 different university/non-profit groups, and 5 different commercial companies.

Examples of research and collaboration with government agencies included:

- Illinois Department of Natural Resources Mapping and surveying underground mine subsidence across Illinois. (Externally funded)
- DoD's National Geospatial-Intelligence Agency Production of 1:50K topographic and ground navigation maps for movement of US and NATO troops. (Externally funded)
- Illinois State Library Development and maintenance of a specialized website for calculating library district populations across Illinois, which determines funding support for each district. (Externally funded)

Examples of research relationships with universities and non-profit organizations included:

- St. Louis University Missouri View Program (Externally funded)
- East-West Gateway Research into mapping urban heat islands and assessing their impact on low-income communities in St. Louis.
- Illinois State University (with C-PAN)— Co-developing workshops and instructional videos on the use of geospatial technologies in rural areas of Illinois. (Externally funded)
- Kansas State University, Iowa State, University of Nebraska SIUE is representing Illinois in the development of a soybean oil and protein model for the Midwest. (Externally funded)
- UIC, UIUC, and EPRI USDA 4-year mapping project related to environmental quantification of USDA CRP acres across the US. (Externally Funded)

Examples of research and collaboration with private industry included:

- Bayer CropScience Mapping the proximity of milkweed habitat to various biotech crops in support of the decline population of Monarch Butterflies. (Externally funded)
- Electric Power Research Institute— Assessing proper management of utility rights-of-way for best environmental management practices. (Externally funded)

2. Pursue external funding.

In FY24, GeoMARC (in conjunction with its several collaborative partners) solicited external research and development funding through 10 proposals that totaled \$ 3,629,873.11, with 8 of the proposals totaling \$ 2,678,773.11 being funded. Because GeoMARC has so many grants and contracts that cross over multiple years, it is difficult to visualize the amount of funding for any given fiscal year. The table below shows all funded grants and contracts that crossed over FY24.

Program Area/Sponsor	Partnering Units/Institutions	Amount
IDNR Mine Map Preservation and Web-based Digital Distribution	GeoMARC (FY23 - FY25)	\$684,794.01
IDNR Subsidence Monitoring Response Team	GeoMARC (FY23 - FY25)	\$597,257.43
USDA -		

Collaborative Research: HDR DSC: The Data Gateways Project - Creating Pathways for Multiple Points of Entry into Data Science Careers and the Training of a Multidisciplinary Workforce	C-PAN/GeoMARC (FY22 - FY26)	\$508,000.00
EPRI Developing metrics to assess the quality of native habitat using remotely sensed data	GeoMARC (FY23/FY24)	\$99,328.00
NGA 1:50K Topographic Production	GeoMARC (FY23 – FY24)	\$126,175.20
T-REX Development of K-5 After School Geospatial Education Curriculum	GeoMARC (FY23/FY24)	\$29,000.00
District 7 Comprehensive GIS Development for Edwardsville Community School District 7	GeoMARC (FY24)	\$24,000
Kansas State University Mapping Soybean Protein and Oil Quality in Farmer Fields	GeoMARC (FY24)	\$11,000.00
EPRI Developing satellite metrics for habitat monitoring and biodiversity	GeoMARC (FY24)	\$99,982.00
Illinois State Library System Library District Website Maintenance and Updates	GeoMARC (FY24)	\$13,780.00

Illinois Heartland Library System Optimized Routing Analysis	GeoMARC (FY24)	\$6,564.51
NGA 1:50K Topographic Map Production	GeoMARC (FY24)	\$132,433.50
Renewable Fuels Association Review of Changes to Soil Grids Data and How These Data Impact the Global Change Analysis Model (GCAM)	GeoMARC (FY24)	\$4,900.00
USDA – FSA Grant Adaptive Habitat Monitoring for CRP	Collaborative Grant GeoMARC, UIC, UIUC, EPRI FY24-FY28	\$2,386,113.00

3. Provide real-world experience and mentorship to undergraduate and graduate students through externally funded research partnerships.

Through funding from the various projects detailed in objectives #1 and #2, GeoMARC (during FY24) funded 18 students through student work, graduate assistantships, and internships. Students were mentored by GeoMARC staff on all aspects of these projects including research design, project implementation, and final product delivery. This experiential learning is the center of GeoMARC's mission with the result being a well-prepared workforce with advanced geospatial skills and real-world experience.

4. Support Student Retention.

GeoMARC's external funding allows students to not only get involved in real-world projects, but to receive financial support for their efforts. The numerous students working at GeoMARC learn how to socialize and work together in a high-level work environment. They learn how to rely on each other, they study together, they socialize outside of work and ultimately form lasting relationships. This student community that GeoMARC is creating is an evolving model that is already paying significant dividends through student retention.

5. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars and conferences.

GeoMARC was very active in FY24 in its collaborative efforts. It partnered with UIC, UIUC, C-PAN, EPRI, Danforth Plant Science Center, and the Jackie Joyner-Kersee Center in soliciting external funding totaling \$ 3,629,873.11 (with \$ 2,678,773.11 being funded). GeoMARC also

worked closely with T-REX and the Danforth Plant Science Center to share its geospatial applications in agricultural to two separate Latin American groups (Brazil and Argentina). GeoMARC was also very active in the environmental space with joint collaborations the Electric Power Industries (AMEREN and EPRI).

6. Promote the ethical uses of geospatial technologies.

One significant issue with evolving geospatial technologies is with their ethical use. Like many technologies, geospatial analysis can be used unethically to produce "desired results". Often, clients will have an idea of what they want the outcome of a project to be prior to any analysis being performed. GeoMARC has never been, and will never be, persuaded to work toward a client-desired outcome. That would be dangerous and horribly unethical. In our world, data speaks for itself. With this said, it is extremely important for students to see this process in action. At GeoMARC, students get to see how we deal with industry and government agencies with respect to our ethical use of these powerful technologies. We hold firm on project design, data integrity, protocol procedures, and analysis and results. GeoMARC's student workers, graduate students, and interns get a first-hand look at this process and will certainly take these important ethical-use concepts with them into the workforce.

7. Create and foster multidisciplinary collaborations across SIUE and the SIU system.

Again, in FY24 GeoMARC was very active in collaborations across various units in the SIU system. GeoMARC collaborated with C-PAN, BLI, Geography, Environmental Sciences, Chemistry, the new Center for Crime Science, and the SIU System. There are several very positive aspects of this multidisciplinary collaboration: sharing of ideas and resources, building a formidable team when applying for external funding, and the co-mingling of students that are working on joint projects. GeoMARC routinely works closely with C-PAN (on the NGA CRADA), BLI, Environmental Science, and Chemistry on environmentally related research. Not only do faculty and staff gain from this, but students also gain exposure to other modes of thinking, learn to use different technologies, and gain insight from other students.

8. Develop partnerships with local businesses and government agencies to produce high impact community engagement projects.

GeoMARC is committed to supporting local businesses and government agencies in community engagement projects. One of GeoMARC's long standing efforts is working with Edwardsville School District #7 in modelling student population migration (in migration, out migration, and within district migration) to help understand the need for school boundary adjustments over time. During FY24, GeoMARC began analyzing the potential for District #7 to move from a three-tier system (different starting times for Elementary, Middle School, and High School) to a two-tier system, which could significantly change transportation costs. With advanced geospatial technologies, GeoMARC is testing the feasibility of a two-tier system through an assessment of more optimized bus routes, potential changes in school start times, and assessing the impact of low bus ridership, in order to assess the potential savings in transportation costs. Additionally, GeoMARC developed and now supports geospatial education at Edwardsville High School. Through this program, GeoMARC has exposed geospatial technologies to over 440 local area high school students over the last 10 years. GeoMARC also has a long-standing relationship with the East St. Louis Board of Elections. In FY23/24, GeoMARC took on a community project in East St. Louis to show various redistricting scenarios in relationship to new legislation. GeoMARC presented the results to a virtual meeting of town officials in FY22 and a modified version of the results during an in-person presentation in FY24.

Finally, GeoMARC, through its relationship with IDNR's subsidence monitoring program, has a strong community presence for SIUE. GeoMARC's subsidence monitoring team is deployed 4 to 5 days a week, taking ground measurements, collecting drone imagery, and interacting with area residents from Springfield to Carbondale. GeoMARC's subsidence monitoring team is one of the primary links between IDNR and the public.

11.5 Evidence of Organizational Effectiveness

Organizational Effectiveness in Achieving Predetermined Goals

As shown in Section 11.1, GeoMARC met or exceeded all targets for its 10 metrics. Granted, this was only GeoMARC's third year, and it is still difficult to truly determine (without significant prior data as a Center) a valuable measure for many of the metrics described. Nonetheless, in its third year GeoMARC made significant progress in strengthening its current relationships (and cultivating new relationships) with governmental agencies, other universities, and private industry. It will be these long-term financial and research relationships that will continue to help stabilize revenue streams over time, allowing for more accurate long-term planning (which affects student funding, student retention, faculty research, and support to the university). This strategy of becoming the "go to" research arm of various agencies and private companies is something that GeoMARC will continue to foster going forward.

Research & Grant Applications

In FY24, GeoMARC submitted 10 grant proposals totaling \$3,629,873. These grant proposals were in collaboration with 7 other entities including SIUE centers and other state universities in Illinois. Of these grant proposals, 8 of the 10 were funded totaling \$2,678,773, with GeoMARC being the solo grant proposer on 7 of the 8 funded proposals. While GeoMARC procured much of this funding independently (without other collaborators), it is expected that GeoMARC will continue to look at the prospect of increasing its collaborative efforts with other researchers and Centers to help increase the potential of grant acceptance for all. Yet, as stated in our FY23 report, time will tell if collaborative research efforts yield a similar return on investment in comparison with solo solicitation efforts. Ultimately GeoMARC will need to find that balance that allows it to most adequately fulfill its various goals and objectives.

With this being GeoMARC's third active year as a Center, we were still more focused on building a substantial research and service revenue base, with Scholarly Publications and Presentations still taking a bit of a back seat. We hope and expect this to change going forward. Also, several of our top funding agencies (NGA, Bayer) have NDAs restricting what can be published or presented. However, even as I write this in FY25, Bayer relaxed its stronghold on the dissemination of its collaborative research and co-published (with us) our research results from an insect decline/grassland study in Germany during FY21.

Below are the Scholarly Publications, Presentations, and Number of Research Faculty for FY24.

Year	# Scholarly	# Scholarly	FTE Research
	Publications	Presentations	Faculty
FY24	1	6	1

12.	Institutional Assessment
	institutional / issessinient

12.1	Date of Last Review	Annual Report Submitted February 28, 2024, for FY23 Review
12.2	Decision at Last Review	X Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	No explanation required.

RESOURCES: GeoSpatial Mapping, Applications, and Research Center (GeoMARC)

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	231,089.00	231,089.00	228,118.00	0	0
Grants & Contracts	651,687.69	765,521.93	541,397.08	0	0
Nonmandatory Transfers In	48,742.48	37,313.06	32,953.64	0	0
Total Revenues	931,519.17	1,033,923.99	802,468.72	0	0
Expenditures*					
Salaries	611,321.81	541,100.34	483,673.04	0	0
Student Wages	48,212.28	75,784.23	34,224.89	0	0
Graduate Assistants	69,085.45	81,605.61	48,450.63	0	0
Fringe Benefits	97,955.40	72,551.62	63,624.34	0	0
F&A	151,702.19	127,922.30	126,427.58	0	0
Contractual Services	6,205.44	19,326.01	3,388.20	0	0
Equipment	10,190.13	51,570.00	35,394.89	0	0
Telecommunications	1,500.00	1,686.39	2,004.32	0	0
University Transportation	14,029.72	14,755.80	11,912.44	0	0
Commodities	2,575.15	1,724.91	2,664.79	0	0
Total Expenditures	1,012,777.57	988,027.21	811,765.12	0	0
Revenue Minus	**(81,258.40)	45,896.78	(9,296.40)	0	0

^{***} For FY24, the Revenue Minus Expenditures show a deficit of \$81,258.40. It should be noted that since the Fiscal Year ends on June 30, GeoMARC always has unpaid balances from IDNR and NGA (IDNR pays quarterly, and NGA payment routinely lag by up to 3 months). For FY24 these unpaid invoices amounted to \$167,462. When this is accounted for, the true FY94 revenue would be \$1,098,981 and the true Revenue Minus Expenses would be adjusted to a positive balance of \$86,204.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	2.0	2.0	1.0	0	0
Staff	6.0	5.0	5.0	0	0
Temporary CS Extra Help	0.4	1.3	0	0	0
Graduate and Undergraduate Students	6.0	4.9	3.8	0	0
Total Staffing	14.4	13.2	9.8	0	0

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution		Southern Illinois University Edwardsville
_	0 , "		
2.	Center/Institute		IL SBDC for the Metro East at SIUE
3.	Date		2-28-25
4.	Director		Giovanna May
	4.1	Telephone	618.650.2929
	4.2	E-mail	gdimagg@siue.edu
5.	Year Es	stablished	1984
6.	Illinois State Statute (if pertinent)		N/A
7.	Reporting Unit		School of Business
8.	Туре		Activity (check all that apply)
	Instruct	ional	
	Researc	h	
	Public Service		X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Illinois SBDC for the Metro East at SIUE operates 2 offices (SIUE–Edwardsville Campus and The Yvetter Younge Higher Education Campus in East St. Louis) and an International Trade Center to assist entrepreneurs and small business owners in the designated 9 (plus) county region of Southwest Illinois.

9.2 Mission

To Provide Professional Guidance for Business Growth. The Illinois SBDC for the Metro East at SIUE assists entrepreneurs and companies in defining their path to success. The SBDC positively impacts the Metro East Illinois region by strengthening the business community, creating and retaining new jobs, and encouraging new investment. Furthermore, the SBDC enhances Metro East Illinois economic interests, providing one-stop assistance to individuals by means of advising, research, and advocacy for new ventures and existing small businesses. When appropriate, the SBDC strives to affiliate its ties to the Southwestern Illinois Region to support the goals and objectives of both the SIUE School of Business and the University at large.

The IL SBDC-ITC prepares companies for long-term international success through its export readiness and expansion programs

9.3 Objectives

- Deliver effective and relevant services that address client needs and contribute to business growth and job creation.
- Develop long-term relationships with clients that have significant opportunities to grow and create jobs in Illinois.
- Utilize community partnerships to advocate for small businesses and promote an entrepreneurial culture.
- Support the goals and objectives of both the SIUE School of Business and the University at large.

10. Advisory Board

10.1 Advisory Board - Membership

SBDC-Established January 2019

Last meeting held November 7, 2024. Next scheduled for March 11, 2025

ITC- Southwest IL Trade and Investment Council

In lieu of having its own advisory board, the International Trade Center is a founding member and co-leads the Southwestern Illinois Trade and Investment Council (SWILTIC), which supports and provides direction for the ITC.

The SWILTIC is the first of its kind in Illinois.

http://swillinoistrade.org/Council

https://www.siue.edu/business/itc/about/sw-ill-trade-investment-council.shtml

10.2	Number of Meetings (FY24)	SBDC - 3 meetings ITC- 2 meetings	
	· · · · · · · · · · · · · · · · · · ·		

11. Annual Performance FY24

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year	
1.	Number of Jobs Created (SBDC)	28	51	
2.	Number of Business Starts (SBDC)	11	2	
3.	Number of Clients Advised (SBDC)	425	409	
4.	Number of Clients Advised (ITC)	40	61	
5.	Client Exports (ITC)	\$12,500,000	\$ 44,302,359.42	

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, and public service activities.

11.2 Major Accomplishments (FY24)

SBDC:

Advised 460 Clients and helped them secure over \$1.19M in Debt and Non-Debt Funding through more than 1812 hours of contact.

Supported Belleville, Edwardsville, Collinsville/Triad, Clinton County, Silver Creek Area High School CEO Programs

Hosted 10th Annual Metro East Startup Challenge promoting Entrepreneurship and Innovation in St. Louis Region

Director serving as co-chair on SIU System Strategic Plan Implementation Team 2 (Entrepreneurship)

Director continued tenure as Co-Chair of the Latino Roundtable (LRT) (Jan. 2023-Dec. 2024)

Director continued as part of IESBGA Planning Committee (SBDC Professional Development)

Certified Advisor and retiree Wieland completed term as Treasurer for IESBGA (2022-2024)

Conducted and/or Hosted 53 Workshops/Training Sessions with approximately 784 attendees

Published 16 Success Stories celebrating our local Entrepreneurs and Small Business Owners.

Attended Emma Fest (East St. Louis) & Numerous LRT Events to promote SBDC and support minority entrepreneurs and business owners

ITC:

- The ITC has remained steadfast in its mission to foster global engagement by cultivating and strengthening partnerships in key international regions. Since 2019, the ITC has maintained a Cooperation Agreement with <u>Universidad de Lima</u> in Peru, a relationship built on a shared commitment to advancing international trade education and opportunities. In 2024, this collaboration gained new momentum as the ITC began exploring potential projects with <u>SERCOTEC</u> (Servicio de Cooperación Técnica), a division of Chile's Ministry of Economy and Development, further expanding its network of strategic alliances across Latin America.
- In the latter half of 2024, the ITC co-led an exploratory trade and educational mission to Lima, Peru, in partnership with the SIUE School of Business faculty. This mission sought to deepen engagement with regional trade organizations while focusing on reviving and expanding the 2019 agreement with Universidad de Lima. Productive meetings were held with several trade organizations, educational institutions, and private-sector representatives. Most notably, discussions with Universidad de Lima reaffirmed a mutual interest in strengthening ties, leading to plans for a series of outbound and inbound visits in 2025 and 2026. These visits aim to build meaningful connections between faculty, students, entrepreneurs, and business leaders.
- Looking ahead, the ITC envisions these partnerships as a bridge linking southern Illinois' small- and medium-sized businesses and entrepreneurs with opportunities in Latin America. By facilitating knowledge exchange and fostering cross-border collaboration, the ITC seeks to support economic growth, create pathways for students to gain global exposure, and help local businesses tap into emerging markets in the region. These efforts not only enhance the ITC's global impact but also position southern Illinois as a hub for international trade and innovation.
- Continued providing specialized assistance regarding Latin America. This included
 the delivery of customized research reports with consumer market trends as well as
 business, country and industry data, focusing on key South American markets; plus
 one-on-one advising sessions in Spanish to SMEs looking to explore market
 opportunities in South America.
- Sponsored/Co-sponsored three programs with very positive feedback. Over 100 business representatives from the entire state participated.
- Sponsored businesses with their participation in trade missions and shows in Europe and Latin America. These clients were also assisted with research work performed by the ITC.
- Expanded the ITC's access to online marketing databases of potential clients as well as industry and country statistics

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Provided business advising and/or support to many SIUE students (Clients, Students, Alumni in CY2024; organized efforts to foster and promote innovation and entrepreneurship on campus; and strengthened SIU system to the community through coordinated outreach efforts, social media campaigns, and community partnerships.

For example, collaborating with various departments to offer students the opportunity to work with small business clients and gain real world experience in Marketing, Art/Design, Engineering and Web Design.

11.4 Evidence of Support for Center/Institute Objectives

As stated above – 460 SBDC client contacts, over \$44M in ITC client exports, 40 SBDC training sessions.

Starting a Small Business Workshop is offered both monthly and on-demand at no cost. The SBDC actively records and provides ready to digest content on its website.

Center supports SIUE Entrepreneurship Program & The Other 40 Competition. Spoke to various classes throughout Fall 2023 and Spring 2024 including Mass Comm and Nutrition.

Recommend clients to participate in class projects for Mass Comm, Engineering and MGMT.

Promoted SIUE's vision of Entrepreneurship and Innovation within the communities we serve.

Attention to geographic reach and diversity inclusion of entrepreneurs and small businesses.

11.5 Evidence of Organizational Effectiveness

During CY24, the SBDC and ITC met or exceeded the goals set in many of its performance measures. Specifically, the SBDC achieved a standing of 71% or greater in 9 of 13 total measures and the ITC over 100% in all total measures.

12. Institutional Assessment

12.1	Date of Last Review	Financial Review 2017 Performance Review 8.30.18 Center Review 2020 Interim Review 3.25.24				
12.2	Decision at Last Review	X Center/Institute in Good Standing				
		Center/Institute Flagged for Priority Review				
			Center/Institute Suspended			
12.3	Explanation	2018 SBA an	d ASBDC Accreditation Review 10/2021			
		Financial Review 2017				
		IBHE 2020				

RESOURCES: IL SBDC for the Metro East at SIUE

Financial Resources	CY2024	CY2023	CY2022	CY2021	CY2020
Revenues					
State Appropriations		80,000		125,710	123,866
Income Fund	770	3,511	1,456	3,032	1,061
Grants & Contracts	200,000	120,000	185,000	505,715	385,000
	12,200	2,000	,	,	1 1 1 1 1 1 1
Total Revenues	200,770	203,511	186,456	634,457	509,957
Expenditures*					
Salaries/Fringes	127,613	120,333	128,829	268,526	255,922
Commodities	5,515	3,019	1,311	6,048	5,420
Contractual	27,637	29,674	40,539	223,118	64,293
Travel	11,934	17,041	10,395	6,118	1,594
Consultants/Indep. Contractors	20,380	16,017	0	55,913	37,005
Equipment	0	0	0	0	0
Telephone/Other	6920	9,843	3,924	3,618	3,853
Total Expenditures	200,000.00	195,927	185,000	563,341	368,087
Revenue Minus Expenditures	770	7,584	1,456	71,116	141,870

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

**CY 2021 includes \$50,000 in CARES Act funding received for COVID-19 relief efforts and \$270,715.44 on Illinois Navigator Grant.

Assistance includes Cybersecurity/IT, Human Resources, Web-Design, Marketing/Social Media, Accounting as well as support for African American and Latino entrepreneurs and small business owners.

Staffing (Full Time Equivalent)	FY23	FY22	FY21	FY20
Faculty	0	0	0	0
Staff	3	4	3	3
Total Staffing	3	4	3	3

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1, 2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	Southern Illinois University Edwardsville				
2.	Center/Institute	IRIS Center for the Digital Humanities and Social Sciences				
3.	Date	_15 March 2025				
4.	Director	_Margaret Smith, interim director				
	4.1 Telephone	618-650-2667				
	4.2 E-mail	margars@siue.edu, iris@siue.edu				
5.	Year Established	November 11, 2020				
6.	Illinois State Statute (if pertinent)	N/A				
7.	Reporting Unit	College of Arts and Sciences				
8.	Туре	Activity (check all that apply)				
	Instructional	х				
	Research	x				
	Public Service	X				

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The IRIS Center aims to facilitate cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences and support these projects via access to physical facilities, equipment, and human resources. The Center works to foster active mentorship and collaboration between faculty and students at undergraduate and graduate levels, encourage the development of curricular innovation that makes significant use of digital applications and resources, and promote digital endeavors that intersect with community initiatives and organizations.

9.2 Mission

The Interdisciplinary Research and Informatics Scholarship (IRIS) Center at Southern Illinois University Edwardsville (SIUE) is an interdisciplinary facility designed to support scholarship in the humanities and social sciences that applies digital content as a primary methodology.

9.3 Objectives

- Facilitate cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences.
- Support these projects via access to physical facilities, equipment, and human resources.
- Foster active mentorship and collaboration between faculty and students at undergraduate and graduate levels.
- Encourage the development of curricular innovation that makes significant use of digital applications and resources.
- Promote digital endeavors that intersect with community initiatives and organizations.

10. Advisory Board

10.1 Advisory Board - Membership

Internal Advisory Board Members Stacey Brown Lora Del Rio Greg Fields Jessica Harris Lydia Jackson Sharon Locke Jeff Manuel Mark Poepsel Howard Rambsy II Vance McCracken Johanna Schmitz

Connie Frey-Spurlock

Gunes Ercal

Cory Willmott

External Advisory Board Members

Jen Cline

Jacob Del Rio

Harriet Green

Robbie Hart

Katherine Knowles

Kristen Lillvis

Matt Meacham

Jacob Carlson

Ben Ostermeier

Ellie Scott

10.2 Number of Meetings (In This Year) 1 per board

11. Annual Performance

11.1 Performance Measures *

Mea	sure	Target for Year	Results in Year
1.	Submit grant proposals to federal/private foundation funding sources	4	4
2.	Submit products for publication	6	8
3.	Present research at conferences	8-10	8
4.	Conduct workshops directed at campus community	6	6
5.	Conduct professional development workshop for local teachers	1	1
6.	Hold an open house	1	1
7.	Develop two initiatives in partnership with community organizations	2	3
8.	Recruit additional students to the minor	2	2

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

IRIS has continued to expand its impact on students, faculty, and the community members, blending community-engaged research and pedagogy in mutually reinforcing ways that embody SIUE's teacher-scholar model.

In FY24, IRIS's signature program CODES has continued to grow. Community-Oriented Digital Engagement Scholars (CODES) is a general education pathway for students who are first-generation college students, Pell-eligible, or historically underrepresented in their majors. CODES has been funded by two awards from the National Endowment for the Humanities. In

this first-of-its-kind program, CODE Scholars collaborate with community organizations from their very first semester. They study and address the world's most pressing problems and share their outcomes using digital humanities methods. The program has benefitted from planning and implementation grants from the National Endowment for the Humanities and investments from SIUE in scholarships and operations. The retention rate of our second cohort of 25 students was 87% compared to 69% for SIUE students from the same demographic group. As of Fall 2024, 100% of CODE Scholars from the first and second cohorts have GPAs placing them in good academic standing, and 27 CODE Scholars made the Dean's List.

In FY24, we welcomed our second cohort of 25 scholars, who over the course of their first year worked with the Missouri Botanical Garden to identify indigenous plant knowledge in the garden's collection, surface histories of enslavement in the garden's founding, and consider ways for the garden to enhance its outreach to surrounding communities — all facets of reparative justice, the theme that frames their partnership with the garden. CODE Scholars learn how to participate within face-to-face and online communities as they translate their interactions with stakeholders into digital environments and focalize their work for multiple audiences. The coursework incorporates multiple high impact practices proven by the American Association of Colleges & Universities to increase student retention and success. The CODES research teams are learning communities; they conduct collaborative research in each course; they publicly present their work; and they assess their learning using ePortfolios. CODE Scholars from every major become immersed in why the humanities matter for their lives, for the future of our world, and for the careers they imagine for themselves.

In a major milestone for the program's sustainability, FY24 also saw the submission of a successful Mellon grant application, which will support the program over three years as it dramatically expands from 25 students per cohort to 100 students per cohort. This \$1 million award ensures the program's continuation, extends its impacts on students and community members, and facilitates the hiring of three new tenure-track faculty members in the humanities and social sciences. It also marks SIUE as a leader in community-engaged pedagogy on a national stage, and will support faculty fellows from three external universities to learn about the CODES model and develop implementation plans for their own institutions.

Another noteworthy achievement blending research and pedagogy is the Black Literature Network, a Mellon-funded digital humanities project creating innovative, data-driven engagements with African American literature. The project's outputs are designed to make literary scholarship accessible and engaging for students, teachers, and public audiences. Directed by Dr. Howard Rambsy (English) and in collaboration with the University of Kansas and Howard University, the project has produced hundreds of data storytelling pieces, podcasts, and discovery tools. IRIS has been a crucial support in prototyping and critically evaluating the underlying technologies for the project, for which Dr. Rambsy is currently applying for further Mellon funding.

Following on the success of RISE-DH, a fellowship program for Black students that taught technical skills like digital storytelling and database management while working on projects centering representative content, Dr. Margaret Smith (IRIS) and Dr. Laura Fowler (History) applied for and received an Illinois Innovation Network grant to support Humanities Futures. Humanities Futures is a fellowship program for students underrepresented in technical spaces to learn about emerging careers at the intersection of technology and the humanities. Smith

and Fowler partnered with Dr. Vida Owusu-Boateng (Governors State University) to write the grant, and the project is currently running in parallel at SIUE and GSU.

Beyond CODES and RISE-DH, IRIS has also supported student interns on other projects that teach both technical and humanistic skills, including the Schaefer Edoid Archive and Litigating Irishness. The Schaefer Edoid Archive, directed by Dr. Kristine Hildebrandt, is an ongoing project to produce a digital archive of Emeritus Professor Ron Schaefer's language documentation work in Nigeria. Litigating Irishness is a project directed by Margaret Smith and supported by a STEP grant, using early modern legal records to identify the strategies by which Irish litigants navigated hostile colonial courts. Both projects have not only produced hands-on learning opportunities for students but have provided opportunities for students to present at conferences like the Association for Computers and the Humanities.

IRIS has continued to support faculty research, collaborating with affiliated faculty through our monthly Morning Bytes workshop series, grant-writing assistance, web development, project management, and consultation. We launched our first faculty fellow program in Spring 2022, offering two faculty the opportunity to focus on their digital research each year. The faculty fellowships not only provide time and support (technical and intellectual) for faculty to work on their projects, but create an invaluable community of practice. The NEH-funded Recovery Hub for American Women Writers, a multi-institutional project dedicated to using digital humanities tools and methodologies to recover the work of American women writers continued cultivating digital projects across the country under the leadership of Jessica DeSpain and Margaret Smith and was awarded a second NEH grant submitted during FY23.

The IRIS Center has also worked to become a leader in digital humanities infrastructure and pedagogy in our region. Margaret Smith continues to co-direct the St. Louis Area Digital Humanities Network, which brings together area scholars and high school educators to expand access to DH pedagogy across the metro St. Louis region through the development of curricular and infrastructural resources. In FY24, the network's student showcase attracted over 60 student presenters from high schoolers to grad students. In addition to this work the Center and affiliated faculty submitted four grant proposals, all of which were awarded. With seven scholarly submissions and nine national conference presentations, IRIS's affiliated faculty are establishing the Center's national reputation.

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

The digital humanities pedagogies and research opportunities offered to students through the IRIS Center support **Goal 1** ("Increase educational attainment to match best-performing states") and **Goal 4** ("Better integrate Illinois' educational, research, and innovation assets to meet the economic needs of the state and its regions"). Through the minor, and through internship and research partnerships both on-campus and in the community, IRIS has provided access to expanded opportunities for students to increase marketable skill sets. IRIS has also worked with area organizations, for example with the Missouri Botanical Garden and with continuing partnerships with the YWCA of Southwestern Illinois, the National Council of Negro Women, and the National Great Rivers Research and Education Center (NGRREC), and TechSTL

to develop sustainable resource pools and incentives for students that train them to be positive agents of change in our region.

System and University Goals

For **System Goal 1** (Academic innovation and student success), **University Goal 4** (student-centered and supportive campus community), and **University Goal 2** (innovative high-quality programs to engage and retain students), the IRIS Center provides interdisciplinary and experiential components that empower our students to address real-world challenges. IRIS engaged in high impact practices including facilitating internships and provided opportunities for DH experience through compensation (through URCA or Student Employment) or credit-earning initiatives, including the minor. In FY24, we expanded our opportunities for internships through CODES. One research team of CODE Scholars received paid summer internships with their community partner, giving them unique opportunities to apply their skills and research in the field. Another research team applied for and received a grant to carry out a mentorship program of their own design at the Alton Boys and Girls Club. Yet another worked with middle school students to produce digital storytelling pieces about the impacts and drivers of youth violence, which they shared in a public exhibition. Additionally, the IRIS Center has frequently been included in family tours during SIUE Preview recruitment events.

For **System Goal 2** (Anti-racism, diversity, equity, and inclusion), **System Goal 3** (EDI infrastructure and organization), and **University Goal 1** (optimized enrollment of diverse and prepared students), the many programs run in partnership with IRIS are explorations of diverse cultural heritage, including Black Literature Online, the Recovery Hub for American Women Writers, the Schaefer Edoid Project, and Litigating Irishness. In addition, innovative programming for students like CODES and student workshops are designed to increase access to twenty-first century technology skills for under-resourced learners and support the University's recruitment, retention, and success efforts.

For **System Goal 5** (Successful and diverse faculty and staff) and **University Goal 3** (dedicated faculty and staff), IRIS partners with faculty who represent a diverse range of experiences and knowledge. Hiring committees across campus often schedule tours of IRIS for their candidates as a selling point for the University. IRIS faculty also regularly serve on search committees for other units, including research faculty in STEM and a digital archivist in Lovejoy Library. In FY24, IRIS hosted its second cohort of faculty fellows, who benefitted from peer mentorship, technical support, and project consultation to develop a piece of digital scholarship or creative output.

For **System Goal 6** (Sustainable infrastructure) and **University Goal 6** (physical and financial sustainability), IRIS provides training to faculty and students on innovative technologies. Additionally, IRIS partners with the office of Information Technology Services at SIUE to provide digital project hosting and computational maintenance. IRIS is also invested in technology sustainability by developing project work plans that include long-term needs and data management and is engaged in a collaboration with Lovejoy Library to consider the data repository needs of digital projects.

11.4 Evidence of Support for Center/Institute Objectives

The Center "facilitated cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences." The following represent a sample of the ongoing research projects and collaborations in IRIS during FY24:

- IRIS supported several of Howard Rambsy's projects, including the Mellon-funded Black Literature Network, the African American Poetry Tracker, and the new African American Literary Studies site.
- Cindy Reed (English), with the support of IRIS, applied for and received a Hansen
 Humanities Award to support her East St. Louis Digital Gallery, a project that uses
 digital storytelling, data, and creative writing to effect narrative change about East St.
 Louis.
- Smith continued to work with Lora Del Rio (Lovejoy) on her Diverse Librarian Career Training and Education website, connected to her IMLS-funded project to create pathways into librarianship for high school students underrepresented in the profession.
- Faculty fellow Jessica Hutchins worked with IRIS to redevelop her Texaco Wiki teaching resource and make it more discoverable. As a result of her work on the fellowship, she applied for and received funding from the Caribbean Digital Scholarship Collective.

IRIS "supported projects via access to physical facilities, equipment, and human resources."

- Seven students worked on the Schaefer Edoid Archive, making use of scanners and computers to digitize archival materials. Emeritus faculty Ron Schaefer has continued supporting the project through generous donations to the Center.
- IRIS provided instances of WordPress, Omeka, and Scalar to faculty and students so that they could work on research and community engagement projects.
- IRIS continued to hold regular coffee hours and office hours to provide consultation and assistance on grant-writing, project development, and technical questions.
- IRIS hosted two faculty fellows, who received a year of consultation and a course release.
- IRIS held monthly "Morning Bytes" workshops on technical tools and methods for SIUE faculty and students.
- IRIS provided a WordPress instance and consultation for the African American Literary Studies unit in the English Department.
- IRIS provided several WordPress instances for pedagogical uses, including in History, English, and Anthropology.
- IRIS contracted with the STEM Center to redevelop their website and train faculty and staff in STEM in WordPress.

The Center "fostered active mentorship and collaboration between faculty and students at undergraduate and graduate levels," including:

- Two students worked on the Schaefer Edoid project under Hildebrandt's direction, scanning, learning about data management, and adding items to the archive.
- One student worked on the "Establishing a DLI Community of Science" project under Hildebrandt's direction to build and maintain the WordPress web site.

- Two students worked with Smith on Litigating Irishnesss, learning digital skills including database design, WordPress, and text encoding, as well as historical skills like paleography.
- Two students worked with DeSpain to develop social media content and programming for the CODES program.
- Smith mentored internships in Digital Humanities and in History.

Center faculty also developed and "encouraged the development of curricular innovation that makes significant use of digital applications and resources." The DHSS minor added four students and continues to recruit and expand.

- DeSpain and Smith continued to participate with faculty from the Honors program as learners in the American Association of Colleges and Universities ePortfolio initiative.
- Following the pilot of ePortfolios in the CODES program in FY23, DeSpain and Smith have refined the eportfolio model for CODES, creating technical infrastructures, documentation, curricular integrations, and more.
- DeSpain and Smith held two SIUE faculty development workshops about AI in the classroom.
- Hildebrandt incorporated digital platforms such as Scalar into her undergraduate and graduate teaching.
- Smith visited over a dozen classes across the university to provide embedded teaching in topics ranging from introduction to digital humanities, to humanities database design, to graduate research methods in digital social sciences.

In addition, the Center "promoted digital endeavors that intersect with community initiatives and organizations," including:

- CODES partnerships
 - Boys and Girls Club of Alton
 - Alton Middle School
 - National Great Rivers Research and Education Center
 - Missouri Botanical Garden
- Support of area high school teachers through the St. Louis Digital Humanities Network, including the student showcase, network Discord chat, grant-writing support, and development of digital humanities lesson plans and modules

11.5 Evidence of Organizational Effectiveness

The IRIS Center has succeeded in meeting or exceeding all its internal measures for success. As the measures show, community engaged scholarship continues to be a core strength and commitment of the center with six community partnerships, several of which have received funding at the local, state, and national levels.

Sustainable infrastructure is a key concern in the digital humanities; as archivists and analysts of historical and cultural data, the Center has a priority to ensure that the projects we support are curated and maintained with longevity in mind. The IRIS faculty bring the same concerns to the

Center's organizational management and infrastructure. We have had sporadic access to administrative assistance and still manage to maintain budgetary and auditing records for the center. At any given time, the Center is engaged in up to thirty faculty projects, which does not include the work of day-to-day Center operations. We have a project management framework, including file management, communication, and workflow systems to support the organization of this workload.

The Center covers more of Dr. Smith's salary than proposed in the original IBHE budget and looks to rectify this in future years. The Center was formerly staffed by one project manager and one web developer before hiring Dr. Margaret Smith. The Center is currently expanding, and FY24 has laid the foundation for hiring a web developer in FY25 with the support of the CODES Mellon grant, as well as other CODES faculty and staff.

12. Institutional Assessment

12.1	Date of Last Review	Upcoming review for permanent status – Fall 2025
12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: (Center/institute name)

Financial	FY2024	FY2023	FY2022	FY2021	FY2020	FY2017
Resources						
Revenues						
State Appropriations	250	250	250	250		
Income Fund		4,386	33,540	18,028		
Foundation	30,590	20,630	32,460	10,120		
Salary budget to state account	58,534.00	18,391	18,390	15,659		
Grants & Contracts						

Support of		0	0	600		
Anthro project						
Support of		0	0	3,793		
SOAR Project						
Douglass		0	6,212	2,490		
Grant-NEH						
Recovery Hub		0	20,579	45,967		
for American						
Women						
Writers-NEH						
(Level 1)						
Recovery Hub	98,061.14	7,121				
for American						
Women						
Writers-NEH						
(Level 2)		00.005	04.040			
Community-		23,625	31,842			
Oriented Digital						
Engagement						
Scholars						
(CODES)-NEH		12.900				
Expanding Access to the		12,800				
Digital						
Humanities in						
St Louis						
Establishing a	100802.52	5,323				
Dynamic	100002.02	0,020				
Language						
Infrastructure						
Community of						
Science						
Madison		37,284				
County at the						
Migratory						
Crossroads						
Realizing		60,000				
Inclusive						
Student						
Engagement in						
the Digital						
Humanities				<u> </u>		
Total	288,237.66	189,810	143,273	96,817		
Revenues	.,		-,			
		1	<u> </u>	1	1	1

Expenditures*]					
Salaries	114,006	128,529	92,587	59,846		
		120,020	02,001			
Student	7,805.68	2,964	5,135	4,468		
Wages						
Office	91.64	12	250	250		
Supplies	10.511.10	47.000	0.000	7.050		
Benefits	12,511.12	17,280	6,283	7,056		
Medicare		973	1,213			
Billing						
Salary Sweep		14,477				
Op Auto		94				
Travel	2,741.41	1,251				
Participant	11,525.56	42,351				
Support Costs						
Indirect	39,071.56	50,535				
Costs-grant						
related						
Contractual Services	101,254.21	8,506				
Commodities	833.87					
Awards and	2500					
Grants to						
Students						
Social Security	449					
Total	292,790.17	266,972	37,805	71,260		
Expenditures	·	,	·	·		
Revenue Minus	*(4,552.51)	*(77,062)	12,742.58	25,557		
Expenditures						

^{*} Please note: There are two factors explaining this loss:

- 1. In our IBHE agreement, the College of Arts and Sciences agreed to cover 68% of the IRIS Center's Research Assistant Professor salary, or \$29,825; they did not make the transfer for FY23 until the FY24 fiscal year, and we have now (as of FY25) addressed that deficit.
- 2. The University swept \$14, 477 from our account as they were seeking a process to recover lapsed salary; that money has since been returned. We have now shifted that salary over to the state account as a more sustainable model moving forward.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020	FY2019
Faculty	.5	.5	.5	.5		
Research Faculty	1	1	1	1		
Staff	.4	.4	.1			
Total Staffing	1.9	1.9	1.6	1.6		

^{*}Through FY24, DeSpain and Hildebrandt each devoted the equivalent of 25% time to the center throughout the year to the Center and were compensated with one course buyout per semester and a month of summer salary. An administrative assistant works for 15 hours per week on Center-related administrative duties.

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting institution	Southern Illinois University Edwardsville
	. •	•
2.	Center/Institute	National Corn-to-Ethanol Research Center (NCERC at SIUE)
3.	Date	February 25, 2025
4.	Director	Yan Zhang
	4.1 Telephone	618-659-6737 ext. 242
	4.2 E-mail	yzhang@ethanolresearch.com
5.	Year Established	Money Appropriated in 1997, Groundbreaking 2001, Opening
		October 2003
_		
6.	Illinois State Statute (if pertinent)	Southern Illinois University Management Act, Public Act 095- 099
7.	Reporting Unit	The Graduate School
8.	Туре	Activity
		(check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The NCERC at SIUE is a nationally recognized research center dedicated to the development and commercialization of biofuels, specialty chemicals, and other renewable compounds. The Center's fully functional dry grind pilot plant and laboratories are equipped with advanced biofuel capabilities including corn fractionation, pretreatment, and a fermentation suite with 5, 30, 150, and 1500 L scale-up. Clients and collaborators benefit from the ability to take their process from the lab to intermediate scale to pilot scale, all in the convenience of one state-of-the-art facility. The Center's engineers, operators, and scientific analysts also provide a range of educational and training opportunities, including internships, courses, workshops, and corporate training programs.

9.2 Mission

- Advocacy: to advocate, educate, and motivate consumers and elected officials on the benefits of biofuels
- Commercialization: To facilitate the commercialization of new technologies and products to stimulate the bioeconomy
- Research: To utilize our relationships with government, industry, academia, and trade to conduct contractual and grant-funded research
- Education: to develop and provide hands-on training to prepare the bioeconomy workforce of tomorrow

9.3 Objectives

- Educate and inform consumers and policymakers on biofuels benefits and policy needs
- Assist industry, trade, and academic research partners in the commercialization of new products and technologies
- Lead or collaborate on research projects designed to increase bioprocessing efficiency, develop or investigate new pathways to optimize the production of bio-based products and materials
- Provide hands-on learning opportunities, training, and education to students, displaced workers, and industry employees

10. Advisory Board

10.1 Advisory Board - Membership

- 1. President of Southern Illinois University who shall be Chairman:
- 2. Director of Illinois Department of Commerce and Economic Opportunity;
- 3. Director of Illinois Department of Agriculture;
- 4. President of the Illinois Corn Growers Association;
- 5. President of the National Corn Growers Association;

- 6. President of the Renewable Fuels Association;
- 7. Dean of the College of Agriculture and Life, Physical Sciences at Southern Illinois University Carbondale
- 8. Dean of the College of Agricultural, Consumer, and Environmental Science, University of Illinois at Champaign-Urbana;

and 6 at-large members appointed by the Governor representing the ethanol industry, growers, suppliers, and universities.

The Advisory Board shall meet at least annually or at the call of the Chairman. At any time, a majority of the Advisory Board may petition the Chairman for a meeting of the Board. Seven members of the Advisory Board shall constitute a quorum.

10.2 Number of Meetings (In This Year)

There was one NCERC Advisory Board and Stakeholders Meeting: October 12, 2023

11. Annual Performance

11.1 Performance Measures *

Mea	Measure Target for Year Results in		Results in Year
1.	Presentations	4	8
2.	Publications	1	1
3.	Contracts	6	8
4.	Grants	2	5
5.	Proprietary technology developed	1	2
6.	Outreach	5	13

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

- With the efforts of the NCERC team, we continue to build the pipeline of contractual clients, at the pilot and lab scale, and establish NCERC's prominence in grant awards.
- We have landed multiple grant projects covering from making biofuel and food from bench scale to 100 L scale.
- We have collaborated with multiple universities in the US and private industry as well.
- The Workforce Training Program continues to grow, with 10 interns, 3 graduate assistants, and 2 visiting research fellows. NCERC also contributed to 3 grant projects based on workforce training.

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

State Priorities

State law requires the NCERC to: form collaborative research teams; to provide training and services to the ethanol industry; to coordinate industry research needs by pursuing external funding sources; to provide hands-on training for the biofuels workforce; to serve as an independent, third-party validator; to advocate for renewable energy; to provide consultation services; and, to develop demonstration projects. With more than 80 technologies now in the commercial marketplace, NCERC has provided valuable services to the bioeconomy, students, government agencies, and society as a whole.

SIU System Priorities

Through its partnerships with SIUC researchers, NCERC creates research opportunities for faculty and students across the SIU System.

SIUE Campus Priorities

NCERC continues to support SIUE's core mission of undergraduate education by providing educational opportunities to countless SIUE student workers, graduate students, and interns. NCERC has a robust Job Shadow Program, employs numerous student workers, effectively runs a well-defined Internship Program, utilizes Graduate Assistants and Research Assistants on all grant-funded work, and employs a postdoc specializing in agriculture bioengineering and techno-economic analysis.

11.4 Evidence of Support for Center/Institute Objectives

NCERC achieves its objectives through its mission of ACRE: Advocacy, Commercialization, Research, and Education. As the legislative, educational, and industry-focused services and activities demonstrate, NCERC worked hard to fulfill its reputation as a private/public partnership success story in FY24. Below is a summary of the activities of key players on the NCERC team.

Dr. Yan Zhang, as the Interim Center Director and Research Director, led the technical presentations at numerous conferences to present the excellence of NCERC's research development and help NCERC attract more clients and collaborators. Oversee the technical excellence from the projects NCERC has been running for the clients or with the collaborators.

Barb Randle, as the Business Manager, worked with the SIU Office of Internal Audit, Compliance and Ethics on internal and external audits. Barb acts as the liaison to connect external collaborators with NCERC and SIUE various offices, and ensure all the projects and activities proceed soundly and smoothly at NCERC.

Rebecca Damuth, as the Publicity and Promotion Associate, served on numerous committees for the St. Louis Agribusiness Club, BioMADE Education and Workforce Development, BioMADE Fermentation Scale-Up, etc. Rebecca also attends numerous meetings and events to network and attract clients and collaborators to NCERC.

Jared Burns (Plant Operation Manager), Lucas Clayton (Assistant Research Engineer), and Krystin Polhemus (Lab Scientific Analyst), together they led about eight months of plant contractual trials, which resulted in approximately \$1.9M in revenue generation. Jared also

serves on the advisory committee for Lewis & Clark Community College's Process Operations Technology program, which strengthens NCERC's workforce development efforts.

Conferences, Meetings, Visits

July 2023

ALAKA'I

(BioMADE funded grant)

Hilo, HI

August 2023

North American Sustainable Aviation Fuel Conference

(presentation and booth display)

Minneapolis, MN

October 2023

NCERC 20th Anniversary Celebration

Edwardsville, IL

NCERC Annual Stakeholders Meeting

Edwardsville, IL

January 2024

IL DCEO and IL Corn Marketing Board visit NCERC

Edwardsville, IL

February 2024

Millipore Sigma Site Visit

St. Louis, MO

March 2024

Advanced Bioeconomy Leadership Conference

Washington D.C.

SIU System Day

(booth display)

Springfield, IL

IL SAF Meeting

Lisle, IL

May 2024

Finger Lakes Community College visits NCERC

Edwardsville, IL

BioMADE 2024 Member Meeting

(presentation and booth display)

Minneapolis, MN

June 2024
Fuel Ethanol Workshop
(2 presentations and booth display)
Minneapolis, MN
ADM Facility Visit
Decatur, IL

11.5 Evidence of Organizational Effectiveness

Organizational Effectiveness:

FY24 continued to progress with active contractual projects, funded research projects, and innovative technologies. NCERC has served as a bridge to connect innovative technologies with industry, to connect experts in different fields to work to strengthen bioeconomy, and connect students with job.

Compared with the past year, the success achieved by the NCERC team came from:

- 1. More organized leadership team
- 2. Better communication and more effective project management
- 3. More experienced leaders and teams

12.1	Date of Last Review	Last meeting of the Illinois Ethanol Research Advisory Board, October 12, 2023
12.2	Decision at Last Review	Center/Institute in Good Standing Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: NCERC

Financial Resources	FY24	FY23	FY22	FY21	FY20
Revenues					
Beginning Cash	8,890,706	9,177,335	7,883,947	7,123,688	5,696,078
State Appropriation/SIUE	1,217,178	1,210,034	1,322,520	1,322,949	1,301,770
Client Contractual Research	1,912,771	1,588,604	1,708,889	814,504	2,161,677
Grants/Sponsored Projects	86,822	901,284	228,745		0
Other Revenue	53,000	48,619	70,035	71,795	102,226
Foundation	200,100	100,000	100,000	100,000	100,000
Total Revenues	3,469,871	3,848,541	3,430,189	2,309,248	3,665,673
Expenditures*					
Salaries	913,057	1,0470,335	824,790	720,607	1,030,826
Benefits	24,013	24,340	206,018	104,182	140,694
Operational Expenses	1,175,639	3,070,494	1,105,993	724,200	1,066,544
Total Expenditures	2,112,709	4,135,169	2,136,801	1,548,989	2,238,064
Cook + Dovenue Minus AD and Evnanditures	40 247 969	9 900 706	0 477 225	7 992 047	7 400 607
Cash + Revenue Minus AR and Expenditures	10,247,868	8,890,706	9,177,335	7,883,947	7,123,687

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

Staffing (Full Time Equivalent)	FY24	FY23	FY22	FY21	FY20
Faculty	2	2	4	2	2
Staff	13	13	13	12	36
Student Workers, Interns, GA's	19	20	9	15	10
Visiting Research Fellows	2	5			
Post Doc/Assistant Research Professor	1	1	1	0	0
Total Ctaffina	27	44	07	20	40
Total Staffing	37	41	27	29	48

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporting Institution	SIUE
2.	Center/Institute	SIUE University Museum
3.	Date	3/4/2025
4.	Director	Erin Vigneau-Dimick
	4.1 Telephone	618-650-2996
	4.2 E-mail	evignea@siue.edu
5.	Year Established	1979 - Established as "The Office of Cultural Arts and University Museum Programs"; 1983 - renamed "University Museum". (Originally named "The Office of University Cultural Arts Services" (UCAS) 1977)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	College of Arts & Sciences
8.	Туре	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The University Museum (UM) of Southern Illinois University Edwardsville, founded in 1979, is a repository and interpretive center whose interdisciplinary collections include more than 38,000 two- and three-dimensional objects of fine art, architecture, history, ethnology, archaeology, and the natural sciences. Highlights of the collection include the Fine Arts Collection which encompasses paintings, prints, and sculpture, the Louis Sullivan Architectural Ornament Collection, the anthropological collections numbering more than 20,000 objects with strengths in Native American, Asian, and African ethnology, and the natural history collections with fossils from Cenozoic through Paleozoic eras.

9.2 Mission

The University Museum (UM) supports the instructional, research and public service functions of Southern Illinois University Edwardsville through the collection, interpretation, preservation, presentation and exhibition of tangible, physical objects to its students and the greater community which it serves.

9.3 Objectives

- 1. Provide access to university sponsored museum collections, expertise, and facilities, for object-based education and research to SIUE faculty and students and the broader community.
- 2. Enhance teaching and learning by providing meaningful opportunities for handson experiential learning within and outside of the classroom.
- 3. Encourage and facilitate research engaged with the museum's culturally diverse art and artifact collection for faculty, students, independent scholars, and members of the general public.
- 4. Serve as a visitor gateway to the campus and the University through outreach events, programming, and interactive experiences.
- 5. Act as responsible stewards for the publicly owned collections of the university.

10. Advisory Board

10.1 Advisory Board - Membership

The SIUE University Museum Advisory Council (UMAC)

- Associate Professor Laura Milsk-Fowler; History Dept.
- Associate Professor Cory Willmott; Anthropology Dept.
- Associate Professor Barbara Nwacha; Chair, Art & Design Dept.
- Associate Professor Luci Kohn; Biology Dept.
- Professor Caroline Pryor; Department of Teaching and Learning
- Professor Elza Ibroscheva; Assoc. Provost for Academic Affairs
- Erin Vigneau-Dimick; Executive Curator, University Museum
- Ted Cox: Director of Development, SIUE Foundation
- Professor Kevin Leonard; Dean, College of Arts & Sciences

11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year
1.	External Exhibits	2 exhibits	2 exhibits
2.	Academic Research (Faculty and Student)		64 researchers
3.	Public/Scholarly Research		19 researchers
4.	Lectures Programming		5 programs
5.	External Grants (proposed or awarded)	1 grant	2 grants
6.	Objects Inventoried	4000 objects	4500 objects

Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Exhibits

- Identity and Origin: Masquerading as a Validation of the Unfamiliar
 Fuller Dome Gallery Center for Spirituality and Sustainability
 Curated by Olivia Perez, Karl Huntley, and Alex Gerstenecker (Graduate students from HIST582) with Erin Vigneau-Dimick
 May 2 June 14, 2024
- Stuck Together: Collage and Assemblage
 Edwardsville Arts Center, Edwardsville,
 IL Curated by Erin Vigneau-Dimick
 March 1 March 30, 2024

Lectures/Programs

• International Education Week: Festival of Cultures Presentation

Goshen Lounge, Morris University Center, SIUE Presenters: Erin Vigneau-Dimick, Laura Mullen November 16, 2023

Black History Month presentation: Masks

LeClaire Elementary School, Edwardsville, IL

Presenters: Erin Vigneau-Dimick, grad students Karl Huntley & Alex Gerstenecker February 28, 2024

• Asian, Pacific Islander, Desi History Month presentation: Walk Thru Asian History

Goshen Lounge, Morris University Center, SIUE Presenters: Erin Vigneau-Dimick, Laura Mullen

April 10, 2024

• Louis Sullivan Centennial Celebration: Preserving Sullivan's Legacy Presentation

Sullivan Exhibit Gallery, Second Floor, Lovejoy Library, SIUE

Presenters: Erin Vigneau-Dimick

April 12, 2024

• Identity and Origin Curators' talk

Fuller Dome Gallery - Center for Spirituality and Sustainability Presenters: Erin Vigneau-Dimick, Olivia Perez, Karl Huntley, & Alex Gerstenecker May 2, 2024

Grants

- <u>Proposed/Submitted</u>
 - National Endowment for the

Humanities Division of Preservation and

Access

Humanities Collections and Reference Resources Grant, FY23 \$ 99,240.00 requested 7/18/2023

SIUE University Museum Digital Access Expansion Project

- Awarded
 - Institute for Museum and Library Services

Museums for America Collections Stewardship Grant, FY23

\$ 175,093.00 awarded 8/3/2023

SIUE University Museum Collections Inventory Project Stage III

Collections Inventory Project: Stage II

Inventory of 10,000+ of the museum's 38,000+ stored collections focusing on Native American, African, Oceanic, and Southeast Asian regional artifacts

- Stage II commenced 1/1/2022 -- completed 5/31/2024
- 10,150 objects inventoried for Stage II
- 47,199 digital images attached to records during Stage II
 - 2,394 objects for Stage II inventoried in FY22
 - 20,036 digital images have been attached to catalog records during Stage II during FY22
 - 3,710 objects for Stage II inventoried in FY23
 - 16,653 digital images have been attached to catalog records during Stage II during FY23
 - 4,046 objects for Stage II inventoried in FY24
 - 10,510 digital images have been attached to catalog records during Stage
 II during FY24

Collections Inventory Project: Stage III

Inventory of 10,000+ of the museum's 38,000+ stored collections focusing on South American artifacts, American History collections, and three-dimensional contemporary art objects

- Grant request for \$175,093.00 from IMLS to support Stage III awarded in FY23
- Stage III commenced 3/1/2024
 - 543 objects for Stage III inventoried in FY24
 - 1,034 digital images have been attached to catalog records during Stage
 III during FY24

<u>Preservation</u>

Internationally recognized Robert Wadlow Statue Restoration

Working with the Alton Rotary Club and the SIUE Vice Chancellor of

Administration's office the UM worked with sculpture restoration specialist John Medwedeff of Medwedeff Forge and Design to repair and restore the statue and chair that resides in the center of the Alton campus.

- Over \$7,500 was raised for the repair with the Alton Rotary Club
- Work took place in May June 2024 and was concluded on 6/14/2024

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

SIUE University Museum (UM) serves the citizens of Illinois via numerous programs and activities. Through hands-on opportunities for learning and research, exhibits and programming the UM provides an enriching experience for students, scholars, and the public, connecting them to fine art, historical objects, natural history specimens and diverse cultural artifacts.

The University Museum supports IBHE stated goals (underlined) as follows:

- 1. The UM directly supports <u>Equity</u> and educational achievement through its instructional and research programs increasing K-12, undergraduate and graduate student's knowledge and understanding of fine art, world cultures, and history as well as providing professional expertise and training in museological studies.
- 2. <u>Sustainability and Growth:</u> The UM sponsors 8 or more semester-long professional level onsite graduate research assistantships per year, increasing affordability by providing stipends, tuition waivers and professional level museum experiential work experience to students from related courses of study from the departments of Museum Studies, Art & Design, History, Cultural Heritage & Resource Management, and Public Administration and Policy Development.
- 3. <u>Growth: Increase talent & innovation</u>: The UM works directly with students who are interested in careers in art handling, exhibition preparation, collections management, and curation at museums and sites of cultural heritage. The extensive UM collections and facilities, coordinated with adjacent credentialing curriculums and programs, provide a museum professional training environment that is unique in the Southern Illinois/St. Louis metro region.
- 4. <u>Growth: Link Research and Innovation</u>: New software, digital imaging and technological advancements have improved access to and management of the UM's collections for faculty, students, and the public. Access to databases, imagery, and educational content engages local and distant learners providing opportunities for scholarship and professional development.

Support for SIUE Campus Priorities (Underlined)

- 1. <u>Support Student Success</u>: The access that the UM provides to students to its multi-cultural, world class collections through exhibitions, classroom hands-on encounters and individual and group research activities exposes them to a world of people and places beyond Illinois. UM sponsored graduate research assistantships, internships, and professional practicums train students in essential museum job skills, preparing them for future careers.
- 2. <u>High-Quality Educational Programs:</u> The UM staff work directly with faculty to optimize opportunities for museum facilitated hands-on research with artifacts. Access to collections objects is essential to courses in Anthropology,

History, Art & Design, and Museum Studies. The UM operations facility is set up to accommodate instruction for students in the storage archive and regularly loans and displays objects from the collections at the Anthropology Department's Ethnographic Museum Laboratory and in classrooms throughout campus.

- 3. <u>Student Success & Inclusive Excellence:</u> The UM is engaged directly with graduate students enrolled in the Integrative Studies master's program under the Cultural Heritage and Resource Management (CHRM) focus and the master's in History with a certificate in Museum Studies. UM professional staff serve on CHRM and History graduate thesis committees, teach Museum Studies courses, and provide mentorship focused on the interdisciplinarity of professional museum career opportunities.
- 4. Excellent & Diverse Faculty and staff: The UM facilitates faculty interdisciplinary research projects utilizing collections materials and benefitting from museum staff expertise. UM staff collaborate with and support faculty by participating as a primary investigator on internal and external grants and proposals and assisting on and co- authoring peer reviewed articles and conference presentations.
- 5. <u>Change Agent: Outreach and Partnerships:</u> Through exhibitions, artifact loans, educational lectures, interactive hands-on experiences and more, the UM connects to the local K-12 community and the public of the region through partners such as the Edwardsville Arts Center, Edwardsville School District #7, the Schmidt Art Center at SW Illinois College, St. Louis' City Museum, the Katherine Dunham Center for the Arts and Humanities and the National Building Arts Center. Additionally, UM staff present and publish research in regional and national venues on museum collections management and education.
- 6. Sustainability: Physical and Financial Stability: The UM's collections are housed in a secure climate-controlled building with modern, museum-quality storage structures. All 38,0000+ of the unique and valuable objects in the collections are covered by an independent rider on SIU's self-managed insurance policy (SIP). In 2015, SIU Office of Audit's Internal Review identified proper inventory control as one of the most important factors to improve the UM's fiscal, and ethical stewardship practices. Since that time the UM has successfully executed a major records reorganization and begun a multi-stage, multi-year Collections Inventory project. Stages I and II of the Collections Inventory Project were supported by two federal grants totaling \$283,392 from the Institute for Museum and Library Services (IMLS). Stage I was competed in FY22 and Stage II in FY24. The UM has received a third federally funded grant in FY24 for \$175,093 to execute Stage III of the project which is now in process.

11.4 Evidence of Support for Center/Institute Objectives

- Provide access to university sponsored museum collections, expertise, and facilities, for object-based education and research to SIUE faculty and students and the broader community.
 - The UM loaned, installed, deinstalled, and/or moved, more than 367 items during FY24, in and out of its facility to provide items for teaching, research, exhibition, and public display.

- The University Museum facilitated internal extended loans of artifacts in FY24 for use in the Anthropology Department's Ethnology Museum Laboratory to benefit student and faculty research.
 - o <u>50</u> museum objects loaned
- The UM welcomed more than <u>83</u> faculty, students, and independent researchers in FY24 to its limited access archive to view and research objects from the 1000's in our collections.
- 2. Enhance teaching and learning by providing meaningful opportunities for handson experiential learning within and outside of the classroom.
 - In coordination with faculty of multiple disciplines from the College of Arts and Sciences, the University Museum has facilitated <u>formal and informal hands-on</u> <u>educational experiences</u> utilizing art and artifacts from the collections. These have included:
 - on-site faculty led <u>interactive research experiences</u> for students both on site in the archive and elsewhere on campus (Museum Studies, Art & Design, Anthropology, History, Biology)
 - HIST580: Intro to Museology, HIST581: Collections
 Management, HIST582: Museum Exhibit Practicum; HIST 590
 Internship
 - ANTH420: Museum Anthropology, ANTH490 Senior Assignment, ANTH570: Artifact Analysis
 - ART 364: Art Education in Middle Schools, ART470: History of Craft, ART506: Professional Practices
 - o Graduate student directed curation of exhibits for Museum Studies courses
 - HIST590 Internships in Museology; HIST582 Museum Exhibit Practicum.
 - Professional level practicums for Museum Studies students
 - HIST581 Management of Museum Collections
 - HIST590 Internships in Museology; HIST582 Practicum in Exhibition and Program Development
- 3. Encourage and facilitate research engaged with the museum's culturally diverse art and artifact collection for faculty, students, independent scholars and members of the general public.
 - Museum staff worked with <u>external researchers</u> both locally and nationally on inquiries and projects involving fine art, natural history, ethnography and history including scholars and curators:
 - o Michael Allen, Director, The National Building Arts Center, Sauget, IL
 - o Galen Gritts, Cherokee Elder, Independent Researcher, St Louis, MO
 - o Dug Feltch, Curator, Kramer's Marionettes, St. Louis, MO
 - Natalie Kessler, Curator, Kramer's Marionettes, St Louis, MO
 - Angela Cooper, Site Services Specialist, Cahokia Mounds State Historic Site, Collinsville, IL
 - Nicole Bridges, Morton D. May Curator of the Arts of Africa, Oceania and the Americas, Saint Louis Art Museum, St Louis, MO
 - o Amy Clark, Curatorial Assistant, Saint Louis Art Museum, St Louis, MO
 - o Jane Birdsall-Lander, Independent Curator, Artist, St Louis, MO
 - Luanne Rimel, Independent Curator, Artist, Webster Groves, MO
 - o Roger Rimel, Independent Curator, Artist, Webster Groves, MO

- Faculty and students (undergraduate and graduate) from the departments of Anthropology, Integrated Studies, Museum Studies/History, and Art & Design carried out <u>independent research</u> utilizing materials from the University Museum's collections.
- Support Diversity, Equity, and Inclusion with the Undergraduate Research and Creative Activities Assistantship (URCA): *Diversity Demography Project* Exec. Curator Vigneau-Dimick supervised undergraduate internships: HIST410]
 - Mandy Lynn Fall 2023
- 4. Serve as a visitor gateway to the campus and the University through outreach events, programming, and interactive experiences.
 - As an aspect of outreach programming to connect with and enrich the surrounding St. Louis regional community, the state and the nation, The University Museum brings exhibitions and programming to the Edwardsville community and the public at large.

o **Exhibitions**

- Identity and Origin: Masquerading as a Validation of the Unfamiliar
 Fuller Dome Gallery Center for Spirituality and Sustainability
 Curated by Olivia Perez, Karl Huntley, and Alex Gerstenecker (Graduate students from HIST582) with Erin Vigneau-Dimick
 May 2 June 14, 2024
- Stuck Together: Collage and Assemblage Edwardsville Arts Center, Edwardsville, IL Curated by Erin Vigneau-Dimick
 March 1 - March 30, 2024

Programming

- International Education Week: Festival of Cultures Presentation Goshen Lounge, Morris University Center, SIUE Presenters: Erin Vigneau-Dimick, Laura Mullen November 16, 2023
- Black History Month presentation: Masks
 LeClaire Elementary School, Edwardsville, IL
 Presenters: Erin Vigneau-Dimick, grad students Karl Huntley & Alex
 Gerstenecker
 February 28, 2024
- Asian, Pacific Islander, Desi History Month presentation: Walk Thru Asian History

Goshen Lounge, Morris University Center, SIUE Presenters: Erin Vigneau-Dimick, Laura Mullen April 10, 2024

 Louis Sullivan Centennial Celebration: Preserving Sullivan's Legacy Presentation

Sullivan Exhibit Gallery, Second Floor, Lovejoy Library, SIUE Presenters: Erin Vigneau-Dimick April 12, 2024

Identity and Origin Curators' talk

Fuller Dome Gallery - Center for Spirituality and Sustainability Presenters: Erin Vigneau-Dimick, Olivia Perez, Karl Huntley, & Alex Gerstenecker May 2, 2024

- Active loan program, enriching community relationships regionally and state- wide
 - Parkin Archeological State Park (ongoing)
 - St. Clair County Historical Society, Belleville, IL (ongoing)
 - The City Museum, St Louis, MO (ongoing)
 - National Building Arts Center (ongoing)
 - Multiple community and financial institutions: The Bank of Edwardsville, Scott Credit Union, Hortica, The City of Edwardsville and others (ongoing)
- Act as responsible stewards for the publicly owned collections of the university.
 According to nationally established standards and best practices, the SIUE UM legally,

ethically, and effectively manages, documents, and preserves the collections in the following ways:

- Strategic plan
 - The current plan has been updated to extend until 12/2024
- Advisory council
 - o 3 full council meetings held in FY24
- NAGPRA: Native American Graves Preservation and Repatriation Act
 Enacted in 1990, NAGPRA is a <u>federal law</u> that requires museums and federal agencies
 to identify Native American human remains, funerary items, and objects of cultural
 significance in their collections and collaborate with Tribes and Native Hawaiian
 organizations to repatriate them.
 - SIU System has a NAGPRA Compliance Committee headed by Dr. Sheila Caldwell, Vice President for Anti-Racism, Diversity, Equity, and Inclusion
 - Members include faculty and administrators from SIUC, SIUE and SIUSOM including SIUE UM Exec. Curator Vigneau-Dimick
 - Full NAGPRA Compliance committee met 1 time during FY24
 - NAGPRA Coordinator sub-committee met 2 times during FY24
 - NAGPRA Coordinator Sub-committee developed position PDQ
 - Posted, interviewed and hired NAGPRA Coordinator during FY24
 - In November 2023 SIUE Exec. Curator Vigneau-Dimick attended a 4-day National NAGPRA conference and training sessions on Repatriation law and procedures

Accessions

During FY24 more than $\underline{1}$,049 individual objects were accessioned and have had records added to the catalog. These are primarily not new acquisitions but objects that were already in the collections and on display. The discovery and resultant cataloging of these objects was a direct result of the thoroughness and accuracy of the wall-to-wall Collections Inventory Project's processes and one of the intentional goals of the project.

- 895 of these objects are from the Milton Harrington donation and were stored or put on display without having had their cataloging completed.
- <u>3</u> of these objects are transfers from other departments in the university of gifts or purchase awards of artworks that need to be placed within the collections for safekeeping and tracking.
- <u>6</u> of these objects are donations to the museum whose paperwork was never completed, and the documentation was not accurately recorded.

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- o <u>7</u> of these objects are new donations to the museum.
- 138 of these objects are deemed Found-In-Collections and will be processed according to Museum policy and Illinois state law.

• Intellectual and physical control of collections

Multi-stage full inventory continues in FY24 (full collection is projected at more than 38,000 objects. Rough projections suggest 9-10 FTE years to complete from beginning in FY19.) To increase the preservation of the collection a staged approach was adhered to as an aspect of the inventory.

- During the inventory process objects were surveyed for condition and flagged for follow-up.
- o Some items at risk were removed from display during the onsite inventory.
- Limited stabilization measures and simple housing practices were performed as fragile or at-risk items were inventoried in the archive.

Collections Inventory Project: Stage I

Inventory of 10,000 of the museum's 38,000+ displayed and stored collections

- Stage I completed 12/31/2021; total of all objects inventoried = 10,809.
 Final report submitted to IMLS
- 23,879 digital images were attached to catalog records during Stage 1 of the Inventory Project.

Collections Inventory Project: Stage II

Inventory of 10,000+ of the museum's 38,000+ stored collections focusing on Native American, African, Oceanic, and Southeast Asian regional artifacts

- Stage II commenced 1/1/2022 -- completed 5/31/2024
- 10,150 objects inventoried for Stage II
- 47,199 digital images attached to records during Stage II
 - 2,394 objects for Stage II inventoried in FY22
 - 20,036 digital images have been attached to catalog records during Stage II during FY22
 - 3,710 objects for Stage II inventoried in FY23
 - 16,653 digital images have been attached to catalog records during Stage II during FY23
 - 4,046 objects for Stage II inventoried in FY24
 - 10,510 digital images have been attached to catalog records during Stage II during FY24

Collections Inventory Project: Stage III

Inventory of 10,000+ of the museum's 38,000+ stored collections focusing on South American artifacts, American History collections, and three-dimensional contemporary art objects

- Grant request for \$175,093.00 from IMLS to support Stage III awarded in FY23
- Stage III commenced 3/1/2024
 - 543 objects for Stage III inventoried in FY24
 - 1,034 digital images have been attached to catalog records during Stage III during FY24

11.5 Evidence of Organizational Effectiveness

Organizational effectiveness is delineated below. The UM is classified as a Public Service Center, but in fact, its activities encompass all three areas: Instruction, Research, and Service.

- 1. Instruction:
 - The UM Executive Curator is engaged in direct teaching for the graduate Museum Studies course HIST582 Practicum in Exhibition and Program Management.
 - The UM Executive Curator serves on graduate thesis committees for Museum Studies/History and Cultural Heritage and Resource Management masters candidates.
 - UM faculty and staff provide indirect teaching and major instructional support for HIST580, HIST581, HIST582, HIST590, INTG500, and INTG593.
 - In coordination with faculty of multiple disciplines from the College of Arts and Sciences, the UM facilitates tours of the collections archives and provides access to objects and data for laboratory and classroom hands-on educational experiences for ART202C, ART305, ART364, ART384, ART470, ART506, ART520, IS370, HIST211, HIST304, HIST306, HIST309, HIST352, ANTH404, ANTH420, ANTH490, ANTH491, ANTH570 courses.
 - Each graduate research assistant (8 term GA's per year) receives 180 hours per semester of valuable, hands-on training in museum object handling, cataloging, interpreting, and preservation skills.
- 2. Research: The UM supports research for SIUE faculty and students and external scholars in art, anthropology, history, and museology by maintaining and providing access to its catalogue, digital images, archives, and collections objects.
 - Research outputs include papers, theses, poster sessions, journal articles, conference presentations, book chapters, and exhibitions.
 - UM staff provide support for and serve as primary investigators on internal and external grant proposals and projects.
 - The UM Executive Curator collaborates with faculty on publications and presentations for regional and national media and organizations.
 - The UM maintains institutional memberships in local, regional, and national professional organizations.
- 3. Public Service: The UM strives to operate as a visitor gateway to the campus and the University through public outreach and interactive experiences.
 - The UM brings <u>exhibitions and programming</u> to local galleries, K-12 schools, regional community colleges, and senior centers.
 - The UM operates an active loan program, <u>enriching community relationships</u> locally, regionally, and state-wide, providing loans of UM collections objects and creating interpretive materials for arts centers, historical sites, museums, and educational institutions.
 - An important facet of the UM's public service mission is to act as a <u>responsible steward</u> for the state-owned collections that it holds in trust for the public of Illinois. The UM works diligently to provide appropriate administration and care to legally, ethically, and effectively manage, document, preserve, curate, and provide access to the collections in accordance with the best practices and standards of the museum profession as promulgated by the American Association of Museums and all relevant state and federal laws and international agreements.
 - <u>Improve governance and decision-making</u> to increase communication and teamwork amongst stakeholders.

- The UM has established strategic goals and milestones incorporating recommendations from its internal and external assessments outlined in the UM's 2022 Strategic Plan.
- University Museum Advisory Council (UMAC) meets two or three times per year to guide and assist the administration of the UM to review and revise the Museum's mission and policies, develop a long-term plan for the museum and be responsive to its obligations.
- <u>Enable greater access and care</u> of the collections by establishing greater intellectual and physical control over the holdings of the museum better serving the UM's stakeholders and the publicly owned collections.
 - Multi-stage full inventory commenced in May 2018 (current estimates project the collection holdings at more than 38,000 objects. Rough projections suggest 9 FTE years to complete full inventory.
 - Stage 1 (10,809 objects; completed December 2021) focused on 3 strategic areas of the collection:
 - 2,128 displayed objects across three SIUE campuses in more than 60 buildings (a group chosen because these were the most inaccurately tracked and the most at risk for environmental exposure concerns.)
 - 4,203 items of two-dimensional Fine Art (chosen because of high usage.)
 - 3,112 objects from the Native American collection (chosen to increase knowledge for NAGPRA compliance)
 - Stage 2 (Begun January 2022), (2,764 objects inventoried in FY22, 3,710 in FY23, 4,046 objects in FY24)
 - focuses on 3 strategic areas of the collection:
 - Native American and Oceanic collections (for NAGPRA compliance)
 - African collection (because of nature of organic material and environmental risks)
 - Asian collection
 - Stage 3 (Begun March 2024; expected completion August 2025) will focus on:
 - Central American, American History and 3dimensional contemporary art collections
- <u>Enhance the visibility of the Museum</u> and its collections to the broader campus and the surrounding community
 - Art on Campus program, begun in 1966, where meaningful art was placed throughout the buildings and grounds, has distinguished this campus from many others. More than 1,700 of the UM's objects and artifacts are displayed throughout the three campuses. UM staff maintains the displayed artworks by inspecting, cleaning, as well as deinstalling and reinstalling objects regularly as buildings are renovated and refurbished.
 - All artworks and artifacts are identified by artist, title, media, and catalogue number and labelled with the UM's logo to promote the cultural significance of the museum's collections on campus and provide a contact and a context for every piece.

- o Art-in-Architecture Program (IL Capital Development Board)
 - UM staff preserve and maintain the multiple large public sculptures on SIUE's three campuses which include 7 artworks commissioned through the Illinois Capital Development Board's Art-in-Architecture program.
 - UM Executive Curator serves as the chair of the SIUE Art-in-Architecture committee. In May 2024 the AIA Committee selected a final artwork for the terrazzo floor for the SIUE Health Sciences Building. Expected completion of the floor and building will be late summer of 2025.
- o Development of online presence: plan begun in May 2020 which includes:
 - University Museum web page (in process expected completion 2026)
 - Online exhibits (in coordination with SIUE's IRIS Center)
 - Multiple virtual exhibits now available on Scalar and MuseumViews platforms
 - Continuation of social media outreach
 - Development of <u>accessible online catalog</u> (seeking new funding sources in FY24 and FY25)
 - Digital Access Expansion project data cleanup and transfer
 - Cloud based catalog Public Access feature
- Systems Management and Accountability: Ongoing integrative practices which affect the UM's instructional, research, and public service capabilities across the board. Areas that continue to be improved, reorganized, streamlined, and standardized include staff and GA hiring and retention, budgeting, records management, object tracking, storage, security, climate control, cataloguing procedures, policy development, and governance strategies. Physical resources and facilities are regularly reassessed and structural and organizational improvements are continually made to the records area, workshops, and storage spaces encompassing surplussing of antiquated and excess equipment and materials, consolidating and expanding collections storage, and reorganizing and increasing dedicated working and teaching space.

12. Institutional Assessment

12.1	Date of Last Review	March 2024
12.2	Decision at Last Review	Center/Institute in Good Standing
		Center/Institute Flagged for Priority Review Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

RESOURCES: SIUE University Museum

Financial Resource	FY24	FY23	FY22	FY21	FY20
Revenues					
State Appropriations	85,155	91,163	85,517	86,562	79,866
Income Fund	56,770	60,775	57,011	57,708	53,244
Grants & Contracts	48,281	88,343	80,181	79,863	
Foundation Funds		207			
Transfers from CAS	2,871		2,871		
Other Revenue/Sales					
ICR from CAS		3,898	2,798	1,298	
Total Revenues	193,077	244,386	225,507	225,431	133,110
Expenditures*					
Salaries (staff & graduate assistants)	165,526	180,055	154,507	182,128	113,180
Grant Fringe Benefits (non-state acct.)	8,411	13,415	8,701	18,355	
Grant Facilities and Admin costs	18,957	25,987	14,855	31,153	
Wages	,	,	0	0	0
Travel	509		0	147	0
Equipment	2,121		0	222	406
Commodities	1,116	1,457	834	782	1,807
Contractual Services	13,512	10,437	10,592	13,013	10,318
Automotive	1,959	3,648	5,417	5,013	5,401
Telecommunication	1,347	1,362	1,341	1,227	1,346
Other		42			
Total Expenditures	213,458	236,403	196,247	252,040	132,458
Revenue Minus Expenditures	(20,381)	7,983	29,260	(26,609)	652

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

^{**} Grant cycles are such that the revenue recorded in a fiscal year will have expenditures in future or subsequent year, which leads to patters of higher revenue some years and deficits in years following, which is evident here.

RESOURCES (Cont.): SIUE University Museum

Staffing (Full Time Equivalent)	FY24	FY23	FY22	FY21	FY20
Faculty					.33 FTE
Staff (including grant)	2.93 FTE	3.5 FTE	3.125 FTE	3.67 FTE	1.17 FTE
Graduate Assistants	0.73 FTE	0.75 FTE	0.75 FTE	0.75 FTE	.90 FTE
Student/Temp workers			0.13 FTE	0.125 FTE	.25 FTE
Total Staffing	3.66FTE	4.25 FTE	4.005 FTE	4.545 FTE	2.65 FTE

CENTERS AND INSTITUTES ANNUAL REPORTING

Report For: July 1,2023 - June 30, 2024

(IBHE Approved and/or Illinois State Statute Established Only) *

1.	Reporti	Reporting Institution Southern Illinois University Edwardsville			
2.	Center/Institute		WSIE-FM 88.7 The Sound, broadcasting at 50 kilowatts from the SIUE Campus		
3.	Date		02-24-2025		
4.	Director		_Jason Church		
	4.1	Telephone	618-650-3607		
	4.2	E-mail	_jaschur@siue.edu		
5.	Year Established		A request for the radio station construction permit was submitted to the Federal Communications Commission (FCC) in October 1968; the station license application was submitted to the FCC in 1969; the FCC granted the license the following year; and the station went on the air for the first time on Sept. 4, 1970.		
6.	Illinois State Statute		N/A		
7.	,		Office of the Chancellor/University Marketing & Communications		
8. Type			Activity (check all that apply)		
	Instruct Researd		X		
	Public Service		X		

^{*} Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

WSIE 88.7 The Sound is a 50,000-watt, non-commercial FM radio station, which serves the SIUE campus, the Metro-East and the entirety of the Greater St. Louis region. WSIE provides our listening audience with a rich blend of Jazz, Smooth Jazz, Blues and Easy R&B, among other "companion" genres of music. We also provide three community-oriented programs (*The Financial Café*, *The SIUE Beat* and *On Another Note*), which air throughout our weekend lineup. WSIE also serves as a training ground for over 40 SIUE students, former students and community volunteers who wish to learn and hone their craft in a hands-on working environment.

9.2 Mission

WSIE 88.7 The Sound is a non-commercial, community-supported radio station that strives to celebrate, promote and educate on the institution of Jazz, in all its forms, throughout Edwardsville, the Greater St. Louis region and beyond. WSIE is also an educational facility which serves as a professional training ground for SIUE students interested in pursuing a career in the field of Mass Communications and across multiple disciplines.

9.3 Objectives

WSIE will strive to achieve the development, promotion and provision of a radio station format which engenders listener loyalty, underwriting, and on-going financial support. WSIE-FM will also strive to serve the communication needs of SIUE, the Greater St. Louis Area and the Southwestern Illinois region through the delivery of community-focused information and public affairs programming. WSIE-FM will strive to provide SIUE students with a myriad of opportunities to work in and experience the business of radio broadcasting through interaction with the professional staff of WSIE through the development and execution of high-quality student programming.

10. Advisory Board

10.1 Advisory Board - Membership

The WSIE Advisory Board is comprised of SIUE Faculty, staff and alumni, as well as supporters of the radio station from the surrounding region. Members (during the reporting period) are Mr. Carlos Bedoya, Ms. Robin Boyce, Ms. Bonni Burns, Mr. Jason Church, Dr. Suman Mishra, Mrs. Kedra Tolson, Mr. Bob Kochan, Dr. Kevin Leonard and Mr. Michael Silverman.

10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures *

Measure		Target for Year	Results in Year	
1.	Generate an average of \$12,000.00 per month in revenue	\$144,000.00	\$274,831.32 (total in grants, donations, and underwriting revenue)	
2.	Increase listening audience size by 10%	Average weekly cume of 94,820	Average weekly cume of 92,380	
3.	Increase social media footprint by 15%	5098	4579	

^{*} Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

WSIE has secured, in full, funding needed to purchase and install a new HD transmitter. The new HD transmitter will benefit WSIE's operations in three major ways:

- 1. The new HD transmitter will provide peace of mind that WSIE will be able to continue operations for the foreseeable future. Our current transmitter was installed in 1984 and has a typical shelf life of 25 years, give or take. The new HD transmitter will extend the life of WSIE by at least another 30+ years.
- 2. The new HD transmitter and antenna pattern will expand WSIE's broadcast footprint to cover areas as far as Springfield, Illinois to the north ... Carbondale, Illinois to the south ... and Hermann, Missouri to the west. A larger broadcast pattern will undoubtedly lead to more listeners, which translates to more donations and better metrics to attract new underwriting business partnerships.
- 3. The new HD transmitter will allow us to lease out the HD2 subchannel. We do have an interested party which, if successful, will allow WSIE to cure our deficit balance within 4-5 years.

We also secured funding to cover the costs of necessary safety upgrades on the WSIE broadcast tower, located next to the Facilities Management building. Those upgrades are currently being executed.

FY24 saw a continued and notable trend in an upward direction for WSIE's overall revenue, as well as a downward trend in our overall losses for the year. Specific numbers can be seen in the revenue vs expenditures table below.

In partnership with SIUE's Mass Communications department, WSIE has successfully instituted a working internship program that offers credit for students looking to fulfill their internship requirement. This program was approved by the accrediting board in FY 24. To date, we've had two interns who have successfully passed the program and we currently have four active interns.

In FY24, WSIE's overall student volunteer base grew to over 40 volunteers who are learning while working with us at the radio station. These volunteers range from on-air hosts, to marketing and sales, to social media managers, to audio producers and engineers.

WSIE successfully instituted an annual concert series (The WSIE Music Series) in partnership with Old Herald Brewery and Distillery in Collinsville, Illinois. Aside from providing a fantastic musical lineup for the enjoyment of our area's citizenry, this event is also a major fundraiser for WSIE.

WSIE 88.7 The Sound has been named one of St. Louis' best radio stations four years in a row (2021, 2022, 2023 & 2024) according to St. Louis Magazine's A-List readers' choice poll.

In FY24, WSIE reached a pinnacle in that we were ranked 16th in the measurable St. Louis market, according to Nielsen for the month of April 2024. This is an historic peak for WSIE's ranking in the market.

WSIE continues to attract the most diverse audience in the measurable St. Louis market, according to Nielsen.

WSIE continues to be a leader in the Jazz-centric format when it comes to our programming, with recognition around the country.

11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

WSIE Continues to broadcast promotional announcements designed to increase awareness of the effectiveness of SIUE as an educational institution. WSIE also broadcasts promotional announcements on the expanding in-state/out-of-state tuition program.

11.4 Evidence of Support for Center/Institute Objectives

WSIE continues to work with the faculty of the Department of Mass Communications to provide students with a unique learning opportunity at the radio station. WSIE also works with the Dean of the College of Arts and Sciences to produce and broadcast the half hour program "The SIUE Beat." The program highlights the work of SIUE and builds upon its relationship with the greater community by conducting interviews with community, civic, and political leaders.

11.5 Evidence of Organizational Effectiveness

We successfully recruited additional volunteers to replace departing voice-trackers. Internship program was set up for WSIE and Marketing & Communications in tandem with the Department of Mass Communications. Increased underwriting / community support.

12. Institutional Assessment

12.1 Date of Last Review Interim Review March 2024

12.2	Decision at Last Review	Cen	ter/Institute in Good Standing ter/Institute Flagged for Priority Review ter/Institute Suspended
12.3	Explanation		e any explanation necessary of the institutional plans for pending program review)

RESOURCES: Center/institute name

Financial Resources	FY2024	FY2023	FY2022	FY2021	FY2020
Revenues					
State Appropriations	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Income Fund	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Grants & Contracts	\$8,700.00	\$7,800.00	\$7,300.00	\$12,800.00	\$50,675.00
Underwriting	\$102,541.00	\$165,810.00	\$111,152.25	\$60,110.99	\$56,053.00
Rental Revenue	\$65.00	\$5.00	\$5,382.76	\$10,220.40	\$9,893.00
Donations to WSIE	\$163,525.32	\$71,413.00	\$38,354.44	\$55,953.80	\$54,282.82
Total Revenues	\$274,831.32	\$245,028.00	\$162,189.45	\$139,085.19	\$170,903.82
Expenditures*					
Salaries	\$251,886.19	\$276,376.92	\$259,063.17	\$192,641.79	\$189,176.00
Employer	\$3,909.00	\$3,681.00	·		·
Social Security	\$3,503.00	\$3,314.00			
Taxes	\$0.00	\$1,315.00			
Miscellaneous Refunds	\$0.00	\$417.00			
Wages	\$0.00	\$0.00	\$0.00	\$0.00	\$676.00
Equipment	\$691.83	\$4,366.68	\$424.97	\$0.00	\$0.00
Commodities	\$894.70	\$0.00	\$955.49	\$226.24	\$1,164.00
Contractual Services	\$16,620.33	\$26,632.11	\$19,598.96	\$20,849.79	\$18,442.29
Telecom	\$8,590.82	\$8,623.92	\$8,885.58	\$8,826.62	\$9,362.00
Foundation Expenditures	\$43,044.30	\$0.00	\$0.00	\$0.00	\$0.00
Total Expenditures	\$329,140.17	\$324,726.63	\$288,928.17	222,544.44	\$218,820.29
Revenue Minus Expenditures	(\$54,308.85)	(\$79,698.63)	(\$126,738.72)	(\$83,459.25)	(\$47,916.47)

^{*} Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

^{**}In the early 2000s through 2016, the center received a state appropriation from the university. In 2015 that appropriation topped out at about \$184,000. When the historic Illinois state budget crisis hit in 2015 and the university developed a tier system to address the crisis, WSIE was placed in Tier III, in part due to not routinely pursuing external funding opportunities and donor support and not drawing students to learning opportunities at the station. Tier III placement indicated WSIE should prepare to have the state appropriation funds decrease to zero by 2018. The station received \$141,240 in FY16, \$141,240 in FY17, \$70,620 in FY18, and 0 dollars of state support in FY19 and since.

***WSIE fully recognizes the university's recent efforts to support the station with approval of a purchase of a new transmitter, which will enable an HD2 signal that the station can lease out. WSIE has two areas for revenue increase, which will resolve the negative budget balance. First, the station has worked with the Radio Arts Foundation, and they are keen to leas the HD2 signal (once transmitter is purchased and installed) for – at minimum – a five year contract at \$175,000 a year. Additionally, WSIE will be hiring a development director to assist in pursuing external funding opportunities and fruitful donor relationships. WSIE has successfully increased its underwriting income in recent years, and a commitment to securing external funds and leasing the HD2 signal should more than resolve the existing budget concerns.

Staffing (Full Time Equivalent)	FY2024	FY2023	FY2022	FY2021	FY2020
Faculty	0	0	0	0	0
Staff	3	3	3	3	3
Student Workers	0	0	0	0	0
	<u>.</u>	•	•	•	•
Total Staffing	3	3	3	3	3