



Fiscal Year FY 2022-2023

Agency Budget Plan

FORM A - BUDGET PLAN SUMMARY

**OPERATING
REQUESTS**
(FORM B1)

For FY 2022-2023, my agency is (mark "X"):	
<input checked="" type="checkbox"/>	Requesting General Fund Appropriations.
<input type="checkbox"/>	Requesting Federal/Other Authorization.
<input type="checkbox"/>	Not requesting any changes.

**NON-RECURRING
REQUESTS**
(FORM B2)

For FY 2022-2023, my agency is (mark "X"):	
<input type="checkbox"/>	Requesting Non-Recurring Appropriations.
<input type="checkbox"/>	Requesting Non-Recurring Federal/Other Authorization.
<input checked="" type="checkbox"/>	Not requesting any changes.

**CAPITAL
REQUESTS**
(FORM C)

For FY 2022-2023, my agency is (mark "X"):	
<input checked="" type="checkbox"/>	Requesting funding for Capital Projects.
<input type="checkbox"/>	Not requesting any changes.

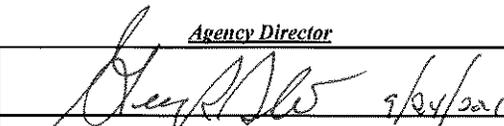
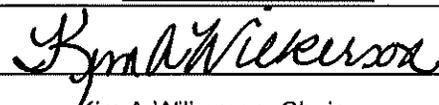
PROVISOS
(FORM D)

For FY 2022-2023, my agency is (mark "X"):	
<input type="checkbox"/>	Requesting a new proviso and/or substantive changes to existing provisos.
<input type="checkbox"/>	Only requesting technical proviso changes (such as date references).
<input checked="" type="checkbox"/>	Not requesting any proviso changes.

Please identify your agency's preferred contacts for this year's budget process.

	<u>Name</u>	<u>Phone</u>	<u>Email</u>
PRIMARY CONTACT:	Melissa Kelley	(864) 656-5273	gaskew@clemson.edu
SECONDARY CONTACT:	George Askew	(864) 650-1466	gaskew@clemson.edu

I have reviewed and approved the enclosed FY 2022-2023 Agency Budget Plan, which is complete and accurate to the extent of my knowledge.

	<u>Agency Director</u>	<u>Board or Commission Chair</u>
SIGN/DATE:		
TYPE/PRINT NAME:	Dr. George Askew	Kim A Wilkerson, Chair

This form must be signed by the agency head – not a delegate.

Agency Name:	Clemson University - Public Service Activities
Agency Code:	P200
Section:	45

BUDGET REQUESTS			FUNDING					FTES				
Priority	Request Type	Request Title	State	Federal	Earmarked	Restricted	Total	State	Federal	Earmarked	Restricted	Total
1	B1 - Recurring	Rural Health Cooperative Extension and Research	2,389,580	0	0	0	2,389,580	26.00	0.00	0.00	0.00	26.00
2	B1 - Recurring	Laboratory Services Support	1,550,060	0	0	0	1,550,060	6.00	0.00	0.00	0.00	6.00
3	B1 - Recurring	Integrated Agriculture Technology	1,078,540	0	0	0	1,078,540	9.00	0.00	0.00	0.00	9.00
4	C - Capital	Critical PSA Infrastructure	3,626,000	0	0	0	3,626,000	0.00	0.00	0.00	0.00	0.00
5	C - Capital	Edisto Research and Education Center Research Infrastructure Upgrades and Expansion	8,337,050	0	0	0	8,337,050	0.00	0.00	0.00	0.00	0.00
6	C - Capital	Poultry Science Research Facility	4,785,000	0	0	0	4,785,000	0.00	0.00	0.00	0.00	0.00
TOTALS			21,766,230	0	0	0	21,766,230	41.00	0.00	0.00	0.00	41.00

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM B1 – RECURRING OPERATING REQUEST

AGENCY PRIORITY	1
------------------------	----------

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Rural Health Cooperative Extension and Research
--------------	--

Provide a brief, descriptive title for this request.

AMOUNT	General: \$2,389,580 Federal: \$0 Other: \$0 Total: \$2,389,580
---------------	--

What is the net change in requested appropriations for FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

NEW POSITIONS	26.00
----------------------	--------------

Please provide the total number of new positions needed for this request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:	
	<input type="checkbox"/>	Change in cost of providing current services to existing program audience
	<input type="checkbox"/>	Change in case load/enrollment under existing program guidelines
	<input type="checkbox"/>	Non-mandated change in eligibility/enrollment for existing program
	<input checked="" type="checkbox"/>	Non-mandated program change in service levels or areas
	<input type="checkbox"/>	Proposed establishment of a new program or initiative
	<input type="checkbox"/>	Loss of federal or other external financial support for existing program
	<input type="checkbox"/>	Exhaustion of fund balances previously used to support program
	<input type="checkbox"/>	IT Technology/Security related
	<input type="checkbox"/>	Consulted DTO during development
<input type="checkbox"/>	Related to a Non-Recurring request – If so, Priority #	

STATEWIDE ENTERPRISE STRATEGIC OBJECTIVES	Mark "X" for primary applicable Statewide Enterprise Strategic Objective:	
	<input checked="" type="checkbox"/>	Education, Training, and Human Development
	<input type="checkbox"/>	Healthy and Safe Families
	<input type="checkbox"/>	Maintaining Safety, Integrity, and Security
	<input type="checkbox"/>	Public Infrastructure and Economic Development
	<input type="checkbox"/>	Government and Citizens

ACCOUNTABILITY OF FUNDS	<p>This funding request supports the following strategies as outlined in the FY20-21 Strategic Planning and Performance Measurement template of Clemson University – PSA’s Accountability Report:</p> <p>1.1 - Enhance research prominence in focus areas that maintain and support the growth of South Carolina's agriculture and forest industries.</p> <p>2.4 – Provide training on the safe preparation, production and handling of food while educating citizens on wise nutritional choices that lead to improved health (Food Safety and Nutrition).</p> <p>These objectives will be advanced by following our strategic plan for critical hires and by specifically adding four (4) Faculty to conduct applied research in nutrition and disease (2), community nutrition (1), and nutrition and physiology (1). Their findings will be organized into plain language materials by a Curriculum Coordinator (1) and Program Trainer (1). These materials will be disseminated to citizens by a team of Extension agents (20).</p> <p>The programs will be evaluated based on impacts reported through our annual Accountability Report to the state. Clemson University PSA is in constant contact with constituents, commodity boards, SC Farm Bureau and other advisory boards throughout the state. Our communication with these groups allows us to provide them with program updates and allows them the opportunity to provide feedback on</p>
--------------------------------	--

these same programs. Our State Extension Advancement Council will also provide feedback on the effectiveness of the program.

What specific strategy, as outlined in the most recent Strategic Planning and Performance Measurement template of agency's accountability report, does this funding request support? How would this request advance that strategy? How would the use of these funds be evaluated?

RECIPIENTS OF FUNDS

The funds will be utilized by Clemson University PSA to fund positions and operating expenses for four (4) Faculty to conduct applied research in nutrition and disease (2), community nutrition (1), and nutrition and physiology (1). Their findings will be organized into plain language materials by a Curriculum Coordinator (1) and Program Trainer (1). These materials will be disseminated to citizens by a team of Extension agents (20).

What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

JUSTIFICATION OF REQUEST

Justification:

Economic development studies point to the need to link agriculture and food systems to nutritional outcomes and public health. South Carolina has made significant gains in the quality and quantity of food production, and in improving market pathways and local food environments. Alongside those gains, more research and Extension efforts are needed to bring the consumers and producers closer through awareness of the connections between diet and health. Obesity, type 2 diabetes, micronutrient deficiencies, and other non-communicable diseases are among the key challenges in health in SC. Agriculture and rural development can positively contribute to a healthier and more nutritious supply of food, but research and education that more directly tackle the barriers to the adoption of healthy diets and lifestyles are needed.

Clemson Cooperative Extension currently develops and delivers science-based programs that help South Carolina citizens lead healthy lives by giving them the tools they need to fight chronic health conditions such as heart disease, obesity, high blood pressure and diabetes. These efforts, supported by sporadic and limited grant funds, have reached approximately 1,000 South Carolinians through forty 16-hour programs delivered by three (3) Extension agents since 2018. Participants showed improvements in weight, knowledge, blood glucose and blood pressure at the end of the programs. This success provides proof-of-concept that a statewide Extension Team supported by base budget funding, and coupled with nutrition research, would greatly improve the health and lives of South Carolinians.

Clemson Cooperative Extension seeks to enhance and expand its current health and nutrition programming by creating a team that will deliver research-based nutrition and wellness education programs in the counties. The focus will be on prevention of chronic disease and self-management of diabetes and heart disease. Extension Agents will empower South Carolinians to adopt healthy lifestyles through programs like "The National Diabetes Prevention Program", "Health Extension for Diabetes," and "The Hypertension Management Program." Traditional and innovative strategies focused on healthy cooking skills and online support will be used to promote lifestyle behavior changes. Partnerships with clinical providers will allow agents to connect citizens to healthcare and social services. Four (4) Faculty will conduct applied research in nutrition and disease (2), community nutrition (1), and nutrition and physiology (1). Their findings will be organized into plain language materials by a Curriculum Coordinator (1) and Program Trainer (1). These materials will be disseminated to citizens by a team of Extension agents (20).

Potential Offsets:

Our ability to expand this program throughout the state is dependent upon this funding. There are no plans to cut existing programs from Extension to expand the offerings laid out in this request. The expansion is dependent upon additional funding.

Matching Funds:

N/A

Method of Calculation:

Nutrition Education and Research (\$2,389,580)

Salary and Fringe Benefits for the following new positions with fringe benefits calculated at an estimated rate of 41.7%:

- Curricula Coordinator and Trainer (2 FTE) - \$255,060

- Extension Agent (20 FTE) - \$1,417,000
- Research Faculty salary (4 FTE) - \$510,120

Operating and travel funds to implement statewide programs \$207,400

The above calculations are average starting salaries for the positions identified and may vary based on experience of the applicants for each position.

Funding Impact/Prioritization:

The Nutrition Education and Research Initiative could be modified to defer portions of the program to future fiscal years if full funding is not provided with this request.

New Positions:

New positions are necessary for this project as existing vacancies under Clemson University PSA are either tied to posted positions or planned hires based on previously approved funding.

Please thoroughly explain the request to include the justification for funds, potential offsets, matching funds, and method of calculation. Please include any explanation of impact if funds are not received. If new positions have been requested, explain why existing vacancies are not sufficient.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM B1 – RECURRING OPERATING REQUEST

AGENCY PRIORITY	2
------------------------	---

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Laboratory Services Support
--------------	------------------------------------

Provide a brief, descriptive title for this request.

AMOUNT	General: \$1,550,060 Federal: \$0 Other: \$0 Total: \$1,550,060
---------------	--

What is the net change in requested appropriations for FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

NEW POSITIONS	6.00
----------------------	------

Please provide the total number of new positions needed for this request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:	
	<input type="checkbox"/>	Change in cost of providing current services to existing program audience
	<input type="checkbox"/>	Change in case load/enrollment under existing program guidelines
	<input type="checkbox"/>	Non-mandated change in eligibility/enrollment for existing program
	<input checked="" type="checkbox"/>	Non-mandated program change in service levels or areas
	<input type="checkbox"/>	Proposed establishment of a new program or initiative
	<input type="checkbox"/>	Loss of federal or other external financial support for existing program
	<input type="checkbox"/>	Exhaustion of fund balances previously used to support program
	<input type="checkbox"/>	IT Technology/Security related
	<input type="checkbox"/>	Consulted DTO during development
<input type="checkbox"/>	Related to a Non-Recurring request – If so, Priority #	

STATEWIDE ENTERPRISE STRATEGIC OBJECTIVES	Mark "X" for primary applicable Statewide Enterprise Strategic Objective:	
	<input type="checkbox"/>	Education, Training, and Human Development
	<input type="checkbox"/>	Healthy and Safe Families
	<input checked="" type="checkbox"/>	Maintaining Safety, Integrity, and Security
	<input type="checkbox"/>	Public Infrastructure and Economic Development
<input type="checkbox"/>	Government and Citizens	

ACCOUNTABILITY OF FUNDS	<p>This funding request supports the following strategies as outlined in the FY20-21 Strategic Planning and Performance Measurement template of Clemson University – PSA’s Accountability Report:</p> <p>3.1 – Enforce state and federal animal health laws and regulations by monitoring interstate movement of animals, performing inspections at livestock auction markets, and developing and expanding livestock traceability capability for livestock disease prevention, control, surveillance and eradication programs to protect animal and public health.</p> <p>3.2 – Protect the health of consumers by providing a comprehensive inspection service to ensure safe, properly labeled, wholesome meat and poultry products through inspections and regulations in state and federal cross-utilization meat and poultry plants.</p> <p>3.3 – Provide accurate and timely veterinarian diagnostic and surveillance testing for early detection of disease, thus improving response and mitigating economic losses in livestock and poultry industry sectors.</p> <p>4.4 – Protect South Carolina agriculture and environment from harmful or invasive plant disease, weed, and insect species.</p> <p>4.6 – Correctly identify or diagnose plant pests and diseases and provide effective</p>
--------------------------------	---

control recommendations in a timely manner.

4.7 – Help prepare South Carolina to better recover from disasters and other emergencies impacting agriculture in the state.

4.9 – Provide for effective leadership, management and administration of Division programs, personnel and facilities.

The requested funding advances the above strategies by providing stable support for increased demand for services and expertise needed to maintain an excellent level of service at the following laboratories: Clemson University PSA Agricultural Service Laboratory, Clemson University Plant Pest Diagnostic Clinic (PPDC), and Clemson University Livestock-Poultry Health.

The programs supported by this funding will be evaluated based on impacts reported through our annual Accountability Report to the state. Clemson University PSA is in constant contact with constituents, commodity boards, SC Farm Bureau and other advisory boards throughout the state. Our communication with these groups allows us to provide them with program updates and allows them the opportunity to provide feedback on these same programs.

What specific strategy, as outlined in the most recent Strategic Planning and Performance Measurement template of agency's accountability report, does this funding request support? How would this request advance that strategy? How would the use of these funds be evaluated?

RECIPIENTS OF FUNDS

The funding would be allocated to the Livestock Poultry Health and Regulatory divisions of Clemson University – PSA to further their programs based on the details provided within this request.

What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

Justification:

The **Clemson University PSA Agricultural Service Laboratory** conducts analytical tests to provide landowners information necessary to make management decisions that maximize agricultural production; comply with environmental regulations; help homeowners grow their own vegetables and ornamentals; and maintain recreational fields, golf courses and lawns. Results of analytical tests provide information necessary to make management decisions that maximize agriculture production; comply with environmental regulations in land applications of animal waste; help homeowners grow their own vegetables and ornamentals; and maintain recreational fields, golf courses and lawns throughout the state. The lab also supports the University's research, teaching, and Extension missions and Clemson's turf management programs. Testing services include but are not limited to soil fertility analysis, animal feed and forage analysis, irrigation water analysis, and animal waste analysis.

The **Clemson University Plant Pest Diagnostic Clinic (PPDC)** provides diagnostic services and management recommendations for plant and turf problems including diseases, nematodes, weeds, environmental issues, nutritional deficiencies and insect pests. The clinic also identifies insects infesting structures, humans, pets and livestock, and helps detect and document new plant diseases and pests in the state. The PPDC receives samples from the Clemson University Cooperative Extension Service, homeowners, growers, landscapers, turfgrass management professionals and researchers and supports research and teaching efforts within Clemson University.

The requested funding will address the increased demand for services by answering the need for additional technical personnel and increased operational costs needed to keep the laboratory relevant and responsive to the growing needs of stakeholders.

Clemson University Livestock -Poultry Health (LPH) ensures the health of South Carolina's livestock industry and the safety of the food supply through facilities inspections, diagnostic work, and other regulatory functions. Disease protection, detection, response and mitigation are among the most important functions of this unit, as well as meat inspection at many of the state's processing plants. Clemson LPH diagnostic laboratories maintain strict certification standards and require highly skilled personnel and modern laboratory facilities.

JUSTIFICATION OF REQUEST

Together these laboratories are essential to the health and well-being of South Carolina citizens, the continued prosperity of the state's agricultural, horticultural and recreation industries and the safety of the food supply. Increased demand for services and expertise need to be addressed to maintain the excellent level of service and support this unit provides to the livestock and poultry industry in South Carolina.

Potential Offsets:

The funding requested is to address the increased demand for services and expertise needed to maintain an excellent level of service, without increasing the fees to SC Citizens for services provided. If funding is not approved, potential offsets would have to be approved via an increase in fees for services.

Matching Funds:

N/A

Method of Calculation:

Plant and Soil Laboratory Services (\$552,040)

Salary and Fringe Benefits (41.7%) for the following positions:

- 1 Research Chemist - \$70,850
- 1 Lab Assistant - \$51,012
- 1 Plant/Weed Taxonomist - \$127,530
- 1 Entomologist - \$62,824
- 1 Lab Technician - \$62,824

Operating funds utilized for instrument maintenance, lab combustibles, IT programming upgrades and laboratory supplies - \$177,000

Livestock-Poultry Health (\$998,020)

Salary and Fringe Benefits (41.7%) for the following position:

- 1 Microbiologist II - \$85,020

Operational support - \$913,000

The above calculations are average starting salaries for the positions identified and may vary based on experience of the applicants for each position. Fringe benefits are calculated at 41.7% of salaries.

Funding Impact/Prioritization:

The Livestock Poultry Health and Regulatory Programs Support request could be modified to defer portion of the programs to future fiscal years if full funding is not provided with this request.

New Positions:

New positions are necessary for this project as existing vacancies under Clemson University – PSA are either tied to posted positions or planned hires based on previously approved funding.

Please thoroughly explain the request to include the justification for funds, potential offsets, matching funds, and method of calculation. Please include any explanation of impact if funds are not received. If new positions have been requested, explain why existing vacancies are not sufficient.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM B1 – RECURRING OPERATING REQUEST

AGENCY PRIORITY	3
------------------------	---

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Integrated Agriculture Technology
--------------	--

Provide a brief, descriptive title for this request.

AMOUNT	General: \$1,078,540 Federal: \$0 Other: \$0 Total: \$1,078,540
---------------	--

What is the net change in requested appropriations for FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

NEW POSITIONS	9.00
----------------------	------

Please provide the total number of new positions needed for this request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:	
	<input type="checkbox"/>	Change in cost of providing current services to existing program audience
	<input type="checkbox"/>	Change in case load/enrollment under existing program guidelines
	<input type="checkbox"/>	Non-mandated change in eligibility/enrollment for existing program
	<input type="checkbox"/>	Non-mandated program change in service levels or areas
	<input checked="" type="checkbox"/>	Proposed establishment of a new program or initiative
	<input type="checkbox"/>	Loss of federal or other external financial support for existing program
	<input type="checkbox"/>	Exhaustion of fund balances previously used to support program
	<input type="checkbox"/>	IT Technology/Security related
	<input type="checkbox"/>	Consulted DTO during development
<input type="checkbox"/>	Related to a Non-Recurring request – If so, Priority #	

STATEWIDE ENTERPRISE STRATEGIC OBJECTIVES	Mark "X" for primary applicable Statewide Enterprise Strategic Objective:	
	<input checked="" type="checkbox"/>	Education, Training, and Human Development
	<input type="checkbox"/>	Healthy and Safe Families
	<input type="checkbox"/>	Maintaining Safety, Integrity, and Security
	<input type="checkbox"/>	Public Infrastructure and Economic Development
	<input type="checkbox"/>	Government and Citizens

ACCOUNTABILITY OF FUNDS	<p>This funding request supports the following strategies as outlined in the FY20-21 Strategic Planning and Performance Measurement template of Clemson University – PSA’s Accountability Report:</p> <p>1.1 - Enhance research prominence in focus areas that maintain and support the growth of South Carolina's agriculture and forest industries.</p> <p>2.1 – Develop and implement agricultural production systems that are economically sustainable and environmentally sound (Agrisystems Productivity and Profitability)</p> <p>These objectives will be advanced by following our strategic plan for critical hires and by specifically adding four (4) Technical Personnel, one (1) Business Manager, two (2) Extension Associates and two (2) Research Faculty to expand the precision agriculture program to establish a joint technology industry program at Edisto Research and Education Center.</p> <p>The programs will be evaluated based on impacts reported through our annual Accountability Report to the state. Clemson University PSA is in constant contact with constituents, commodity boards, SC Farm Bureau and other advisory boards throughout the state. Our communication with these groups allows us to provide them with program updates and allows them the opportunity to provide feedback on these same programs. Our State Extension Advancement Council will also provide feedback on the effectiveness of the program.</p>
--------------------------------	--

What specific strategy, as outlined in the most recent Strategic Planning and Performance Measurement template of agency's accountability report, does this funding request support? How would this request advance that strategy? How would the use of these funds be evaluated?

RECIPIENTS OF FUNDS

The funds will be utilized by Clemson University PSA to fund positions and operating for four (4) Technical Personnel, one (1) Business Manager, two (2) Extension Associates and two (2) Research Faculty and operating to enhance the field supplies, IT services and supplies needed to expand the precision agriculture program to establish a joint technology industry program at Edisto Research and Education Center.

What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

JUSTIFICATION OF REQUEST

Justification:

Clemson PSA proposes to establish a joint technology industry program that builds upon precision agriculture breakthroughs in the design and use of robots, drones, UAVs and online farm efficiency applications supported by FY2013-14 (\$500,000) and FY2015-16 (\$250,000) legislative funding. Technological innovations developed by researchers at Clemson's Edisto Research and Education Center help farmers maximize the efficiency of irrigation and fertilizer applications and increase productivity. Additional recurring funding will allow Clemson researchers to leverage recent advances in Artificial Intelligence (AI), remote sensing and data management into Integrated Agricultural Technology Systems designed to help farmers improve efficiency and productivity through predictive farm planning and data-driven farm operation.

Working in public-private collaboration with major technology companies, Clemson PSA will help farmers better understand environmental conditions, forecasts, and crop management options. Capitalizing on information extracted from technologies such as remote sensing, sensor-based measurements of field and crop conditions, and integrating this information into an advanced decision platform will improve the efficiency and effectiveness of common agricultural practices such as irrigation, planting and harvesting times, chemical applications, yield monitoring, pest management and field design. These Integrated Agricultural Technology Systems will also enable the ongoing evolution of agricultural analytics for crop production.

Potential Offsets:

Our ability to expand this program throughout the state is dependent upon this funding. There are no plans to cut existing programs from Extension or Research to expand the offerings laid out in this request. The expansion is dependent upon additional funding.

Matching Funds:

N/A

Method of Calculation:

Integrated Agriculture Technology (\$1,078,540)

Salary and Fringe Benefits for the following new positions with fringe benefits calculated at an estimated rate of 41.7%:

- o Technical Personnel (4 FTE) – \$340,080
- o Business Manager (1 FTE) - \$85,020
- o Extension Associate (2 FTE) - \$170,040
- o Research Faculty (2 FTE) \$283,400

Operating to enhance field supplies, IT services and supplies \$200,000

The above calculations are average starting salaries for the positions identified and may vary based on experience of the applicants for each position.

Funding Impact/Prioritization:

The Integrated Agriculture Technology Initiative could be modified to defer portions of the program to future fiscal years if full funding is not provided with this request.

New Positions:

New positions are necessary for this project as existing vacancies under Clemson University PSA are either tied to posted positions or planned hires based on previously approved funding.

Please thoroughly explain the request to include the justification for funds, potential offsets, matching funds, and method of calculation. Please include any explanation of impact if funds are not received. If new positions have been requested, explain why existing vacancies are not sufficient.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM C – CAPITAL REQUEST

AGENCY PRIORITY	4
------------------------	---

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Critical PSA Infrastructure
--------------	-----------------------------

Provide a brief, descriptive title for this request.

AMOUNT	\$3,626,000
---------------	-------------

How much is requested for this project in FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

CPIP PRIORITY	This project is included in the Clemson University PSA Comprehensive Permanent Improvement Plan (CPIP) for plan year FY22-23 as Priority 1 of 6, this is the first year of inclusion in the CPIP. This initiative is reliant upon support from additional state funding.
----------------------	--

Identify the project's CPIP plan year and priority number, along with the first year in which the project was included in the agency's CPIP. If not included in the agency's CPIP, please provide an explanation. If the project involves a request for appropriated state funding, briefly describe the agency's contingency plan in the event that state funding is not made available in the amount requested.

OTHER APPROVALS	This project has been approved as a priority by the State Budget Planning Committee for the university. If funding is allocated, the university will proceed with obtaining additional approvals to renovate the facilities, both internally and with the proper state government authorities.
------------------------	--

What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, SFAA, etc.)

LONG-TERM PLANNING AND SUSTAINABILITY	This is a new request for funding. If fully funded, the \$3.626M request will make improvements to the T. Ed Garrison Arena, replacing the 30-year-old 106,000 sq. ft. roof of the Main Arena, replace and upgrade laboratory equipment and allow for building renovations for the Agricultural Service Laboratory and Plant Pest Diagnostic Clinic. The funding will also construct a 15,800 sq. ft. storage and training facility for Livestock-Poultry Health. The recurring request in FY23 Priority 2 Laboratory Services would support the expanded services and any operating costs that would be enhanced by these renovations, however, the requests are mutually exclusive and could be funded independently. The useful life of these improvements is approximately 40 years.
--	--

What other funds have already been invested in this project (source/type, amount, timeframe)? Will other capital and/or operating funds for this project be requested in the future? If so, how much, and in which fiscal years? Has a source for those funds been identified/secured? What is the agency's expectation with regard to additional annual costs or savings associated with this capital improvement? What source of funds will be impacted by those costs or savings? What is the expected useful life of the capital improvement?

LONG-TERM PLANNING AND SUSTAINABILITY	<p>Clemson University PSA's facilities include six Research and Education Centers throughout the state, Livestock-Poultry Health unit in Columbia, and Regulatory Services Laboratories in Pendleton. This year Clemson PSA is seeking one-time funding to address specific maintenance and renovation needs at several critical facilities.</p> <p>The T. Ed Garrison Arena draws approximately 100,000 visitors annually from across the Southeast and increases the national reputation of South Carolina's cattle, equine and related agriculture-based industries by hosting an array of high-profile events. The requested funding will be used to replace the 30-year-old 106,000 sq. ft roof of the Main Arena that has reached its maximum life expectancy. The installation of a new steel roof is a critical need if Clemson is going to maintain a safe environment for all exhibitors and guests.</p> <p>The Agricultural Service Laboratory (ASL) provides analytical testing services to</p>
--	---

farmers, homeowners, and many others across the state that are essential to the success of agriculture in South Carolina and provide information to help farmers and homeowners manage their land in a productive manner with regard to fertilizer application and land management.

The **Plant Pest Diagnostic Clinic (PPDC)** provides diagnostic services and management recommendations for plant and turf problems. The clinic also identifies insects infesting structures, humans, pets, and livestock and helps detect and document new plant diseases and pests. The requested funding will address the need for equipment upgrades and infrastructure improvements needed to maintain the quality of the ASL and PPDC laboratories.

Livestock-Poultry Health is the state regulatory agency responsible for responding to domestic and transboundary animal disease events affecting South Carolina livestock and poultry. Emergency preparedness for disease events continues to be our priority. The requested funding would allow Clemson University to construct a 15,800 sq. ft. storage and training building. This would provide LPH rapid access to equipment during emergency events, and allow for training with the equipment and supplies at one location.

SUMMARY

Item	Cost
Laboratory Equipment	\$211,000
Laboratory Building Renovations	\$265,000
Construction of 15,800 sq ft LPH facility estimate	\$650,000
Arena roof replacement	\$2,500,000
TOTAL	\$3,626,000

Provide a summary of the project and explain why it is necessary. Please refer to the budget guidelines for appropriate questions and thoroughly answer all related items.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM C – CAPITAL REQUEST

AGENCY PRIORITY	5
------------------------	---

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Edisto Research and Education Center Research Infrastructure Upgrades and Expansion
--------------	---

Provide a brief, descriptive title for this request.

AMOUNT	\$8,337,050
---------------	-------------

How much is requested for this project in FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

CPIP PRIORITY	<p>CPIP Plan Year FY2022-2023, Priority 4 of 6</p> <p>First included in the FY19 CPIP</p> <p><u>This initiative is reliant upon support from additional state funding.</u></p>
----------------------	--

Identify the project's CPIP plan year and priority number, along with the first year in which the project was included in the agency's CPIP. If not included in the agency's CPIP, please provide an explanation. If the project involves a request for appropriated state funding, briefly describe the agency's contingency plan in the event that state funding is not made available in the amount requested.

OTHER APPROVALS	<p>This project has been approved as a priority by the State Budget Planning Committee for the university. If funding is allocated, the university will proceed with obtaining additional approvals to renovate the facility, both internally and with the proper state government authorities.</p>
------------------------	---

What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, SFAA, etc.)

LONG-TERM PLANNING AND SUSTAINABILITY	<p>This is a new request for funding. If fully funded, the \$8.34M request will be used to upgrade and expand the research facilities at Edisto REC. The biggest investment (\$7M) will be toward construction of a new research laboratory building. The existing laboratories were originally built as temporary space 35 years ago and do not include space for equipment necessary for plant and soil analysis. With the addition of new faculty and modern equipment to support their research programs, the current lab facilities are inadequate. The FY23 Integrated Agriculture Technology would benefit from this facility, however it is not dependent on this funding to move forward. No future request for capital and/or operating funding is planned for specifically relative to these proposed improvements. Annual cost are estimated to increase \$25,000 per year and would come from general funds. The useful life of these improvements is approximately 40 years.</p>
--	--

What other funds have already been invested in this project (source/type, amount, timeframe)? Will other capital and/or operating funds for this project be requested in the future? If so, how much, and in which fiscal years? Has a source for those funds been identified/secured? What is the agency's expectation with regard to additional annual costs or savings associated with this capital improvement? What source of funds will be impacted by those costs or savings? What is the expected useful life of the capital improvement?

	<p>Scientists at the Edisto Research and Education Center (REC) located in Barnwell County have conducted research on agricultural production practices since 1937. Currently, the main research focus at Edisto REC is precision agriculture, where temporal and spatial data are used to drive agricultural management decisions in an effort to maximize resource utilization efficiency, profitability, and sustainability.</p> <p>This request for one-time funds will be used to upgrade and expand the research facilities at Edisto REC. The biggest investment (\$7M) will be toward construction of a new research laboratory building. The existing laboratories were originally built as temporary space 35 years ago and do not include space for equipment necessary for plant and soil analysis. With the addition of new faculty and modern equipment to support their research programs, the current lab facilities are inadequate.</p>
--	--

In addition to the laboratory building, an investment in graduate student housing is also needed. The ability to house graduate students and visiting scientists is an essential component of productive research programs. Existing housing is insufficient and inadequate. The requested funds will be used to build new facilities (\$1M) as well as to renovate and expand existing housing (\$.5M). The new housing facility will accommodate twelve graduate scholars or visiting scientists, while the renovated houses will accommodate another twelve.

SUMMARY

Need	Cost
New construction of Research Laboratory Building	\$ 7,000,000
New Construction of Graduate Student Housing	\$837,050
Upgrades to Existing Graduate Student Housing	\$500,000
TOTAL	\$8,337,050

Provide a summary of the project and explain why it is necessary. Please refer to the budget guidelines for appropriate questions and thoroughly answer all related items.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM C – CAPITAL REQUEST

AGENCY PRIORITY	6
------------------------	---

Provide the Agency Priority Ranking from the Executive Summary.

TITLE	Poultry Science Research Facility
--------------	-----------------------------------

Provide a brief, descriptive title for this request.

AMOUNT	\$4,785,000
---------------	-------------

How much is requested for this project in FY 2022-2023? This amount should correspond to the total for all funding sources on the Executive Summary.

CPIP PRIORITY	<p>CPIP Plan Year FY2022-2023, Priority 5 of 6</p> <p>First included in the FY19 CPIP</p> <p>This initiative is reliant upon support from additional state funding.</p>
----------------------	--

Identify the project's CPIP plan year and priority number, along with the first year in which the project was included in the agency's CPIP. If not included in the agency's CPIP, please provide an explanation. If the project involves a request for appropriated state funding, briefly describe the agency's contingency plan in the event that state funding is not made available in the amount requested.

OTHER APPROVALS	<p>This project has been approved as a priority by the State Budget Planning Committee for the university. If funding is allocated, the university will proceed with obtaining additional approvals to renovate the facility, both internally and with the proper state government authorities.</p>
------------------------	---

What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, SFAA, etc.)

LONG-TERM PLANNING AND SUSTAINABILITY	<p>This is a new request for funding. If fully funded, the \$4.785M request will be used to build a new Poultry Science Research Center near Clemson's main campus on the Piedmont Research and Education Center that will provide research, teaching and outreach support to the South Carolina poultry industry that represents 40% of all agriculture in the state, 80% of animal agriculture and accounts for approximately 13,000 jobs*. Utility expenses of \$30,000 per year will be offset by a \$15,000 per year savings in the Maintenance and Repairs required at the current facility. These savings and expenses will impact generated revenues. The useful life of these improvements is approximately 40 years.</p>
--	--

What other funds have already been invested in this project (source/type, amount, timeframe)? Will other capital and/or operating funds for this project be requested in the future? If so, how much, and in which fiscal years? Has a source for those funds been identified/secured? What is the agency's expectation with regard to additional annual costs or savings associated with this capital improvement? What source of funds will be impacted by those costs or savings? What is the expected useful life of the capital improvement?

OTHER	<p>The current facilities at the Morgan Poultry Center were constructed prior to or during the 1970s. The addition of new, active research scientists in the areas of poultry nutrition, food safety, genetics and animal behavior have created long waiting lists for facility use. Also, the existing facility does not provide environments that replicate current commercial poultry operations, making research 1) more labor intensive; 2) less applicable to commercial growers; and 3) less fundable by agencies. Renovation of the existing facilities would not be cost-effective.</p> <p>The requested one-time funds would be used to build a new Poultry Science Research Center near Clemson's main campus on the Piedmont Research and Education Center that will provide research, teaching and outreach support to a South Carolina poultry industry that represents 40% of all agriculture in the state, 80% of animal agriculture and accounts for approximately 13,000 jobs*.</p>
--------------	---

SUMMARY

The new facility would include four poultry grower facilities, an egg layer facility and an intensive research facility located on the grounds of the recently decommissioned and soon-to-be-demolished Starkey Swine Center. Location of the Poultry Research Center on the decommissioned swine farm would allow expansion of poultry research capacity while capitalizing on existing swine facility utilities and infrastructure. Four poultry grower research houses will provide for multi-disciplinary research in the areas of nutrition, animal welfare, behavior, and stress physiology. The egg layer facility will support ongoing nutrition research and additional research in animal welfare, animal behavior and animal stress physiology, and animal health. An intensive research building will be constructed and equipped to allow researchers to conduct nutrient balance trials and other metabolism studies. All facilities will be fitted with state-of-the-art lighting, feeding, and ventilation systems which will allow faculty to simulate a variety of current industry-relevant growing conditions.

Need	Cost
Professional Services/Fees	\$300,000
New Construction	\$2,400,000
Renovations	\$300,000
Utilities	\$150,000
Equipment and Materials	\$700,000
Site Development	\$500,000
Contingency	\$435,000
Total	\$4,785,000

* Source <https://scpoultry.org/ecoimpacct/>

Provide a summary of the project and explain why it is necessary. Please refer to the budget guidelines for appropriate questions and thoroughly answer all related items.

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM E – AGENCY COST SAVINGS AND GENERAL FUND REDUCTION CONTINGENCY PLAN

TITLE	Agency Cost Savings and General Fund Reduction Contingency Plan
--------------	---

AMOUNT	\$1,478,938
---------------	-------------

What is the General Fund 3% reduction amount? This amount should correspond to the reduction spreadsheet prepared by EBO.

ASSOCIATED FTE REDUCTIONS	We would plan to reduce our FTEs by 5 positions, should this reduction take place.
----------------------------------	--

How many FTEs would be reduced in association with this General Fund reduction?

PROGRAM / ACTIVITY IMPACT	<p>The reduction could impact programs/activities within four of Clemson PSA's major divisions and programs:</p> <p>Livestock & Poultry Health *(request to hold harmless)</p> <p>Regulatory & Public Service</p> <p>Agricultural Research</p> <p>Cooperative Extension Service</p>
----------------------------------	---

What programs or activities are supported by the General Funds identified?

SUMMARY	<p>Impact on Livestock-Poultry Health: We request that our Livestock-Poultry Health division be held harmless in the event of a 3% budget reduction due to the unit's importance in ensuring a safe food supply for South Carolina. (Portion requested to be held harmless \$131,900)</p> <p>Impact on Regulatory and Public Service Programs: Our ability to provide the current level of inspections, pest monitoring, laboratory analysis, and related tasks would be at risk and may impact our ability to ensure early pest detection and regulatory compliance for South Carolina. The Division of Regulatory and Public Service Programs will manage the reduction of \$38,393 by withholding a portion of our travel funds and a reduction in operating funds for Organic Certification Services. The potential impacts include decreased travel for training, pest monitoring, inspections, and other program-specific needs and a possible increase in Organic Certification fees.</p> <p>Impact on Agricultural Research: Our ability to maintain the primary operational functions of our research and education centers would be at risk, resulting in a diminished capacity to conduct field and laboratory research and diminish our competitiveness in acquiring research grants and contracts. Specifically, the reduction of \$619,613 would come from operating dollars at Research and Education Centers around the state, reducing the ability of personnel to travel and impacting the number of public events (field days, workshops, demonstrations, etc.) at each of the Centers.</p> <p>Impact on Cooperative Extension Service: We would primarily reduce operating and travel allocations to non-county operations. These reductions would diminish our number of contacts, workshops, and troubleshooting on the state's farms and forests. Additionally, we would reduce our temporary faculty and staff and re-evaluate faculty Extension appointments of existing faculty, along with re-examining the administrative structure of Extension to produce salary savings. The plan for this reduction (\$688,486) would include a \$332,486 reduction to operating and travel funds, \$247,394 in Classified/Unclassified or Other Personal Services Salary, and a \$108,606 decrease to Employee Benefits. This would result in a reduction of 5 FTEs.</p> <p>The 3% reduction could impact all 4 of the divisions within Clemson PSA. Because our Livestock and Poultry Health Division has a critical role in safeguarding the food supply chain in South Carolina, we would request that division be held harmless. This would prevent the other three divisions from taking a disproportionate share of the total 3% reduction.</p>
----------------	--

The amount of the reduction is based on 3% of the total general fund appropriation for all four divisions.

Please provide a detailed summary of service delivery impact caused by a reduction in General Fund Appropriations and provide the method of calculation for anticipated reductions. Agencies should prioritize reduction in expenditures that have the least significant impact on service delivery.

AGENCY COST SAVINGS PLANS

Savings will be realized through multiple means. Positions that are vacated due to retirements, but that are critical to our infrastructure will be refilled, but at a salary savings for a new employee, vs an employee with 28 years of experience. In areas that are not critical to our infrastructure, positions will not be refilled and the savings will be utilized to support cost of existing operations for the division that realizes the savings.

What measures does the agency plan to implement to reduce its costs and operating expenses by more than \$50,000? Provide a summary of the measures taken and the estimated amount of savings. How does the agency plan to repurpose the savings?

Agency Name:	Clemson University - Public Service Activities		
Agency Code:	P200	Section:	45

FORM F – REDUCING COST AND BURDEN TO BUSINESSES AND CITIZENS

TITLE	Regulation Through Education
--------------	------------------------------

Provide a brief, descriptive title for this request.

EXPECTED SAVINGS TO BUSINESSES AND CITIZENS	The philosophy of regulation through education will save citizens and businesses of South Carolina from fines and fees for failure to comply with existing State and Federal regulations.
--	---

What is the expected savings to South Carolina's businesses and citizens that is generated by this proposal? The savings could be related to time or money.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:	
	<input type="checkbox"/>	Repeal or revision of regulations.
	<input type="checkbox"/>	Reduction of agency fees or fines to businesses or citizens.
	<input type="checkbox"/>	Greater efficiency in agency services or reduction in compliance burden.
	<input checked="" type="checkbox"/>	Other

METHOD OF CALCULATION	N/A
------------------------------	-----

Describe the method of calculation for determining the expected cost or time savings to businesses or citizens.

REDUCTION OF FEES OR FINES	There are no planned fine or fee reductions for FY23 for Clemson University – PSA.
-----------------------------------	--

Which fees or fines does the agency intend to reduce? What was the fine or fee revenue for the previous fiscal year? What was the associated program expenditure for the previous fiscal year? What is the enabling authority for the issuance of the fee or fine?

REDUCTION OF REGULATION	There are no planned amendments to regulations associated with Clemson University – PSA for FY23.
--------------------------------	---

Which regulations does the agency intend to amend or delete? What is the enabling authority for the regulation?

SUMMARY	Clemson University Public Service Activities has operated for many years under the philosophy of regulation through education. By educating the public and professionals on requirements for handling pesticides, moving plants and animals intrastate or interstate, and proper treatments for invasive species, our Regulatory and Public Service and Livestock-Poultry Health Divisions serve to prevent issues that would cost the citizens and agricultural industry and the state of South Carolina excessive fines, fees and lost plants and animals if these divisions did not exist.
----------------	---



Provide an explanation of the proposal and its positive results on businesses or citizens. How will the request affect agency operations?