

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14



Fiscal Year 2017-18 Agency Budget Plan

FORM A – SUMMARY

RECURRING FUNDS (FORM B DECISION PACKAGES)	<p>My agency is submitting the following recurring decision packages listed in <u>priority order</u> (Form B):</p> <ul style="list-style-type: none"> 10914 – Connected Vehicles Center (B-1) 10917 – Cyber-Physical Security Institute (CPSI) (B-6) 10920 – Product Lifecycle Management (PLM) Center (B-11) 10923 – Changes to Other Earmarked Funds in I.A E&G Unrestricted and III. Employee Benefits Budgets (B-16) 10926 – Changes to Other Earmarked Funds in II. Auxiliary Enterprises and III. Employee Benefits Budgets (B-21) 10929 – Changes to Federal Restricted Funds in I.B E&G Restricted and III. Employee Benefits Budgets (B-25) 11042 – Changes to Federal Funds in I.A E&G Unrestricted Budgets (B-29) 10932 – Realignment of Existing Other Funds Authorization (B-33) 10935 – Other Funds FTEs (B-37) 10938 – State Appropriations – FY2017 Allocations for 3.25% Pay Plan, Retirement, Health and Dental Insurance (B-42) 			
	<p>For FY 2017-18, my agency is (mark "X"):</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td>Requesting a net increase in recurring General Fund appropriations.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Not requesting a net increase in recurring General Fund Appropriations.</td> </tr> </table>	<input checked="" type="checkbox"/>	Requesting a net increase in recurring General Fund appropriations.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Requesting a net increase in recurring General Fund appropriations.			
<input type="checkbox"/>	Not requesting a net increase in recurring General Fund Appropriations.			

CAPITAL & NON-RECURRING FUNDS (FORM C DECISION PACKAGES)	<p>My agency is submitting the following one-time decision packages listed in <u>priority order</u> (Form C):</p> <ul style="list-style-type: none"> 10822 – Critical Investments in South Carolina's Advanced Materials Industrial Competitiveness (C-1) 11394 10864 – Business and Behavioral Science Building (C-5) 11397 10867 – Advanced Materials Science Complex Building (C-8) 11400 10905 – Martin Hall Renovation (C-11) 10908 – Long Hall Renovation (C-13) 10911 – Daniel Hall Renovation (C-15) 			
	<p>For FY 2017-18, my agency is (mark "X"):</p>			
	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;"><input checked="" type="checkbox"/></td> <td>Requesting capital and/or non-recurring funds.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Not requesting capital and/or non-recurring funds.</td> </tr> </table>	<input checked="" type="checkbox"/>	Requesting capital and/or non-recurring funds.	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Requesting capital and/or non-recurring funds.			
<input type="checkbox"/>	Not requesting capital and/or non-recurring funds.			

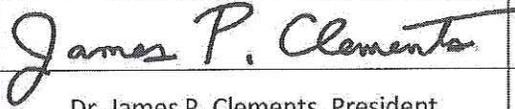
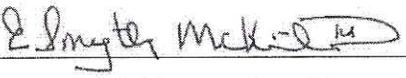
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PROVISOS (FORM D)	For FY 2017-18, my agency is (mark "X"):		
	<input type="checkbox"/>	Requesting a new proviso and/or substantive changes to existing provisos.	
	<input type="checkbox"/>	Only requesting technical proviso changes (such as date references).	
	<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:	Brett A. Dalton	864-656-2421	dbrett@clemson.edu
SECONDARY CONTACT:	Virginia Baumann	864-656-2422	vbauman@clemson.edu

I have reviewed and approved the enclosed FY 2017-18 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. James P. Clements, President	E. Smyth McKissick III, Chairman

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

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FORM B – PROGRAM REVISION REQUEST #1

DECISION PACKAGE	10914
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Connected Vehicles Center at CUICAR
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Provide a brief, descriptive title for this request.

AMOUNT	\$3,160,500 Recurring State Appropriations
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<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.	

RECIPIENTS OF FUNDS	The majority of funds received for this initiative will be used for program costs, positions and operating costs for existing academic departments responsible for facilitating the success of the program. Clemson University will adhere to state procurement policies and procedures for any acquisition of goods and services with these funds, if necessary.
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What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing

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formula, through a competitive process, based upon predetermined eligibility criteria?

ACCOUNTABILITY OF FUNDS	<p>The funding request for the Connected Vehicles Center supports the University's enterprise objective for Public Infrastructure and Economic Development. The Connected Vehicles Center (CVC) at CUICAR's research focus would be on the development and building of energy efficient, autonomous, on-demand means of transportation in order to lessen the costs and fill the mobility gap for local workforce. Revolution in transportation and personal mobility has already begun, and it will be critical for sustainable growth of regions such as the Upstate, improved safety, and improved opportunities for underserved communities.</p>
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What specific agency objective, as outlined in the agency's accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	<p>While external grant funding may be an option for this initiative, the Connected Vehicles Center requires a recurring investment from a stable revenue stream and cannot be appropriately planned and maintained with one-time funds, such as grant sources and fund balances.</p>
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

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SUMMARY

The automotive, transportation, and mobility industries are in the midst of one of the most significant transformations in their history. Rapid advances in technology such as sensors, wireless, software, hardware, advanced devices, and manufacturing are propelling the industries and their suppliers into new territories. Specific initiatives and advances in autonomous and connected mobility and transportation are priority investment areas for all major transportation manufacturers and suppliers. “Smart transportation” in which infrastructure and vehicles communicate, as well as “smart cars” that communicate with other vehicles, infrastructure, and drivers, are all becoming realities. Through the Clemson University International Center for Automotive Research (CUICAR), South Carolina has an opportunity to be a leader in this transformation. South Carolina automotive manufacturers and suppliers such as BMW, Volvo, and Bosch are committing substantial resources to develop self-driving cars and are seeking additional expertise and capabilities from CUICAR to partner in R&D, prototyping, application testing, education, and workforce development and training. To secure and advance South Carolina’s competitiveness in the automotive and transportation sector, it is important to invest in this phase of automotive and transportation engineering and development. As the only doctoral training program in the nation focused on automotive engineering, Clemson is uniquely positioned to lead this effort in South Carolina.

Building on existing investments, expertise, infrastructure, and partnerships at CUICAR, Clemson will propel South Carolina through the Center for Connected Vehicles (CVC), a research and development center that will engage directly with automotive manufacturers, suppliers, and technology firms. The center will be located at CUICAR and will build on CUICAR’s strong relationships with the South Carolina automobile industry. The Connected Vehicles Center (CVC) will be a leader in the research, development, education, and workforce development required to ensure the success of South Carolina in this rapidly developing area of transportation. Instead of starting from zero, this initiative will build on firmly established successes and partnerships at CUICAR (State, Local, Federal, Private, and University).

The CVC will expand the faculty and expert personnel at CUICAR, providing additional highly-trained automotive engineers, technicians, and workforce available to propel growth in the South Carolina automobile industry. This will improve South Carolina’s competitiveness in attracting and retaining automotive manufacturers. It will also increase the benefits to be gained from the state’s 2016 \$123M infrastructure investment in Volvo. Graduates from CUICAR have close to a 100% job placement rate and this addition will extend some of this benefit to undergraduates who will be able to complete a certificate in automotive engineering as a part of their degree.

The proposed CVC will position South Carolina as a leader in connected transportation, smart transportation, and autonomous mobility. This investment will drive economic opportunity and advancement in SC.

State support of CVC will be used to fund salaries for six faculty and industry/research scientists to staff CVC. It will also fund increased space to house the teaching, research, and industry activities associated with the center. This funding will provide research operating support for workforce development.

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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>The \$3,160,500 funding request includes the following:</p> <ul style="list-style-type: none"> • Salaries and Fringe Benefits for 6 FTEs and Graduate Students \$910,440 • Lease Expense \$50,000 • Research Operating Support, Infrastructure and Equipment \$2,200,060
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Funding for this initiative will become part of Clemson's operating base budget in I.A E&G Unrestricted Funds.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

PRIORITIZATION	<p>If the University receives partial funding, this will impede Clemson's ability to remain at the forefront of transportation and personal mobility research and testing, therefore potentially reducing the economic impact throughout the Upstate and State of South Carolina. Therefore, if partial funds are received, Clemson will take a phased approach to establishing the Connected Vehicles Center.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

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INTENDED IMPACT	<p>The proposed Connected Vehicles Center will strengthen the automobile industry in Greenville, the upstate, and South Carolina as a whole. This is critical to allow our local automotive partners to remain competitive in an industry that is changing rapidly. It will also bring technology-based companies to our state and propel an ecosystem that enables new startups, new companies and respective talent that will pool knowledge in the broader area of autonomous connected vehicles.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The program will be evaluated on an annual basis in the University's Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #2

DECISION PACKAGE	10917
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Provide the decision package number issued by the PBF system (“Governor’s Request”).

TITLE	Cyber-Physical Security Institute (CPSI)
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Provide a brief, descriptive title for this request.

AMOUNT	\$3,103,820 Recurring State Appropriations
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package’s total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark “X” for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<input checked="" type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Non-Recurring request – If so, Decision Package # _____
	<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.	

RECIPIENTS OF FUNDS	The majority of funds received for this initiative will be used for positions and operating and program costs for existing academic departments responsible for facilitating the success of the program. Clemson University will adhere to state procurement policies and procedures for any acquisition of goods and services with these funds, if necessary.
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What individuals or entities would receive these funds (contractors, vendors, grantees, individual beneficiaries, etc.)? How would these funds be allocated – using an existing

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formula, through a competitive process, based upon predetermined eligibility criteria?

ACCOUNTABILITY OF FUNDS	<p>The funding request for the Cyber-Physical Security Institute (CPSI) supports the University's enterprise objective for Public Infrastructure and Economic Development. The proposed research infrastructure will build upon existing strengths and leverage the proposed state investment to establish Clemson and the State of South Carolina as the leader in advancing cyber security for critical infrastructure.</p>
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What specific agency objective, as outlined in the agency's accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	<p>Cyber-Physical Security Institute requires a recurring investment from a stable revenue stream and cannot be appropriately planned and maintained with one-time funds, such as grant sources and fund balances.</p>
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

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SUMMARY

In an age of global terrorism, cyber-attacks are a constant threat that pose significant danger to economic vitality and productivity. Successful attacks on electrical and transportation networks can have devastating consequences. In the context of cyberinfrastructure, such assets are known as Cyber-physical systems; these are the devices, machines, planes, trains, cars, and tools linked through wires or wirelessly to do much more work than can be done as a collection of isolated parts. They are rapidly increasing in number, offering a promise for a better future, but also create great risks to safety, security, health, and well-being because they are vulnerable to attack and disruption.

Clemson University is establishing a Cyber-Physical Security Institute (CPSI) that will reduce this vulnerability and thereby protect economic vitality, social stability, and the quality of life in South Carolina and the US. This Cyber-Physical Security Institute leverages and builds upon Clemson’s one-of-a-kind facilities on its main Clemson campus, its state of the art computing center, its laboratories at CUICAR, and its globally unique infrastructure at the Wind Turbine Drivetrain Testing and Duke Energy E-Grid Laboratory in North Charleston. CPSI will focus on making the electric power grid and the motor-vehicle transportation grid safer and more stable. Additional benefits will derive from funded research and development bringing significant economic impact to South Carolina, and new educational opportunities for undergraduate and graduate students in South Carolina colleges and universities. This institute will establish South Carolina as a leader in the development of safe Smart Cities and Smart Grids and substantially enhance the security of the state’s economic infrastructure.

By closely coupling research and training with the real-world critical security concerns of the electric power and automotive industries, CPSI will bring South Carolina to the forefront of research, practice, and workforce development in this vital area. A unique combination of research infrastructure and expertise, supported by both State, Local, Federal, and private corporate investment over the past decade, has positioned Clemson University to take the lead in research on cyber security for electric grid and transportation systems. At Clemson’s Charleston campus, the Duke Energy Electric Grid Research, Innovation, and Development (eGRID) facility and its associated Distributed Automation Lab (DAL) enables capabilities for electric-grid research that exist nowhere else in the world. In Clemson’s Greenville International Center for Automotive Research (ICAR), the CPSI will take advantage of an internationally distinctive automotive research center and experience in vehicular computer systems and intelligent transportation systems. Moreover, Clemson’s leadership in the campus-wide deployment and research use of computer networking provides a key communication infrastructure to support cyber-security research. The proposed Cyber-Physical Systems Institute (CPSI) will build upon these existing strengths and magnify the impact of past State investment. The resulting facilities will provide unique capabilities for research in cyber-physical system security, improving education and workforce development while also providing critical research that will make the state a safer place to work and live.

The proposed research infrastructure will build upon these existing strengths and establish Clemson and the State of South Carolina as the leader in advancing cyber security for energy and transportation infrastructure. Funds will be used to upgrade critical facilities at CURI and CUICAR to increase capabilities in the cyber-security arena.

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eGRID and DAL resources in Charleston, for example, are already much in demand for testing by South Carolina companies such as GE. These funds will add a critical missing component – the ability to simulate cyber-attacks and test the ability of South Carolina electrical grid to withstand attack and recover in the event of an attack.

The proposed funding of \$3,103,820 will be used for a combination of advanced technology and personnel costs. It is anticipated that \$2,067,940 will be required to provide and sustain critical infrastructure, allowing CPSI to stay on the cutting edge of technology. This funding will provide for SDN infrastructure and equipment supporting the three testbeds servers. The remaining \$1,035,880 will be used for support of research scientists and post-docs for each testbed to provide initial implementation of and research support for the new cyber security research capabilities.

Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency’s security or technology plan.

METHOD OF CALCULATION

The \$3,103,820 funding request includes the following:

- Salaries & Fringe Benefits for 6 Research scientists and Post-Docs \$1,035,880
- Critical infrastructure and equipment \$2,067,940

How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT

The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Funding for this initiative will become part of Clemson’s operating base budget in I.A E&G Unrestricted Funds.

Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

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PRIORITIZATION	<p>If the University receives partial funding, this will impede Clemson's ability to execute at a scale that will be impactful throughout the State of South Carolina. Therefore, if partial funds are received, Clemson will take a phased approach to implementing the Cyber-Physical Security Institute.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>Electric and transportation systems are key to the economic vitality, social stability, and the quality of life in the US, and they depend critically on advanced computing and communications for reliable, efficient and safe operation. This makes them vulnerable to attack by cyber-terrorists. By closely coupling research and training with the real critical security concerns of the electric power and automotive industries, the Cyber-Physical Security Institute will bring South Carolina to the forefront of research, practice, and workforce development in this vital area. The resulting facilities will provide unique capabilities for research in cyber-physical system security, allowing industry in South Carolina opportunities to plan for and defend against cyberattack.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The program will be evaluated on an annual basis in the University's Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #3

DECISION PACKAGE	10920
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Product Lifecycle Management (PLM) Center
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Provide a brief, descriptive title for this request.

AMOUNT	\$1,961,520 Recurring State Appropriations
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<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.	

RECIPIENTS OF FUNDS	The majority of funds received for this initiative will be used for positions and operating costs for existing academic departments responsible for facilitating the success of the program. Clemson University will adhere to state procurement policies and procedures for any acquisition of goods and services with these funds, if necessary.
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What individuals or entities would receive these funds (contractors, vendors, grantees,

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individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

ACCOUNTABILITY OF FUNDS	<p>The funding request for the Product Lifecycle Management (PLM) Center supports the University’s enterprise objective for Public Infrastructure and Economic Development. Clemson University is requesting a recurring commitment from the State to allow the PLM Center to accelerate its progress towards the goals of fostering economic development and increasing the competitiveness of South Carolina manufacturers through partnerships with industry leaders such as BMW Manufacturing Company, Boeing Company, General Electric Power, Savannah River National Laboratory, and ZF Transmissions, and building and educating a PLM training workforce throughout the State of South Carolina.</p>
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What specific agency objective, as outlined in the agency’s accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	<p>While external grant funding may be an option for this initiative, the Product Lifecycle Management Center requires a recurring investment from a stable revenue stream and cannot be appropriately planned and maintained with one-time funds, such as grant sources and fund balances.</p>
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

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SUMMARY

Product Life Cycle Management (PLM) is a state of the art system for advanced manufacturing. It allows manufacturers to manage the full product management life cycle from idea to design to market readiness. It allows manufacturers to reduce cost and improve efficiency by integrating all facets of design and manufacturing into one integrated process including costing, supply chain, and logistics. Energy, transportation, and aircraft corporations such as BMW and Boeing are important users of PLM. Widespread use of PLM will enhance the competitiveness of South Carolina industries. However, PLM is also complex with a steep learning curve. Manufacturers and businesses throughout the state are looking for Clemson to provide expertise and training to accelerate their implementation of PLM. As the leading science and technology institution in the state, Clemson is in the best position to lead this effort and produce maximum benefit for state industry and commerce. This relatively moderate investment request of under \$2M will leverage existing faculty expertise at Clemson, unique facilities and computing capabilities as well as significant industry commitments to support the center's mission.

Through collaboration with the world's leading developers of Product Life Cycle Management software and with major manufacturers, Clemson University's PLM center will:

- Build a PLM-trained workforce in South Carolina through
 - 4-year engineering degree programs at Clemson University
 - Collaborations with South Carolina's 16 Technical Colleges
 - Training programs for existing manufacturing employees
- Increase SC manufacturers' bottom line through improved efficiency, control of costs and waste, and enhanced capacity to respond to markets
- Create and apply new advances in PLM through research and development
- Bring new companies to, and grow the existing companies within, South Carolina which will provide a positive impact on the state economy.

World-renown PLM software vendors have committed to donate the software to the Center for education and research. A consortium of manufacturers will help guide the direction of research and education. Potential consortium members with demonstrated interest in the Center include BMW Manufacturing Company, Boeing Company, General Electric Power, Savannah River National Laboratory, and ZF Transmissions. The Center will be strategically located on Clemson University campuses (Clemson, Charleston, and Greenville). Short courses, seminars, and continuing education certificate opportunities will be made available for workforce development through online and classroom delivery methods. Faculty and students will also engage with industry to identify critical research projects that can bring the benefits of PLM to the state.

State support of this initiative will increase outreach to industries, including organizations of all sizes and fields. In particular, the state support will:

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METHOD OF CALCULATION	<ul style="list-style-type: none"> • Allow Clemson to open PLM center at sites across the state, rather than just in the upstate. • Provide direct support to the 16 South Carolina technical colleges and career centers so that PLM can be integrated into technical college programs. • Align with recommendations (forthcoming) from the South Carolina Coordinating Council of Workforce Development to improve manufacturing readiness. • Develop curriculum for campus, workforce development, and on the job training to prepare students, technicians, and professionals in the use and application of PLM tools. • Respond to industry requests to establish a community of PLM practitioners within the State of South Carolina to share best practices and foster continual learning. • Link PLM software vendor(s) more closely to state industries, promoting greater collaboration on education and workforce development. <p>The proposed budget can be divided into Personnel and Other Operating Expenses for the PLM Center. PLM application engineers will support the Center’s education and research activities. Staff will support industry engagement, communicate the benefits of PLM to state industries and businesses and develop training materials, including online courses. Assistant Professors will collaborate with industry on PLM innovations such as using virtual reality and facilitating the integration of PLM with existing, embedded processes.</p> <p>To ensure successful Center operation, funds are requested for equipment to offer on-site training sessions at each of the Clemson University campus sites as well as support the on-line delivery of the training materials. Travel funds will enable outreach to companies throughout the State as well as participation in targeted conferences to disseminate research and education activities. Finally, a small amount is allocated to necessary software fees and licenses as the majority of software will be donated to the Center.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency’s security or technology plan.

METHOD OF CALCULATION	<p>The \$1,961,520 funding request includes the following:</p> <ul style="list-style-type: none"> • Salaries and Fringe Benefits for 8 FTEs and Graduate Students \$622,000 • Equipment, Travel, Software fees \$1,339,520
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

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FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Funding for this initiative will become part of Clemson’s operating base budget in I.A E&G Unrestricted Funds.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

PRIORITIZATION	<p>If Clemson receives partial funding rather than the requested amount, the progress of the PLM Center reaching its goals of allowing greater outreach to industries, including organizations of all sizes and fields, for education, research, and economic opportunities will be delayed.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>Clemson University is requesting a recurring commitment from the State to allow the PLM Center to accelerate its progress towards the goals of fostering economic development and increasing the competitiveness of South Carolina manufacturers through partnerships with industry leaders such as BMW Manufacturing Company, Boeing Company, General Electric Power, Savannah River National Laboratory, and ZF Transmissions, and building and educating a PLM training workforce throughout the State of South Carolina.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The program will be evaluated on an annual basis in the University’s Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #4

DECISION PACKAGE	10923
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Changes to Other Earmarked Funds in I.A E&G Unrestricted and III. Employee Benefits
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Provide a brief, descriptive title for this request.

AMOUNT	\$33,506,140 Increase
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<input checked="" 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"/> NEW REVENUES/GIFTS
	<input checked="" type="checkbox"/> USE OF PRIOR YEAR BALANCES
<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.	

RECIPIENTS OF FUNDS	These earmarked funds will be used to provide instructional salaries and fringe benefits, contractual startup commitments for faculty, investments in labs, classrooms, and other planned maintenance projects and capital investments, continuation of undergraduate creative inquiry programs, and research incentives for faculty. The additional budget
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authorization will provide funding for new FTEs (included in decision package 10935) for positions to support student progress, engagement, success and retention, strategic research areas, life safety and security, academic support, and mission critical systems. The budget increase will also provide funding for the University’s rising mandatory costs, such as employee fringe benefits and Fair Labor Standards Act impacts, property and liability insurance, legal costs, cost of materials, and utility costs. Clemson University will adhere to state procurement policies and procedures for any acquisition of goods and services with these funds.

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?

ACCOUNTABILITY OF FUNDS

This request is for a change to spending authorization for Education and General Other Earmarked Funds which are generated by the University and provide support for all of the University’s objectives in the Accountability Report.

What specific agency objective, as outlined in the agency’s accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS

This request is for a change to spending authorization for Education and General Other Earmarked Funds which are generated by the University.

For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS

N/A

Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

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FUNDING ALTERNATIVES	<p>Clemson University critically evaluates potential funding sources for all programs and initiatives in an effort to ensure the most effective and financially responsible utilization of both University and State resources.</p>
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

SUMMARY	<p>Clemson University is requesting an increase to its spending authority for Other Earmarked Funds based on a projection of E&G Unrestricted revenues and prior year balances. Contributing factors to the increase in the I.A E&G Unrestricted Budget for Other Earmarked Funds include the following:</p> <ul style="list-style-type: none"> • increased enrollment • a projection (based on trend data) of modest increases to student fees, including online, distance education, and summer school programs • the hire of new FTE positions in student success, progress and engagement, strategic research areas, life safety, academic support, and mission critical systems • rising mandatory costs such as employee fringe benefits, cost of living increases or bonuses, potential impacts from federal regulations, property and liability insurance, legal costs, cost of materials, and utility costs • an anticipated use of prior year balances, which include one-time costs associated with the following: <ul style="list-style-type: none"> ○ contractual startup commitments for faculty ○ investments in labs, classrooms and other planned maintenance projects and capital investments ○ continuation of undergraduate creative inquiry programs ○ research incentives for faculty ○ the non-cash impact of the net pension liability “expense” required by GASB 68 <p>This growth supports the University’s strategic priorities:</p> <ul style="list-style-type: none"> • Research: to foster a rich, curiosity-driven intellectual environment; to solve real problems; and to create more opportunities for graduates and alumni • Engagement: to capitalize on existing strengths and opportunities to emphasize high-impact, evidence-based academic and global engagement • Academic Core: create an optimal path for academic programs — both undergraduate and graduate — to achieve national prominence • Living: strengthen the cherished sense of community and connectedness that defines the Clemson Family by creating an environment that is diverse, respectful and inclusive, further enhancing the quality of student life and developing policies, facilities and support systems that will make Clemson a great place to work, study and live
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been

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requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>The increase in E&G revenues was calculated based on trend data for the last four fiscal years, incorporating essential components of the ClemsonForward strategic plan, while considering the reporting of these revenues as prescribed by Generally Accepted Accounting Principles (GAAP). This budget increase will help the University address its rising mandatory costs, such as employee fringe benefits, cost of living increases or bonuses, potential impacts from federal regulations, liability and property insurance, legal expenses, cost of materials, and utility costs. This budget also includes the use of prior year balances, which is based on the anticipated need for one-time costs associated with the following: contractual startup commitments for faculty; investments in labs, classrooms and other planned maintenance projects and capital investments; continuation of undergraduate creative inquiry programs; research incentives for faculty; and the non-cash net pension liability "expense" required by GASB 68.</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Clemson University is requesting an increase to its spending authority in Other Earmarked Funds in both I.A E&G Unrestricted and III. Employee Benefits budget programs to reflect an average growth in revenues and anticipated need to spend prior year balances. Additional spending authority is necessary in order to meet the students' expectations of quality education and services while adequately planning for the University's inflationary costs. Clemson's ability to invest in its students, faculty, facilities and infrastructure as outlined in the ClemsonForward strategic plan while also managing rising mandatory costs such as employee fringe benefits, cost of living increases or bonuses, property and liability insurance, legal expenses, cost of materials, and utility costs will be limited if this authorization is not granted.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

PRIORITIZATION	<p>Clemson University is requesting an increase to its spending authority for the growth in revenues in Other Earmarked Funds that is projected for FY 2017-18. Clemson's ability to invest in its students, faculty, facilities and infrastructure while also managing rising mandatory costs such as employee fringe benefits, cost of living increases or bonuses, property and liability insurance, legal expenses, cost of materials, and utility costs will be limited if this authorization is not granted.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting

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other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>The Education and General Program consists of Clemson’s core activities funded by unrestricted and restricted sources. Academic programming, research, student services and administrative staff directly support Clemson’s tripartite mission of teaching, research and service. The teaching mission prepares an educated, well-rounded workforce trained through innovative programs and by a dedicated faculty. Students typically receive classroom and laboratory instruction, but online instruction is also available. Research and economic development missions provide structure for moving new knowledge from the laboratory to the classroom and to the world. The findings are disseminated through professional papers, presentations, websites, and the registration of intellectual properties. The public service mission provides an interface between faculty, students and the citizens of South Carolina in community-based projects, consultations and publications.</p> <p>This decision package will have the following impacts:</p> <ul style="list-style-type: none"> • Research: to foster a rich, curiosity-driven intellectual environment; to solve real problems; and to create more opportunities for graduates and alumni • Engagement: to capitalize on existing strengths and opportunities to emphasize high-impact, evidence-based academic and global engagement • Academic Core: create an optimal path for academic programs — both undergraduate and graduate — to achieve national prominence • Living: strengthen the cherished sense of community and connectedness that defines the Clemson Family by creating an environment that is diverse, respectful and inclusive, further enhancing the quality of student life and developing policies, facilities and support systems that will make Clemson a great place to work, study and live
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The success of this budget program is evaluated each year by the University in its annual Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #5

DECISION PACKAGE	10926
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Changes to Other Earmarked Funds in II. Auxiliary Enterprises and III. Employee Benefits Budgets
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Provide a brief, descriptive title for this request.

AMOUNT	\$13,666,305 Increase
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<input checked="" 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"/> NEW REVENUES/GIFTS
	<input checked="" type="checkbox"/> USE OF PRIOR YEAR BALANCES
<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.	

RECIPIENTS OF FUNDS	Clemson University will adhere to state procurement policies and procedures for any acquisition of goods and services with these funds.
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What individuals or entities would receive these funds (contractors, vendors, grantees,

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individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

ACCOUNTABILITY OF FUNDS	This request is for a change to spending authorization for Auxiliary Other Earmarked Funds which are generated by the University’s auxiliary enterprises in support of Education, Training, and Human Development.
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What specific agency objective, as outlined in the agency’s accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	This request is for a change to spending authorization for Auxiliary Other Earmarked Funds which are generated by the University.
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	This request is for the use of projected revenue growth and prior year balances in the Auxiliary Enterprises (Housing, Dining, Athletics, IT external contracts, etc.).
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

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SUMMARY	<p>Clemson University is requesting an increase to its Earmarked Other Funds Budget for Auxiliary Enterprises. This growth is attributed to the following: \$8.4M net growth in Athletic revenues for conference distribution, ticket sales, and licensing; \$3.4M growth in Housing and Dining for new residence halls and in Student Health Services; anticipated increase of \$1.9M for investment income; and prior year balances for investments in planned maintenance, capital projects, and equipment. Additional spending authority is necessary to fulfill contractual obligations and to provide students with high quality facilities.</p> <p>The impact of the growth in auxiliary enterprises is anticipated to necessitate the hire of additional FTEs (included in decision package 10935) in Athletics, Housing, Dining, and Student Counseling Services.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>The increase in Auxiliary revenues was mostly calculated based on trend growth, existing revenue contracts, and anticipated growth as a result of additional housing and dining facilities, while considering the reporting of these revenues as prescribed by Generally Accepted Accounting Principles (GAAP). The increase in the use of prior year balances is an estimate based on needs for planned maintenance, capital projects, and equipment.</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Clemson University is requesting an increase to its spending authority for growth in revenues and the additional use of prior year balances in the II. Auxiliary Enterprises Budget for Other Earmarked Funds. This authorization will allow additional investments in planned maintenance, capital projects, and equipment.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

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PRIORITIZATION	<p>Clemson University is requesting an increase to its spending authority for growth in revenues as a result of negotiated revenue contracts and additional capacity, as well as the additional use of prior year balances in the Other Earmarked Funds Budget for Auxiliary Enterprises. Clemson’s capacity to further invest in planned maintenance and capital projects in order to meet the needs of its customers will be limited if the authorization request is not granted.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>Clemson University is requesting an increase to its spending authority for growth in revenues and the additional use of prior year balances in the II. Auxiliary Enterprises Budget for Other Earmarked Funds. These funds will allow Clemson to provide quality services and facilities to students. This authorization will allow additional investments in planned maintenance, capital projects, and equipment.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The success of this budget program is evaluated each year by the University in its annual Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #6

DECISION PACKAGE	10929
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Changes to Federal Restricted Funds in the I.B. E&G Restricted and III. Employee Benefits Budgets
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Provide a brief, descriptive title for this request.

AMOUNT	\$5,323,540 Increase
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<input checked="" 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"/> NEW REVENUES/GIFTS
	<input type="checkbox"/> USE OF PRIOR YEAR BALANCES

Proposed establishment of a new program or initiative.
 Loss of federal or other external financial support for existing program.
 Exhaustion of fund balances previously used to support program.

RECIPIENTS OF FUNDS	This request is for increased spending authority for the impact of Federal grants and contracts.
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What individuals or entities would receive these funds (contractors, vendors, grantees,

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individual beneficiaries, etc.)? How would these funds be allocated – using an existing formula, through a competitive process, based upon predetermined eligibility criteria?

ACCOUNTABILITY OF FUNDS	<p>The change in spending authorization for Federal grants and contracts will allow the University to advance within the Public Infrastructure and Economic Development objective. The University seeks to increase its sponsored program research expenditures in support of this goal, and additional spending authority is crucial to meeting contractual obligations.</p>
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What specific agency objective, as outlined in the agency’s accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	<p>This request is for additional spending authorization for Federal grants and contracts.</p>
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	<p>N/A</p>
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	<p>This request is for increased spending authority for the impact of Federal grants and contracts.</p>
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

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SUMMARY	<p>As a result of anticipated growth in Federally sponsored research, Clemson University is requesting an increase to its Federal Restricted Funds Budget. Faculty have been extremely successful with new awards in this highly competitive environment, following years of negative impact from the Federal sequestration.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>The increase in Federal Restricted revenues was calculated based on growth trends in this category while considering the reporting of these revenues as prescribed by Generally Accepted Accounting Principles (GAAP). This category of revenue includes research programs and activities funded by the Federal Government.</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Clemson University is requesting an increase to its spending authority for the anticipated growth in revenues in Federal Restricted Funds. These funds include Federally funded grants and contracts.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

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PRIORITIZATION	<p>These funds include Federally funded grants and contracts. The University is obligated to fulfill commitments to the Federal Government for sponsored research.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>The change in spending authorization for Federal grants and contracts will allow the University to advance within the Public Infrastructure and Economic Development objective. The University seeks to increase its sponsored program research expenditures in support of this goal, and additional spending authority is crucial.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The success of this budget program is evaluated each year by the University in its annual Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

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FORM B – PROGRAM REVISION REQUEST #7

DECISION PACKAGE	11042 <i>Provide the decision package number issued by the PBF system ("Governor's Request").</i>
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TITLE	Changes to Federal Funds in the I.B. E&G Unrestricted Budgets <i>Provide a brief, descriptive title for this request.</i>
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AMOUNT	\$391,947 Increase <i>What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.</i>
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ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University. <i>What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.</i>
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FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<input checked="" 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"/> NEW REVENUES/GIFTS
	<input type="checkbox"/> USE OF PRIOR YEAR BALANCES

RECIPIENTS OF FUNDS	This request is for increased spending authority for the impact of indirect cost recoveries on Federally sponsored research.
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AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

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?

ACCOUNTABILITY OF FUNDS	The change in spending authorization for indirect cost recoveries from Federally sponsored programs contributes to the University’s advancement within the Public Infrastructure and Economic Development objective.
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What specific agency objective, as outlined in the agency’s accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	This request is for additional spending authorization for indirect cost recoveries from Federally sponsored grants and contracts.
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	This request is for increased spending authority for the indirect cost recoveries received as reimbursement from Federally sponsored grants and contracts.
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

SUMMARY	<p>As a result of anticipated growth in Federally sponsored research, Clemson University is requesting an increase to its Federal Unrestricted Budget for indirect cost recoveries from grants and contracts.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>The increase in Federal Restricted revenues was calculated based on growth trends in this category while considering the reporting of these revenues as prescribed by Generally Accepted Accounting Principles (GAAP). This category of revenue includes indirect cost recoveries on research programs and activities funded by the Federal Government.</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>The state will not incur any maintenance-of-effort or other obligations by adopting this decision package. Clemson University is requesting an increase to its spending authority for the anticipated growth in revenues in Federal Unrestricted Funds. These funds include indirect cost recoveries from Federally funded grants and contracts.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

PRIORITIZATION	<p>These funds include the expenditure of indirect cost recoveries from Federally funded grants and contracts.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>The change in spending authorization for indirect cost recoveries from Federal grants and contracts will contribute to the University’s advancement within the Public Infrastructure and Economic Development objective.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The success of this budget program is evaluated each year by the University in its annual Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

FORM B – PROGRAM REVISION REQUEST #8

DECISION PACKAGE	10932
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Realignment of Existing Other Funds Authorization - \$13,874,598
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Provide a brief, descriptive title for this request.

AMOUNT	Net \$0
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input checked="" type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<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 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.	

RECIPIENTS OF FUNDS	This is a request to realign existing Other Funds budget from I.B E&G Restricted to II. Auxiliary Enterprises. No additional funds are being requested.
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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?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

ACCOUNTABILITY OF FUNDS	N/A
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What specific agency objective, as outlined in the agency's accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	N/A
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

SUMMARY	<p>This decision package reflects a shift of \$13,874,598 from I.B E&G Restricted to II. Auxiliary Enterprises. In order to comply with established governmental accounting standards for related organizations, the IPTAY portion of the budget will be accounted for as gift revenues to Athletics in the Other Earmarked Auxiliary Fund.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	N/A
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>There is no maintenance-of-effort associated with this shift of Other Funds authorization.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

PRIORITIZATION	N/A
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	No impact is intended other than to realign the budget more accurately with actual revenues and expenditures.
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	The program will be evaluated on an annual basis in the University's Accountability Report.
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

FORM B – PROGRAM REVISION REQUEST #9

DECISION PACKAGE	10935
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Clemson University Other Funds FTEs
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Provide a brief, descriptive title for this request.

AMOUNT	\$0 117.00 Other Funds FTEs
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<input type="checkbox"/> Change in cost of providing current services to existing program audience.
	<input checked="" 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 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.	

RECIPIENTS OF FUNDS	This request is for additional Other Funded FTEs in support of the University's new ClemsonForward strategic plan.
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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?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

ACCOUNTABILITY OF FUNDS	<p>This request is for a change to Other Funded FTEs authorization in support of the University's new ClemsonForward strategic plan, which will provide support for all of the University's objectives in the Accountability Report.</p>
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What specific agency objective, as outlined in the agency's accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	N/A
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

SUMMARY

Clemson University is requesting an increase of 117 Other Funded FTEs, primarily as a result of the University’s new ClemsonForward strategic plan and enrollment growth.

The plan calls for increasing capacity to educate students in academic areas where job growth is expected to be very robust or in industries that are critical to the South Carolina economy. Professor FTEs (15) are requested to support the ability of South Carolina students to pursue majors in which job prospects and economic impact are robust. These include all STEM majors, business majors, health and nursing, agriculture, and education. Two of the primary goals of ClemsonForward are to increase freshman to sophomore retention and six year graduation. Student Services Program Coordinators (8) will increase the number of advisors to support student progress, engagement, and success. Some of these advisors will be embedded in the academic colleges but others will be staffed at the Academic Success Center and other student serving outlets on campus. Another primary goal of the ClemsonForward strategic plan is to increase the proportion of underrepresented minority South Carolina students who obtain Clemson degrees. This requires hiring three (3) new recruiters who will focus specifically on outreach to underrepresented South Carolina students and their parents and who will engage with local schools to build relationships and identify high talent students who can benefit from a Clemson education. The Clemson University Restoration Institute (CURI) in Charleston has a need for five (5) scientists to support both e-grid and wind turbine drive train testing, since the volume of both industry and research need for services has grown. The Watt Family Innovation Center requires four (4) positions to significantly and directly contribute to creating, sustaining, and deploying a technology-rich learning environment for students. Academic Affairs plans to hire two (2) analysts to support comprehensive and ongoing reviews of all graduate programs.

Enrollment growth over the past five years has put significant pressure on departments to serve student needs and maintain our very high four and six year graduate rates. Lecturers (22) will be placed in academic departments throughout the campus where enrollment growth has increased significantly and where student/teacher ratios exceed 30:1. One of the most important predictors of student retention and graduation is the number of faculty who are available to work with students. Maintaining student/teach ratios is critical to Clemson's ability to serve the students of South Carolina. These positions will directly support student success.

The ClemsonForward plan has placed emphasis on improvements to life safety and security for its students. This FTE request includes seven (7) FTEs for law enforcement, fire safety, and card access control. Other areas within Student Affairs are expecting to hire 14 FTEs for residential living, campus activities and events, fraternity and sorority life, advocacy and success, and career assistance.

The Facilities Division anticipates a need of 12 FTEs for multi-skilled tradesmen, HVAC technicians, project managers for capital projects, and space management as a result of significant growth on campus. The Research Division anticipates a need of four (4) FTEs for oversight of the University Conflict of Interest program, assistance with implementing strategic research initiatives in the areas of science and technology, research safety and compliance to ensure implementation of research according to

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

	<p>federal and state regulations and laws, and grant administration for CU/GHS Research Collaboration.</p> <p>Athletics anticipates hiring three (3) athletic administrator positions to direct men’s and women’s soccer operations and golf operations. Various positions (18) are needed within administration for risk management operations, inclusion and equity programs, access and equity training, Emerging Scholars program, centralizing payroll operations, fundraising, and the Madren Conference Center.</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency’s security or technology plan.

METHOD OF CALCULATION	<p>Although Clemson has approximately 250 vacancies, the University has more than 125 positions currently being recruited or in the process of being filled. This leaves Clemson with only 3% of its total FTE authorization available for new positions. As student enrollment grows, more faculty and staff are necessary to provide quality services to students.</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>There is no maintenance-of-effort associated with this request of additional Other Funded FTEs. Although Clemson has approximately 250 vacancies, the University has more than 125 positions currently being recruited or in the process of being filled. This leaves Clemson with only 3% of its total FTE authorization available for new positions. As student enrollment grows, more faculty and staff are necessary to provide services to students. The University’s commitment to the ClemsonForward strategic plan will be compromised if sufficient FTE resources are not granted.</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

AGENCY NAME:	Clemson University		
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PRIORITIZATION	<p>This request is for additional FTEs necessary for the University to meet its obligations to students for educational instruction, academic advising, career guidance, life safety and security, recreation and activities, well-maintained facilities, and research initiatives. The inability to provide adequate faculty and staff resources to our students will compromise our commitment to providing a high quality education.</p>
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	<p>Additional FTEs will allow the University to meet its obligations to students for educational instruction, academic advising, career guidance, life safety and security, recreation and activities, well-maintained facilities, and research initiatives. The inability to provide adequate faculty and staff resources to our students will compromise our commitment to providing a high quality education.</p>
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	<p>The programs associated with these additional FTEs will be evaluated on an annual basis in the University's Accountability Report.</p>
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

FORM B – PROGRAM REVISION REQUEST #10

DECISION PACKAGE	10938
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	State Appropriations – 3.25% Base Pay Increase, Health & Dental Insurance Increase, 0.5% Retirement Rate Allocation in FY2017
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Provide a brief, descriptive title for this request.

AMOUNT	\$2,739,310 Increase
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What is the net change in requested appropriations for FY 2017-18? This amount should correspond to the decision package's total in PBF across all funding sources.

ENABLING AUTHORITY	Section 59-119-20 of the SC Code of Laws authorized the establishment of Clemson University in accordance with the will of Thomas Green Clemson. Section 59-119-40 of the SC Code of Laws established the Board of Trustees for Clemson University and its authority over the University.
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What specific state or federal statutory, regulatory, and/or administrative authority established this program? Is this decision package prompted by the establishment of or a revision to that authority? Please avoid citing general provisions of law where possible, and instead cite to the most specific legal authority supporting the request.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input checked="" type="checkbox"/> (Base Adjustment) Allocation of statewide employee benefits.
	<input type="checkbox"/> (Base Adjustment) Realignment within existing programs and lines.
	<input type="checkbox"/> (Base Adjustment) Restructuring of agency programs – <i>requires pre-approval.</i>
	<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, Decision Package # _____
	<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 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.	

RECIPIENTS OF FUNDS	These earmarked funds will be used to provide instructional health and dental insurance and retirement benefits for faculty, as well as cost of living increases.
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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?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

ACCOUNTABILITY OF FUNDS	N/A
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What specific agency objective, as outlined in the agency's accountability report, does this funding request support? How would this request advance that objective?

POTENTIAL OFFSETS	N/A
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For decision packages that request non-mandatory funding increases to programs or initiatives, please identify a potential offset within an existing lower priority or ineffective program(s).

MATCHING FUNDS	N/A
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source, amount, and terms of the match requirement.

FUNDING ALTERNATIVES	N/A
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What other possible funding sources were considered? Could this request be met in whole or in part with the use of other resources, including fund balances? If so, please comment on the sustainability of such an approach.

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

SUMMARY	<p>Allocation for 3.25% Base Pay Increase, Health & Dental Insurance Increase, 0.5% Retirement Rate Allocation</p>
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Using as much detail as necessary to make an informed decision regarding this request, provide a summary of the rationale for the decision package. Why has it been requested? How specifically would the requested funds be used? If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

METHOD OF CALCULATION	<p>N/A</p>
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How was the amount of the request calculated? List the per unit or per FTE costs of implementation. What factors could cause deviations between the request and the amount that could ultimately be required in order to perform the underlying work?

FUTURE IMPACT	<p>N/A</p>
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Will the state incur any maintenance-of-effort or other obligations by adopting this decision package? What impact will there be on future capital and/or operating budgets if this request is or is not honored? Has a source of any such funds been identified and/or obtained by your agency?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

PRIORITIZATION	N/A
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If no or insufficient new funds are available in order to meet this need, how would the agency prefer to proceed? By using fund balances, generating new revenue, cutting other programs, or deferring action on this request in FY 2017-18? Please be specific.

INTENDED IMPACT	N/A
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What impact is this decision package intended to have on service delivery and program outcomes, and over what period of time?

PROGRAM EVALUATION	N/A
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How would the use of these funds be evaluated? What specific outcome or performance measures would be used to assess the effectiveness of this program?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #1

DECISION PACKAGE	11394
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Critical Investment in South Carolina's Advanced Materials Industrial Competitiveness
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Provide a brief, descriptive title for this request.

AMOUNT	\$5,000,000 Non-Recurring Request
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How much is requested for this project in FY 2017-18?

BUDGET PROGRAM	I.A E&G Unrestricted
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Identify the associated budget program(s) by name and budget section.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Recurring request – If so, Decision Package # _____
	<input type="checkbox"/> Capital Request
	<input type="checkbox"/> Included in CPIP – If so, CPIP Priority # _____
	<input checked="" type="checkbox"/> Non-recurring request for funding
<input type="checkbox"/> Non-recurring request for authorization to spend existing cash/revenue	

SUMMARY	<p>Companies developing advanced materials comprise a major sector of South Carolina's current economy. The continual development and improvement of advanced materials (e.g., biological implants, lightweight materials-including structural components produced from carbon fiber/composites and polymers, and solid phases for nuclear waste storage) drives technological and manufacturing innovation across industries from automotive to textiles. This amplifies across the state's economy and improves South Carolina's competitive position in a global economy. Maintaining advanced materials as a significant aspect of South Carolina's economy requires public/private research relationships that maintain the pace of cutting edge research and rapid translation into the manufacturing lifecycle. As the leading science and technology institution in the state, with robust and mature advanced materials research faculty, Clemson University is an important hub of this economic sector. To sustain its competitiveness and to nurture the next generation of industrial advanced materials, Clemson University requests funds to invest in three state-of-the-art advanced materials instruments to perform cutting edge research and technology development for the benefit of industries and employers in South Carolina:</p> <p>a. <u>Scanning X-ray photoelectron spectroscopy (XPS) microprobe [\$1,350,000]</u> allows analyzing surface layers or thin film structures, which is important for many industrial and research applications including: nanomaterials, photovoltaics, catalysis, corrosion, adhesion, electronic devices and packaging,</p>
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magnetic media, display technology, surface treatments, and thin film coatings used for numerous applications.

- b. LEAP 500 Atom Probe Tomography (APT) [\$3,500,000] is a cutting-edge atom probe microscope, and the only material analysis technique offering extensive capabilities for both 3D imaging and chemical composition measurements at the atomic scale offering superior detection efficiency across a wide variety of metals, semiconductors and insulators.
- c. 1000-ton high-pressure resin transfer molding (HP-RTM) machine with an injection-molding plasticizer [\$3,000,000] is designed to enable work on entire spectrum of composites, namely, thermoplastics and thermosets. Such integration helps to produce hybrid new products and components, and it also allows scale-up from research solutions to production style prototypes and industry trials.

An industry survey and market assessment recently conducted by Clemson confirmed industry demand for this equipment. Prominent corporations with a significant presence in South Carolina, BMW Manufacturing Co., Sage Automotive, Michelin, Kraus-Meffani, and Toho-Tenax, have indicated a strong interest in access to this equipment. The equipment is relevant to a large number of South Carolina industries ranging from agriculture (soil analysis) to textiles (new fibers) to environmental sustainability (clean up of toxic rivers and lakes). None of the nearby public universities in the southeast appear to have these capabilities yet. These state-of-the-art research instruments will revolutionize existing education, research and development activities in the entire southeast region while substantially contributing to the economic development of state of SC. Although these instruments would require an \$7.85 M, we specifically request \$5M to bring this much-desired equipment to Clemson University. The remaining cost will be covered through raising funds from the industry, federal funding agencies through existing faculty project contracts and through regional universities using a capital campaign. We will also aggressively seek the equipment manufacturer's educational and all other available discounts to cover the gap. These capabilities will have open access by industry members, majority of regional colleges, government research organizations, public and private universities throughout the Southeast.

These instruments will be housed at Clemson University's Advanced Materials Research Laboratory in Anderson SC which has housed a multi-user shared scientific instrumentation electron microscopy (EM) for over 10 years. The EM facility currently has nine electron microscopes and other major scientific instrumentation worth more than \$15M. It has received robust state and industry support in the past and these new acquisitions will increase the impact of that past support. This specially constructed facility is ideally suited for housing the requested state-of-the-art-equipment and has staff well qualified to support both industry and academic uses. The facility offers open access to all researchers including those from regional colleges, universities, government research organizations and industry members throughout state of South Carolina. Such advanced instrument acquisition will help sustain South Carolina's leadership position in the area of advanced materials. Similar to the other

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instrumentation housed at the EM facility, instrumentation usage fees from internal and external users will be collected to cover some of the operational expenses of the proposed equipment.

These capabilities will also strongly aid in education and outreach activities to regional and predominantly undergraduate and underrepresented institutions. We will leverage existing ties with industry in the region to ensure their members benefit from these capabilities, developing products which lead to economic development and new job creation in our region.

Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

CLASSIFICATION OF FUNDS

This request is in support of non-recurring expenditures as a result of advanced materials equipment purchases.

Is this request in support of a capital project or is it in support of other non-recurring expenditures? If this request is for a capital project, is it included in the agency's CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS

The remaining cost will be covered through raising funds from the industry, federal funding agencies through existing faculty project contracts and through regional universities using a capital campaign. We will also aggressively seek the equipment manufacturer's educational and all other available discounts to cover the gap.

Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES

Clemson University critically evaluates potential funding sources for all non-recurring and capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.

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What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY	<p>The non-recurring request for advanced materials instruments is for \$5 million of the total anticipated cost of \$7.85 million. The remaining cost will be recovered through raising funds from the industry, federal funding agencies through existing faculty project contracts and through regional universities using a capital campaign. We will also aggressively seek the equipment manufacturer’s educational and all other available discounts to cover the gap.</p>
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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?

OTHER APPROVALS	<p>State procurement policies will be followed during the purchase of the advanced scientific instruments.</p>
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)

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FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #2

DECISION PACKAGE	11397 <i>Provide the decision package number issued by the PBF system ("Governor's Request").</i>
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TITLE	Business and Behavioral Science Building <i>Provide a brief, descriptive title for this request.</i>
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AMOUNT	\$25,000,000 <i>How much is requested for this project in FY 2017-18?</i>
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BUDGET PROGRAM	I.A E&G Unrestricted <i>Identify the associated budget program(s) by name and budget section.</i>
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FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Recurring request – If so, Decision Package # _____
	<input checked="" type="checkbox"/> Capital Request
	<input checked="" type="checkbox"/> Included in CPIP – If so, CPIP Priority # 1 (Year 1)
	<input type="checkbox"/> Non-recurring request for funding
<input type="checkbox"/> Non-recurring request for authorization to spend existing cash/revenue	

SUMMARY	<p>The College of Business and Behavioral Sciences (CBBS) is currently housed in Sirriner Hall, built in 1938 with funds received from the Federal Works Progress Administration stimulus package during Franklin Delano Roosevelt's presidency. Clemson University's current student enrollment is ten times the enrollment in 1938. College and academic offices have outgrown the existing space. Sirriner Hall has not had a significant renovation in over 35 years. It does not have adequate infrastructure or proper spaces to support teaching and research in the 21st century. The proposed new facility will accommodate increasing enrollment, reduction in class sizes and development of new programs to support the CBBS mission.</p> <p>A floor-by-floor, phased renovation of Sirriner Hall was strongly considered, but deemed impractical and financially burdensome. A phased renovation would take multiple years to complete, would create long-term disruptions to academic activity, and would dramatically increase construction costs.</p> <p>The proposed facility totaling 180,000 gross square feet will primarily house instructional space, offices, and specialized teaching and research laboratories to support disciplines within the College of Business and Behavioral Sciences. Sirriner Hall, a 168,000 square foot building that was constructed in 1938, is one of the largest academic buildings on campus currently serving both the College of Business and Behavioral Sciences (CBBS) and the College of Engineering and Science. The building is in</p>
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need of a major renovation to provide adequate basic services. This new facility will house and consolidate most undergraduate CBBS programs, which will create much-needed swing space for other renovations across campus and allow for Sistine Hall to undergo intense renovation for future repurposing. Separating CBBS instruction from Engineering and Science research labs will also significantly improve life safety for students and faculty.

The proposed building will create an enhanced interface between academics and industry while accommodating current and future growth, providing flexibility and adapting to technological advances. This facility will also serve as the interface between the business community and Clemson University students and faculty.

Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

CLASSIFICATION OF FUNDS

This request is for a capital project which was included in the latest Clemson University Comprehensive Permanent Improvement Plan identified in Year 1, priority 1 and is therefore the highest priority capital funding request. This project was also in the University's CPIP in 2013, 2014, and 2015 and is essential to Clemson's capital strategy and the Building Futures initiative within the Clemson Forward strategic plan. It will provide much needed square footage to offset a 14% decrease in E&G square footage per headcount since 2005 and will enable the University to use Sistine Hall for swing space. There is currently no swing space on campus, which makes renovations difficult and very disruptive to students.

Is this request in support of a capital project or is it in support of other non-recurring expenditures? If this request is for a capital project, is it included in the agency's CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS

Multiple sources, such as private gifts and institutional funds, will be utilized to fund this project.

Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES

Clemson University critically evaluates potential funding sources for all capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.

What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY

The University conducts thorough long-term planning before pursuing capital projects. The sustainability of the University's plans and approach is evident in the fact that the University spent more than \$58 million on institutional facility repair and renewal projects and \$29.5 million on routine preventative maintenance in 2015.

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	<p>To date, the University has invested \$175,000 for the feasibility study for this project and \$317,000 on preliminary design and engineering. No additional capital or operating funds will be requested for this project. The University will fund the building's operations and maintenance with its existing budget and the source of these funds has been identified.</p>
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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?

OTHER APPROVALS	<p>Concept approval from the Clemson Board of Trustees and Phase 1 approval has been obtained from CHE, JBRC and SFAA. Clemson will continue to fully follow normal capital approval processes for this project.</p>
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)

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FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #3

DECISION PACKAGE	11400
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Advanced Materials Science Complex Building
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Provide a brief, descriptive title for this request.

AMOUNT	\$25,000,000
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How much is requested for this project in FY 2017-18?

BUDGET PROGRAM	I.A E&G Unrestricted
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Identify the associated budget program(s) by name and budget section.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Recurring request – If so, Decision Package # _____
	<input checked="" type="checkbox"/> Capital Request
	<input checked="" type="checkbox"/> Included in CPIP – If so, CIIP Priority # 1 (Year 2)
	<input type="checkbox"/> Non-recurring request for funding
<input type="checkbox"/> Non-recurring request for authorization to spend existing cash/revenue	

SUMMARY	<p>The Advanced Materials Science Complex will provide a state-of-the-art facility for collaborative research and teaching for the Departments of Materials Science and Engineering (MS&E), Chemical and Bio-Molecular Engineering, and Chemistry. The facility will also provide a new home for the MS&E Department. The approximately 210,000 square foot facility will include classrooms, shared wet and dry labs, shared collaborative spaces, conference and seminar rooms, and offices. It will be used by the three departments for research and teaching, as well as by other campus programs and industry partners.</p> <p>The buildings housing these three departments have facilities that are antiquated and require frequent maintenance. They were built between the 1930's and 1980's and no longer meet the instructional, technology and mechanical needs expected of today's state of the art laboratories and classrooms. The new facility will replace outdated lab spaces and provide additional labs and teaching areas for the programs. It will maximize resources through shared core laboratories and collaboration spaces, which create synergies between science and engineering that will increase research competitiveness. It will also multiply the unique strengths of each discipline, enabling breakthrough discoveries that occur where science and engineering converge. Further, the facility will facilitate the acceleration of increased grant funding and economic development with industry partners through public/private partnerships.</p>
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The facility will consolidate a geographically dispersed MS&E Department in one location, including the program’s labs and classrooms, faculty and graduate offices, and administrative offices. Research and education in advanced materials will facilitate the discovery of more sustainable energy resources, the design and development of more effective transportation systems, the restoration and protection of our natural environment, and the promotion of health in our communities. This new facility is integral to continue Clemson’s 2020 Vision as one of the nation’s top-20 public universities and deliver on Research focus of the Clemson Forward strategic plan.

Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency’s security or technology plan.

CLASSIFICATION OF FUNDS

This request is for a capital project which was included in the latest Clemson University Comprehensive Permanent Improvement Plan, identified in Year 2, priority 1 and is the 2nd highest priority capital funding request. Departments are currently dispersed in multiple buildings, including SIRRINE Hall mentioned above, and current space limits research and in some cases lacks critical infrastructure such as appropriate HVAC and fume hoods. This impairs Clemson’s ability to compete for research activity and fulfill its mission. This facility will allow the University to fully vacate SIRRINE Hall

Is this request in support of a capital project or is it in support of other non-recurring expenditures? If this request is for a capital project, is it included in the agency’s CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS

Multiple sources, such as private gifts and institutional funds, will be utilized to fund this project.

Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES

Clemson University critically evaluates potential funding sources for all capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.

What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY

The University conducts thorough long-term planning before pursuing capital projects. The sustainability of the University’s plans and approach is evident in the fact that the University spent more than \$58 million on institutional facility repair and renewal projects and \$29.5 million on routine preventative maintenance in 2015.

To date, the University has invested \$179,000 for the feasibility study for this project. No additional capital or operating funds will be requested for this project. The University will fund the building’s operations and maintenance with its existing budget

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	and the source of these funds has been identified.
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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?

OTHER APPROVALS	No approvals have yet been secured on the project, through the Board of Trustees, CHE, JBRC or SFAA. Clemson will fully follow normal capital approval processes for this project.
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)

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FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #4

DECISION PACKAGE	10905 <i>Provide the decision package number issued by the PBF system ("Governor's Request").</i>
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TITLE	Martin Hall Renovation <i>Provide a brief, descriptive title for this request.</i>
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AMOUNT	\$15,000,000 <i>How much is requested for this project in FY 2017-18?</i>
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BUDGET PROGRAM	I.A E&G Unrestricted <i>Identify the associated budget program(s) by name and budget section.</i>
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FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Recurring request – If so, Decision Package # _____
	<input checked="" type="checkbox"/> Capital Request
	<input checked="" type="checkbox"/> Included in CPIP – If so, CPIP Priority # 2, Year 3
	<input type="checkbox"/> Non-recurring request for funding
<input type="checkbox"/> Non-recurring request for authorization to spend existing cash/revenue	

SUMMARY	<p>Built in 1962, this 90,000 square foot central academic building is in need of an HVAC and complete window replacement.</p> <p>The HVAC system is original to the building, is over 50 years old and past its useful life, with most of the system exceeding its useful life by over 20 years. The system has numerous deficiencies resulting in inconsistent temperature controls, poor humidity control and indoor air quality issues. The windows are single-glaze operable windows which do not work well and are not energy efficient.</p> <p><i>Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.</i></p>
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CLASSIFICATION OF FUNDS	<p>This request is for a capital project which was included in the latest Clemson University Comprehensive Permanent Improvement Plan, identified in Year 3, priority 2 and is the 4th highest priority capital funding request. This project was also included in the University's 2014 CPIP.</p> <p>This renovation project dovetails well with the strategic importance of the first two capital priorities. Those projects will create much-needed additional square footage whereas this project will renovate a critical existing asset. This project is of high importance towards Clemson's capital strategy of maintaining and improving existing</p>
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assets for future use and will enable Clemson to continue using a keystone building centrally located on campus.

Is this request in support of a capital project or is it in support of other non-recurring expenditures? If this request is for a capital project, is it included in the agency's CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS Multiple sources, such as private gifts and institutional funds, will be utilized to fund this project.

Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES Clemson University critically evaluates potential funding sources for all capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.

What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY The University conducts thorough long-term planning before pursuing capital projects. The sustainability of the University's plans and approach is evident in the fact that the University spent more than \$58 million on institutional facility repair and renewal projects and \$29.5 million on routine preventative maintenance in 2015.

To date, the University has invested \$20,000 for the study for this project. No additional capital or operating funds will be requested for this project. The University will fund the building's operations and maintenance with its existing budget and the source of these funds has been identified.

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?

OTHER APPROVALS No approvals have yet been secured on the project, through the Board of Trustees, CHE, JBRC or SFAA. Clemson will fully follow normal capital approval processes for this project.

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

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FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #5

DECISION PACKAGE	10908 <i>Provide the decision package number issued by the PBF system ("Governor's Request").</i>
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TITLE	Long Hall Renovation <i>Provide a brief, descriptive title for this request.</i>
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AMOUNT	\$14,000,000 <i>How much is requested for this project in FY 2017-18?</i>
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BUDGET PROGRAM	I.A E&G Unrestricted <i>Identify the associated budget program(s) by name and budget section.</i>
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FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:
	<input type="checkbox"/> IT Technology/Security related
	<input type="checkbox"/> Consulted DTO during development
	<input type="checkbox"/> Related to a Recurring request – If so, Decision Package # _____
	<input checked="" type="checkbox"/> Capital Request
	<input checked="" type="checkbox"/> Included in CPIP – If so, CPIP Priority # 3, Year 3
	<input type="checkbox"/> Non-recurring request for funding
<input type="checkbox"/> Non-recurring request for authorization to spend existing cash/revenue	

SUMMARY	<p>Built in 1937, this 71,000 square foot centrally located academic building, which has never been renovated, will receive a substantial renovation. The envelope of the building will be renovated including tuck pointing the brick and replacing roof sheathing and tiles, a complete HVAC renovation as well as plumbing and electrical system replacements. Upgrades to the interior spaces will also be made to extend the useful life of the building by 30-40 years.</p> <p><i>Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.</i></p>
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CLASSIFICATION OF FUNDS	<p>This request is for a capital project which was included in the latest Clemson University Comprehensive Permanent Improvement Plan, identified in Year 3, priority 3 and is the 5th highest priority capital funding request.</p> <p>This renovation project dovetails well with the strategic importance of the first two capital priorities. Those projects will create much-needed additional square footage whereas this project will renovate a critical existing asset. This project is of high importance towards Clemson's capital strategy of maintaining and improving existing assets for future use and will enable Clemson to continue using a keystone building centrally located on campus.</p> <p><i>Is this request in support of a capital project or is it in support of other non-recurring</i></p>
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expenditures? If this request is for a capital project, is it included in the agency's CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS	Multiple sources, such as private gifts and institutional funds, will be utilized to fund this project.
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

FUNDING ALTERNATIVES	Clemson University critically evaluates potential funding sources for all capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.
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What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY	<p>The University conducts thorough long-term planning before pursuing capital projects. The sustainability of the University's plans and approach is evident in the fact that the University spent more than \$58 million on institutional facility repair and renewal projects and \$29.5 million on routine preventative maintenance in 2015.</p> <p>To date, the University has invested \$34,000 for the study for this project. No additional capital or operating funds will be requested for this project. The University will fund the building's operations and maintenance with its existing budget and the source of these funds has been identified.</p>
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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?

OTHER APPROVALS	No approvals have yet been secured on the project, through the Board of Trustees, CHE, JBRC or SFAA. Clemson will fully follow normal capital approval processes for this project.
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)

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FORM C – CAPITAL OR NON-RECURRING APPROPRIATION REQUEST #6

DECISION PACKAGE	10911
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Daniel Hall Renovation
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Provide a brief, descriptive title for this request.

AMOUNT	\$10,500,000
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How much is requested for this project in FY 2017-18?

BUDGET PROGRAM	I.A E&G Unrestricted
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Identify the associated budget program(s) by name and budget section.

FACTORS ASSOCIATED WITH THE REQUEST	Mark "X" for all that apply:	
	<input type="checkbox"/>	IT Technology/Security related
	<input type="checkbox"/>	Consulted DTO during development
	<input type="checkbox"/>	Related to a Recurring request – If so, Decision Package # _____
	<input checked="" type="checkbox"/>	Capital Request
	<input checked="" type="checkbox"/>	Included in CPIP – If so, CPIP Priority # 4 (Year 3)
	<input type="checkbox"/>	Non-recurring request for funding
<input type="checkbox"/>	Non-recurring request for authorization to spend existing cash/revenue	

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SUMMARY	<p>Daniel Hall is the principal classroom building for Clemson students, housing classes for students from every discipline. Constructed in 1969, it has had minimal renovations or improvements since that time. The building is therefore in poor condition and is not able to support new contemporary teaching and learning methods. A feasibility study scored the existing building poorly for physical condition, average sq. ft. per student station, technology, and user opinion with Daniel being one of two least popular buildings on campus for students and faculty.</p> <p>The building assessment conducted recommended immediate improvements to include gut renovating the building systems and interior finishes. The scope of the work envisioned with this request includes HVAC upgrades, improving accessibility by renovation bathrooms and exterior doors), auditorium renovation and repainting of classroom walls.</p>
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Provide a summary of the project and explain why it is necessary. If the request is related to information security or information technology, explain its relationship to the agency's security or technology plan.

CLASSIFICATION OF FUNDS	<p>This request is for a capital project which was included in the latest Clemson University Comprehensive Permanent Improvement Plan, identified in Year 3, priority 4 and is the 3rd highest priority capital funding request. This project was also included in the University's 2014 and 2015 CPIPs.</p> <p>This renovation project dovetails well with the strategic importance of the first two capital priorities. Those projects will create much-needed additional square footage whereas this project will renovate a critical existing asset. This project is of high importance towards Clemson's capital strategy of maintaining and improving existing assets for future use and will enable Clemson to continue using a keystone building centrally located on campus.</p>
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Is this request in support of a capital project or is it in support of other non-recurring expenditures? If this request is for a capital project, is it included in the agency's CPIP (please include CPIP year and priority)? How does this project rank in priority to all other nonrecurring agency requests?

MATCHING FUNDS	<p>Multiple sources, such as private gifts and institutional funds, will be utilized to fund this project.</p>
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Would these funds be matched by federal, institutional, philanthropic, or other resources? If so, identify the source and amount.

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FUNDING ALTERNATIVES	<p>Clemson University critically evaluates potential funding sources for all capital projects in an effort to ensure the most effective and financially responsible utilization of both University and State resources.</p>
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What other possible funding sources were considered?

LONG-TERM PLANNING AND SUSTAINABILITY	<p>The University conducts thorough long-term planning before pursuing capital projects. The sustainability of the University’s plans and approach is evident in the fact that the University spent more than \$58 million on institutional facility repair and renewal projects and \$29.5 million on routine preventative maintenance in 2015.</p> <p>To date, The University has invested \$90,300 for the feasibility study for the project. No additional capital or operating funds will be requested for this project. The University will fund the building’s operations and maintenance with its existing budget and the source of these funds has been identified.</p>
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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?

OTHER APPROVALS	<p>No approvals have yet been secured on the project, through the Board of Trustees, CHE, JBRC or SFAA. Clemson will fully follow normal capital approval processes for this project.</p>
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What approvals have already been obtained? Are there additional approvals that must be secured in order for the project to succeed? (Institutional board, JBRC, BCB, etc.)

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FORM E – 3% GENERAL FUND REDUCTION

DECISION PACKAGE	11149
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Provide the decision package number issued by the PBF system ("Governor's Request").

TITLE	Agency General Fund Reduction Analysis
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Provide a brief, descriptive title for this request.

AMOUNT	-\$2,400,934
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What is the General Fund reduction amount (minimum based on the FY 2016-17 recurring appropriations)? This amount should correspond to the decision package's total in PBF.

METHOD OF CALCULATION	<p>The general fund reduction amount was calculated by the Executive Budget Office as 3% of Clemson's FY 2016-17 Revised Base General Fund Appropriations (\$80,031,127).</p> <p>Since it will take some time to evaluate appropriate options for this reduction, such as early retirement and voluntary separation plans, the decision package will reflect a decrease to the Other Operating Expenses category within the I.A Unrestricted E&G budget.</p>
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Describe the method of calculation for determining the reduction in General Funds.

ASSOCIATED FTE REDUCTIONS	N/A
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How many FTEs would be reduced in association with this General Fund reduction?

PROGRAM/ACTIVITY IMPACT	<p>Clemson University's General Funds Appropriations primarily support Education and General instructional activity, preparing undergraduate and graduate students with the knowledge and skills that they need to complete their degrees and prepare for life-long learning. This program includes funding for student internships, academic advising and support. Economic development and research activities are also supported by General Funds Appropriations, such as the Center for Energy Systems, Clemson Center for Human Genetics, and Clemson University International Center for Automotive Research (CUICAR).</p>
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What programs or activities are supported by the General Funds identified?

AGENCY NAME:	Clemson University		
AGENCY CODE:	H120	SECTION:	14

SUMMARY	<p>While elimination of positions is generally not the preferred solution, a reduction in general funds of this magnitude would force Clemson to consider reductions in the positions funded by general funds. Clemson would work with the state to attempt to implement early retirement programs and other voluntary separation alternatives to minimize the negative impact to individuals or families. At the same time, the University will continue its efforts to aggressively develop alternative revenue sources, expand partnerships with industry and the private sector for funding, and to continue its successful and longstanding work to be as lean as possible and reduce operating costs per unit of output.</p> <p>Since it will take some time to evaluate options, such as early retirement and voluntary separation plans, for reduction in state appropriations, the decision package will reflect a decrease to the Other Operating Expenses category within the I.A Unrestricted E&G budget.</p>
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Please provide a detailed summary of service delivery impact caused by a reduction in General Fund Appropriations.