VIRGINIA TECH 2018-19 CAPITAL OUTLAY PROJECT AUTHORIZATIONS as of May 31, 2018

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⁽¹⁾ This report includes expenses as of May 31, 2018. Thus, the estimated expenses for FY2019, and the current balance on June 30, 2018, may vary slightly depending on the level of expenses recorded during June 2018.

GENERAL FUND APPROPRIATION CAPITAL PROJECTS FOR FISCAL YEAR 2019

(Dollars in Thousands)

as of May 31, 2018

	TOTAL PROJECT AUTHORIZATION							
General Fund Appropriation Projects	STATE SUPPORT	NONGENERA FUND	L AGENCY DEBT	TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2017	ESTIMATED BALANCE AVAILABLE FOR FY2018	ESTIMATED ANNUAL BUDGET FY2018	ESTIMATED BALANCE AT CLOSE OF FY2018
Decision Phase								
Design Phase Improve Kentland Facilities Agriculture Production Facilities Chiller Plant Phase II Holden Hall Renovation Planning: Undergraduate Science Laboratory Building	\$ 9,363 22,136 31,024 44,386	\$ - - - - 3,084	\$ - - 9,797 17,500	\$ 9,363 22,136 40,821 61,886 3,084	\$ 1,125 406 1,687 2,400 1,000	\$ 8,238 21,730 39,134 59,486 2,084	\$ 5,000 1,800 4,200 3,000 1,400	\$ 3,238 19,930 34,934 56,486 684
Construction Phase								
Maintenance Reserve	15,530	-	-	15,530	-	15,530	12,000	3,530
Academic Buildings Renewal	35,029	-	-	35,029	22,600	12,429	11,000	1,429
Health Sciences & Technology	51,554	-	40,142	91,696	10,200	81,496	33,000	48,496
Close-Out Fire Alarm Systems and Access	4,891	-	-	4,891	3,380	1,511	1,511	0
Total General Fund Appropriaion Projects	\$213,913	\$3,084	\$67,439	\$284,436	\$42,798	\$241,638	\$72,911	\$168,727

NONGENERAL FUND AUTHORIZATION CAPITAL PROJECTS FOR FISCAL YEAR 2019

(Dollars in Thousands)

as of May 31, 2018

	TOTAL PROJECT BUDGET AUTHORIZATION							
Nongeneral Fund Authorization Projects	STATE SUPPORT	NONGENERAL FUND	AGENCY DEBT	TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2017	ESTIMATED BALANCE AVAILABLE FOR FY2018	ESTIMATED ANNUAL BUDGET FY2018	ESTIMATED BALANCE AT CLOSE OF FY2018
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Design Phase								
Student Wellness Improvements	\$ -	\$ 6,010	\$ 56,990	\$ 63,000	\$ 2,785	\$ 60,215	\$ 5,000	\$ 55,215
Creativity & Innovation District Residence Hall	-	-	26,818	26,818	1,500	25,318	3,000	22,318
Gas-Fired Boiler at the Central Steam Plant	-	6,800	-	6,800	100	6,700	3,500	3,200
Planning: Intelligent Infrastructure and Construction Compl	€ -	6,000	-	6,000	480	5,520	1,400	4,120
Dietrick First Floor and Plaza Renovation	-	5,000	3,300	8,300	500	7,800	6,000	1,800
Student-Athlete Performance Center	-	16,682	-	16,682	250	16,432	1,600	14,832
Commonwealth Ballroom Improvements	-	3,246	-	3,246	200	3,046	2,500	546
Construction Phase								
Maintenance Reserve	-	7,200	-	7,200	-	7,200	7,200	-
Lane Substation Expansion	-	2,000	4,500	6,500	4,727	1,773	1,500	273
Renovate Undergraduate Science Laboratories	-	10,000	-	10,000	2,300	7,700	5,000	2,700
ACC Network Studio	-	· -	10,000	10,000	250	9,750	7,500	2,250
Close-Out								
Upper Quad Residential Facilities	-	35,671	53,729	89,400	87,764	1,636	1,636	-
Athletic Facilities Improvements	-	37,500	, -	37,500	34,450	3,050	3,050	-
Biocomplexity Data Center	-	5,900	-	5,900	5,247	653	500	153
O'Shaughnessy Renovation	-	8,867	12,633	21,500	18,231	3,269	3,269	-
Eastern Shore AREC Storage Building	-	535	-	535	478	57	2	55
Total Nongeneral Fund Authorization Projects	\$0	\$151,411	\$167,970	\$319,381	\$159,262	\$160,119	\$52,657	\$107,462
GRAND TOTAL ALL CAPITAL PROJECTS	\$213,913	\$154,495	\$235,409	\$603,817	\$202,060	\$401,757	\$125,568	\$276,189

CAPITAL PROJECTS TARGETED TO CLOSE IN FISCAL YEAR 2018

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as of May 31, 2018

	TO STATE SUPPORT	TAL PROJECT A NONGENERAL FUND	ESTIMATED TOTAL EXPENSES June 30, 2017	ESTIMATED UNUSED AUTHORIZATION BALANCE June 30, 2017		
General Fund Appropriation Projects		TOND	DEBT	BUDGET	,	
Classroom Building	42,652	-	-	42,652	42,652	0
Total Educational and General Projects	42,652	0	0	42,652	42,652	0
Nongeneral Fund Authorization Projects Unified Communications and Network Renewal	0	9,564	6,944	16,508	16,508	0
Residential Door Access Improvements	0	7,735	0,544	7,735	7,735	0
Total Auxiliary Enterprise Projects	85,303	17,299	6,944	109,546	109,546	0
Total Projects Closed in Fiscal Year 2018	\$127,955	\$17,299	\$6,944	\$152,198	\$152,198	<u>\$0</u>

NARRATIVE DESCRIPTIONS OF CAPITAL PROJECTS

General Fund Appropriation Projects

<u>Improve Kentland Facilities (229)</u>: This project is for the replacement of several dairy science research facilities with modern agricultural facilities that meet the needs of research projects that support industry and government.

Agriculture Production Facilities (229): This project is the first of two phases to renew existing facilities for the livestock and poultry programs. This first phase includes an approximate total scope of 126,000 gross square feet of new and renovated facilities at the Blacksburg campus and three nearby university production and research farms.

<u>Chiller Plant Phase II</u>: This project continues the strategic infrastructure advancements initiated by the Chiller Plant, Phase I project (Chapter 1/874, project code 208-17657). This Phase II project includes the upgrade of campus utility systems and addresses several strategic needs for shifting the campus to a lower resource consuming cooling service.

<u>Holden Hall Renovation</u>: This project will renovate and expand Holden Hall to accommodate the instruction and research programs of Material Science Engineering, Mining/Mineral Engineering, and Computer Science Engineering. The final project would be 101,000 gross square feet of engineering instruction and research space to accommodate these high demand engineering fields.

<u>Planning: Undergraduate Science Laboratory Building</u>: This project will design a new 102,000 gross square foot state of the art science laboratory building adjacent to the new Classroom Building and West Campus Drive.

<u>Maintenance Reserve:</u> Since 1982, the Commonwealth has allocated General Fund support for preserving and extending the useful life of state-owned E&G facilities. This ongoing project covers a wide range of building and campus infrastructure repair and replacement work.

<u>Academic Buildings Renewal</u>: This project is for the renovation and renewal of three academic buildings located within central campus on the drillfield: Sandy Hall, Davidson Hall Phase II, and the Liberal Arts Building. The project is under construction with substantial completion expected in fall 2018.

<u>Health Sciences & Technology</u>: This project will be delivered by a Public Private Partnership and located adjacent from the existing Virginia Tech-Carilion Research Institute (VTCRI) facility in Roanoke, Virginia. The building will serve as a fully operational and contained biomedical research and education facility.

Address Fire Alarms and Access: This project is for the needed health, safety, and accessibility improvements in several E&G facilities on campus including Randolph Hall, War Memorial Hall, Food Science and Technology Building, Norris Hall, Newman Library, Lane Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex, and Wallace Annex.

Nongeneral Fund Authorization Projects

(The following projects are supported by revenues from overhead, auxiliary enterprise operations, and private gifts donated for specific uses.)

<u>Student Wellness Improvements</u>: This project includes improvements to War Memorial Hall and renovations to Schiffert Health Center in McComas Hall to convert the area vacated by counseling services to accommodate student health services.

<u>Creativity & Innovation District Residence Hall:</u> This project will plan a new residential community with approximately 596 beds, including 176 beds for student-athletes, and academic collaborative spaces to support creativity and innovation programs. It will be in the living-learning model focused on academic collaborative spaces to support creativity and innovation activities and the athletics program.

<u>Gas-Fired Boiler at the Central Steam Plant</u>: This project will design, purchase and install a new gas-fired boiler within the central steam plant.

<u>Planning: Intelligent Infrastructure Destination Area:</u> This project will plan the Intelligent Infrastructure and Human-Centered Communities Destination Area. The overall vision of the Destination Area includes University facility improvements that will be a multi-phased development occurring on the north side of campus, Plantation Road, and at the Virginia Tech Transportation Institute.

<u>Dietrick First Floor and Plaza Renovation</u>: This project includes refurbishing the first floor of Dietrick Hall, inserting a modern food service venue, enclosing 6,400 gross square feet of overhang, and improvements to the outdoor plaza.

<u>Student-Athlete Performance Center</u>: This project includes a complete renovation of the fourth floor of the Jamerson Center, construction of a balcony cantilevered from the fourth floor, and a new elevator tower.

<u>Commonwealth Ballroom Improvements</u>: This project refurbishes and updates outdated and nonfunctioning lighting systems, stage systems, ceiling tiles, and air handlers. Instillation of a Skyfold dividing wall will increase usage capabilities of the Commonwealth Ballroom.

<u>Maintenance Reserve</u>: The auxiliary Maintenance Reserve program was initiated in 1994 to preserve and extend the useful life of auxiliary enterprise facilities. The program covers 104 assets with a total replacement value of \$1.1 billion. This project covers a wide range of building infrastructure repair and replacement work. The resources to support this program are provided by the auxiliary units.

<u>Lane Substation Expansion</u>: The substation expansion is located adjacent to the existing Lane Substation on Innovation Drive. The improvements will double the capacity of the substation and cover expected campus and Corporate Research Center growth for approximately 20 years.

Renovate Undergraduate Science Laboratories: This project will renovate approximately 20,800 square feet of undergraduate laboratories within Derring and Hahn Halls that are needed to accommodate the increased demand for introductory science laboratory coursework in biology, chemistry, physics, and microbiology.

<u>ACC Network Studio</u>: This project includes improvements and expansion of broadcasting facilities to support the new ACC Network channel to be launched fall 2019.

<u>Upper Quad Residential Facilities</u>: This project replaced Rasche and Brodie with two new residential facilities and razed Thomas and Monteith. The first building, Pearson Hall, was occupied in November 2015. The second building, New Cadet Hall, was occupied August 2017.

Athletic Improvements: This project includes improvements to Rector Field House and the Baseball Facilities and feasibility studies for an athletic nutrition center and tennis facilities improvements. The feasibility studies are complete. Construction for Rector Field House and Baseball Facilities is nearly complete and are in use under a temporary certificate of occupancy.

<u>Biocomplexity Data Center</u>: This project established a new high performance data center within the existing Biocomplexity Institute's facilities. The project is complete and occupied since July 2017.

<u>O'Shaughnessy Renovation</u>: This project updates the building's interior; residential rooms; bathrooms; mechanical, electrical, and plumbing systems; elevators; addressing other deferred maintenance items as needed; and install air conditioning. The project is nearly complete with occupancy expected August 2018.

<u>Eastern Shore AREC Storage Building</u>: The new 7,500 gross square foot storage building provides space to store and secure modern research equipment on-site. The project is complete and occupied since August 2017.