VIRGINIA TECH 2017-18 CAPITAL OUTLAY PROJECT AUTHORIZATIONS as of May 31, 2017

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⁽¹⁾ This report includes expenses as of May 31, 2017. Thus, the estimated expenses for FY2018, and the current balance on June 30, 2017, may vary slightly depending on the level of expenses recorded during June 2017.

EDUCATIONAL AND GENERAL CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2018

(Dollars in Thousands)

as of May 31, 2017

		TOTAL PROJECT	AUTHORIZATIO	NC				
	STATE SUPPORT	NONGENERAL AGENCY FUND DEBT		TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2017	ESTIMATED BALANCE AVAILABLE FOR FY2018	ESTIMATED ANNUAL BUDGET FY2018	ESTIMATED BALANCE AT CLOSE OF FY2018
Educational and General Projects								
Educational and General Maintenance Reserve								
Maintenance Reserve	\$20,424	\$0	\$0	\$20,424	\$7,500	\$12,924	\$11,250	\$1,674
Design Phase		_						
Improve Kentland Facilities	9,363	0	0	9,363	1,182	8,181	6,000	2,181
Renovate Undergraduate Science Laboratories	0	600	0	600	600	0	0	0
Agriculture Production Facilities	22,136	0	0	22,136	200	21,936	1,080	20,856
Chiller Plant Phase II	31,024	9,797	0	40,821	200	40,621	4,040	36,581
Holden Hall Renovation	44,386	17,500	0	61,886	2,000	59,886	3,840	56,046
Health Sciences & Technology	48,307	23,793	0	72,100	200	71,900	10,200	61,700
Planning: Intelligent Infrastructure Destination Area	0	6,000	0	6,000	50	5,950	2,880	3,070
Planning: Undergraduate Science Laboratory Building	4,500	0	0	4,500	0	4,500	2,500	2,000
Construction Phase								
Academic Buildings Renewal	27,389	4,466	0	31,855	7,430	24,425	18,600	5,825
Address Fire Alarms and Access	4,891	0	0	4,891	3,626	1,265	1,265	0
Biocomplexity Data Center	0	5,900	0	5,900	5,125	775	575	200
Eastern Shore AREC Storage Building	0	535	0	535	425	110	110	0
Gas-Fired Boiler at the Central Steam Plant	0	6,800	0	6,800	50	6,750	3,375	3,375
Close-Out								
Classroom Building	42,652	0	0	42,652	41,910	742	742	0
Planning: Corps Leadership & Military Science Building	0	2,100	0	2,100	1,431	669	0	669
On Hold and Not Funded								
Total Educational and General Projects	\$255,072	\$77,491	\$0	\$332,563	\$71,929	\$260,634	\$66,457	\$194,177

AUXILIARY ENTERPRISE CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2018

(Dollars in Thousands)

as of May 31, 2017

	ТОТ	AL PROJECT BUDG	SET AUTHORIZA	TION				
	STATE SUPPORT		AGENCY DEBT	TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2017	ESTIMATED BALANCE AVAILABLE FOR FY2018	ESTIMATED ANNUAL BUDGET FY2018	ESTIMATED BALANCE AT CLOSE OF FY2018
Auxiliary Enterprises Projects								
Auxiliary Maintenance Reserve								
Maintenance Reserve	\$0	\$7,000	\$0	\$7,000	\$0	\$7,000	\$7,000	\$0
<u>Design Phase</u>								
Planning: Student Wellness Services	0	0	2,785	2,785	324	2,461	2,461	(0)
Creativity & Innovation District Residence Hall	0	0	26,818	26,818	304	26,514	3,200	23,314
Construction Phase								
Unified Communications and Network Renewal	0	9,564	6,944	16,508	15,253	1,255	1,255	(0)
Upper Quad Residential Facilities	0	35,671	53,729	89,400	84,232	5,168	4,668	500
Lane Substation Expansion	0	2,000	4,500	6,500	937	5,563	4,000	1,563
O' Shaughnessy Renovation	0	8,867	12,633	21,500	3,002	18,498	16,000	2,498
Athletic Improvements	0	37,500	0	37,500	5,723	31,777	20,000	11,777
Close-Out Phase								
Airport Hangar Replacement	0	2,520	0	2,520	1,843	677	100	577
Residential Door Access Improvements	0	7,735	0	7,735	6,983	752	300	452
On Hold and Not Funded								
Parking Blanket Authorizations Balance	0	0	16,547	16,547	0	16,547	0	16,547
Phase IV Oak Lane Community	0	0	17,518	17,518	0	17,518	0	17,518
Total Auxiliary Enterprise Projects	\$0	\$110,857	\$141,474	\$252,331	\$118,601	\$133,730	\$58,984	\$74,746
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GRAND TOTAL ALL CAPITAL PROJECTS	\$255,072	\$188,348	\$141,474	\$584,894	\$190,530	\$394,364	\$125,440	\$268,923

NARRATIVE DESCRIPTIONS OF CAPITAL PROJECTS

Educational and General Projects

<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>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.

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.

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>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.

<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>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>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 spring 2018.

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.

<u>Biocomplexity Data Center</u>: This project will establish a new high performance data center within the existing Biocomplexity Institute's facilities. The project achieved substantial completion in May 2017.

<u>Eastern Shore AREC Storage Building (229)</u>: This project is for a new 7,500 gross square foot storage building for the Eastern Shore Agriculture Research and Extension Center (AREC). The facility's program provides space to store and secure modern research equipment on-site. The project is under construction and will be complete in the summer 2017.

<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>Classroom Building</u>: This project is for the construction of a 73,200 gross square foot state of the art classroom building. This project completed construction in August 2016.

Corps Leadership & Military Science Building: This project will plan and design a new building that will be located in the northern portion of the Upper Quad near Lane Hall. The facility would provide a centralized and consolidated home to the wide range of Corps of Cadets and ROTC programs currently dispersed around the northern portion of campus. Preliminary Design is complete, and the project will now be put on hold pending completion of its funding plan.

Auxiliary Enterprise Projects

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

<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>Planning: Student Wellness Services</u>: This project will explore alternatives and prepare design documents for an expanded, comprehensive student wellness services solution to meet student expectations.

<u>Creativity & Innovation District Residence Hall:</u> The original project was over budget and has been on hold for several years hold while the university explored alternatives. A programing study is underway for a new residential hall in the living-learning community model focused on academic collaborative spaces to support creativity and innovation activities and the athletics program.

<u>Unified Communications and Network Renewal</u>: This project includes improvements to four complementary communication infrastructure components. The four components include a unified communications system, upgrading the Internet Protocol (IP) Network, upgrading the cable plant, and upgrading equipment rooms in various facilities.

<u>Upper Quad Residential Facilities</u>: This project replaces Rasche and Brodie with two new residential facilities and razes Thomas and Monteith. The first building, Pearson Hall, was occupied in November 2015. The second hall was originally scheduled to be occupied by fall 2016 and is behind schedule with an anticipated substantial completion by spring 2017.

<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.

<u>O'Shaughnessy Renovation</u>: This project will update to the building's interior; residential rooms; bathrooms; mechanical, electrical, and plumbing systems; elevators; addressing other deferred maintenance items as needed; and install air conditioning. Additionally, O'Shaughnessy Hall will be converted into a living-learning/residential college format to modernize the residential program within the building. Programmatic changes include the creation of a faculty principal apartment, five to seven faculty/staff offices, a classroom, and common meeting rooms for student activities.

<u>Athletic Improvements</u>: This project includes four high priority Athletic facility improvements: Rector Field House, Baseball Facilities, athletic nutrition center, and Tennis Facilities. Construction is underway for both Baseball Facilities and Rector Field House. Feasibility studies are underway for an athletic nutrition center and Tennis Facilities improvements.

<u>Airport Hanger</u>: This project constructed and installed necessary utilities and equipped a 14,000 gross square foot building with the capacity to house two planes and provided interior office spaces for pilots. The existing hangar will be razed at a later time as part of the future runway extension project

<u>Residential Door Access Improvements</u>: This project will install electronic door access locks on approximately 4,520 student rooms in the existing residential system, includes a proprietary hard key code, and improve access control to approximately 1,551 non-student doors.

<u>Parking Blanket Authorizations Balance:</u> The purpose of this unfunded parking blanket authorization balance is to complete future improvements and repair projects for the parking system as specific needs are identified and as funding becomes available.

Phase IV Oak Lane Community Remaining Authorization: This is the remaining authorization of the \$23.5 million Oak Lane Community, Phase IV project. The remaining Oak Lane Community expansion, houses two through five and their necessary site improvements, may be constructed as organizations come forward with plans and commitments for their one-third funding requirement per house.

CAPITAL PROJECTS TARGETED TO CLOSE IN FISCAL YEAR 2017

(\$000)

as of May 31, 2017

	TOTAL PROJECT AUTHORIZATION STATE NONGENERAL AGENCY TOTAL SUPPORT FUND DEBT BUDGET							ESTIMATED TOTAL EXPENSES June 30, 2017		ESTIMATED UNUSED AUTHORIZATION BALANCE June 30, 2017		
Educational and General Projects									<u> </u>		<u> </u>	
Property Acquisition: West Roanoke Street	\$	-	\$	550	\$	-	\$	550	\$	550	0	
Total Educational and General Projects		\$0		\$550		\$0		\$550		\$550	\$0	
Auxiliary Enterprises Projects East Eggleston Renovation		0		2,500		0		2,500		2,196	304	
Total Auxiliary Enterprise Projects		\$0		\$2,500		\$0		\$2,500		\$2,196	\$304	
Total Projects Closed in Fiscal Year 2017		\$0		\$3,050		\$0_		\$3,050		\$2,746	<u>\$304</u>	