

**VIRGINIA TECH**  
**FISCAL YEAR 2017**  
**CAPITAL OUTLAY PROJECT AUTHORIZATIONS**  
**as of May 31, 2016**

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(1) This report includes expenses as of May 31, 2016. Thus, the estimated expenses for FY2016, and the current balance on June 30, 2016, may vary slightly depending on the level of expenses recorded during June 2016.

**EDUCATIONAL AND GENERAL CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2017**

**(Dollars in Thousands)**

**as of May 31, 2016**

	TOTAL PROJECT AUTHORIZATION					ESTIMATED TOTAL EXPENSES June 30, 2016	ESTIMATED BALANCE AVAILABLE FOR FY2017	ESTIMATED ANNUAL BUDGET FY2017	ESTIMATED BALANCE AT CLOSE OF FY2017
	STATE SUPPORT	GENERAL OBLIGATION BONDS	NONGENERAL FUND	AGENCY DEBT	TOTAL				
<u>Educational and General Projects</u>									
<u>Educational and General Maintenance Reserve</u>									
Maintenance Reserve	\$ 10,705	\$ 0	\$ 0	\$ 0	\$ 10,705	\$ 0	\$ 10,705	\$ 9,100	\$ 1,605
<u>Design Phase</u>									
Planning: Corps Leadership & Military Science Building	0	0	2,100	0	2,100	180	1,920	1,920	0
Planning: Eastern Shore AREC Storage Building	0	0	46	0	46	20	26	26	0
Academic Buildings Renewal	27,389	0	0	0	27,389	2,680	24,709	13,500	11,209
Improve Kentland Facilities	8,618	0	0	0	8,618	850	7,768	4,500	3,268
BI Data Center Expansion	0	0	5,900	0	5,900	400	5,500	4,800	700
Agriculture Production Facilities *	22,500	0	0	0	22,500	0	22,500	1,120	21,380
Chiller Plant Phase II *	35,200	0	4,800	0	40,000	0	40,000	2,000	38,000
Holden Hall Renovation *	61,000	0	12,500	0	73,500	0	73,500	3,670	69,830
VTC Health Sciences & Technology Expansion *	46,700	0	21,000	0	67,700	0	67,700	3,380	64,320
<u>Construction Phase</u>									
Address Fire Alarms and Access	4,891	0	0	0	4,891	2,140	2,751	2,751	0
Classroom Building	42,652	0	0	0	42,652	32,000	10,652	8,530	2,121
<u>Close-Out</u>									
Total Educational and General Projects	\$ 259,655	\$ 0	\$ 46,346	\$ 0	\$ 306,001	\$ 38,270	\$ 267,731	\$ 55,297	\$ 212,433

**AUXILIARY ENTERPRISE CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2017**

**(Dollars in Thousands)**

**as of May 31, 2016**

	TOTAL PROJECT BUDGET AUTHORIZATION					ESTIMATED TOTAL EXPENSES June 30, 2016	ESTIMATED BALANCE AVAILABLE FOR FY2017	ESTIMATED ANNUAL BUDGET FY2017	ESTIMATED BALANCE AT CLOSE OF FY2017
	STATE SUPPORT	GENERAL OBLIGATION BONDS	NONGENERAL FUND	AGENCY DEBT	TOTAL				
<u>Auxiliary Enterprises Projects</u>									
<u>Auxiliary Maintenance Reserve</u>									
Maintenance Reserve	\$ 0	\$ 0	\$ 10,464	\$ 0	\$ 10,464	\$ 0	\$ 10,464	\$ 7,000	\$ 3,464
<u>Design Phase</u>									
Planning: Athletic Improvements	0	0	3,500	0	3,500	800	2,700	2,700	0
Planning: O' Shaughnessy Renovation	0	0	1,750	0	1,750	30	1,720	1,720	0
Planning: Student Wellness Services	0	0	0	3,071	3,071	307	2,764	2,000	764
<u>Construction Phase</u>									
Lane Substation Expansion	0	0	2,000	4,500	6,500	500	6,000	4,000	2,000
Residential Door Access Improvements	0	0	7,735	0	7,735	1,000	6,735	3,368	3,368
Unified Communications and Network Renewal	0	0	9,564	6,944	16,508	13,122	3,386	3,386	0
Upper Quad Residential Facilities	0	0	28,620	62,380	91,000	61,700	29,300	24,905	4,395
<u>Close-Out Phase</u>									
Airport Hangar Replacement	0	0	2,520	0	2,520	2,006	514	514	0
<u>On Hold and Not Funded</u>									
New Residence Hall II	0	0	0	27,000	27,000	182	26,818	0	26,818
Parking Blanket Authorizations Balance	0	0	0	16,547	16,547	0	16,547	0	16,547
Phase IV Oak Lane Community	0	0	0	17,518	17,518	0	17,518	0	17,518
Total Auxiliary Enterprise Projects	\$ 0	\$ 0	\$ 66,154	\$ 137,960	\$ 204,114	\$ 79,647	\$ 124,467	\$ 49,592	\$ 74,875
<b>GRAND TOTAL ALL CAPITAL PROJECTS</b>	<b>\$ 259,655</b>	<b>\$ 0</b>	<b>\$ 112,500</b>	<b>\$ 137,960</b>	<b>\$ 510,114</b>	<b>\$ 117,917</b>	<b>\$ 392,198</b>	<b>\$ 104,890</b>	<b>\$ 287,308</b>

## NARRATIVE DESCRIPTIONS OF CAPITAL PROJECTS

### Educational and General Projects

Maintenance Reserve: 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.

Corps Leadership & Military Science Building: This project will plan 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.

Eastern Shore AREC Storage Building: This project will plan a new 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.

Academic Buildings Renewal: 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.

Improve Kentland Facilities (229): 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.

BI Data Center Expansion: This project will establish a new high performance data center within the existing Biocomplexity Institute's facilities. The goal is for the data center to be ready for use later in fiscal year 2017.

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.

Chiller Plant Phase II: 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.

Holden Hall Renovation: 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.

VTC Health Sciences & Technology Expansion: 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.

Classroom Building: This project is for the construction of a 73,200 gross square foot state of the art classroom building. This project is under construction and will be completed summer 2016.

#### Auxiliary Enterprise Projects

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

Maintenance Reserve: 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. The estimated balance at the end of fiscal year 2017 is restricted for future projects identified to be completed over the next five years.

Planning: Athletic Improvements: The project includes design work for four high priority Athletic facility improvements: Rector Field House, Baseball Facilities, athletic nutrition center, and Tennis Facilities.

Planning: O'Shaughnessy Renovation: This project will plan updates 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.

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

Lane Substation Expansion: 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.

Residential Door Access Improvements: 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.

Unified Communications and Network Renewal: 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.

Upper Quad Residential Facilities: 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.

Airport Hanger: 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

New Residence Hall II: This project envisions a new residence hall of approximately 250 beds. Cost estimates exceed the project budget and the project is on hold while the university explores alternatives. Funding for the project may be considered pending a program plan and financial plan.

Parking Blanket Authorizations Balance: 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 2016**

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**as of May 31, 2016**

	TOTAL PROJECT AUTHORIZATION					ESTIMATED TOTAL EXPENSES June 30, 2016	ESTIMATED UNUSED AUTHORIZATION BALANCE June 30, 2016
	STATE SUPPORT	GENERAL OBLIGATION BONDS	NONGENERAL FUND	AGENCY DEBT	TOTAL BUDGET		
<u>Educational and General Projects</u>							
Human & Agricultural Biosciences Building I	\$ 53,759	\$ -	\$ -	\$ -	\$ 53,759	\$ 53,759	0
Marching Virginians Practice Facility	0	0	4,750	0	4,750	4,700	50
McBryde 100 Classroom Renovation	0	0	2,800	0	2,800	2,483	317
Renovate Davidson Hall, Phase I	32,003	0	0	0	32,003	31,952	51
Signature Engineering Building	47,609	0	18,650	28,959	95,218	91,895	3,323
<b>Total Educational and General Projects</b>	<b>\$133,372</b>	<b>\$0</b>	<b>\$26,200</b>	<b>\$28,959</b>	<b>\$188,531</b>	<b>\$184,789</b>	<b>\$3,742</b>
<u>Auxiliary Enterprises Projects</u>							
Indoor Athletic Training Facility	0	0	21,300	3,700	\$25,000	\$20,400	\$4,600
South Recreation Field Surface Replacement	0	0	0	4,600	4,600	3,244	1,356
Residential Connectivity	0	0	4,000	0	4,000	2,953	1,047
East Eggleston Renovation	0	0	2,500	0	2,500	2,500	0
<b>Total Auxiliary Enterprise Projects</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,800</b>	<b>\$8,300</b>	<b>\$36,100</b>	<b>\$29,097</b>	<b>\$7,003</b>
<b>Total Projects Closed in Fiscal Year 2016</b>	<b>\$133,372</b>	<b>\$0</b>	<b>\$54,000</b>	<b>\$37,259</b>	<b>\$224,631</b>	<b>\$213,886</b>	<b>\$10,745</b>