Part 4: General Fund (GF) Request Virginia Military Institute

Instructions: Indicate items for which you anticipate making a request for state general fund in the 2022-24 biennium. The item can be a supplement to a strategy or item from the academic and financial plan or it can be a free-standing request for which no tuition revenue would be used. If it is a supplement to a strategy or item from the academic and financial plan, use the same title used in Part 3 and place it in bold print to draw attention to it's connection to Part 3. Also, describe in the Notes column how additional general fund will enhance or expand the strategy. Requests for need-based financial aid appropriated in program 108 should be included here. If additional rows are added, please update the total costs formulas.

	Initiatives Requiring General Fund Support										
]							
Priority Ranking	Strategies (Match Academic-Financial Worksheet Short Title)	VP Goal	2022-2023		2023-2024		2022-2023 (Revised)		2023-2024 (Revised)		Notes
			Total Amount	GF Support	Total Amount	GF Support	Total Amount	GF Support	Total Amount	GF Support	
1	Tuition Moderation Funding	2	TBD	TBD	TBD	TBD	\$0	\$0	\$2,500,000	\$2,500,000	Additional funding to hold FY 2024 in-state tuition to FY 2023 level versus the planned 4% increase.
2	Strategic Enrollment Management	1	\$0	\$0	\$0	\$0	\$0	\$0	\$579,475	\$367,500	Staff to coordinate the Admissions, and Financial Aid processes and foster collaboration of recruitment and retention of cadets.
3	Incremental Compensation Adjustments	1	\$0	\$0	\$0	\$0	\$0	\$0	\$1,200,000	\$1,200,000	Continue to address disparity in salaries of administrative faculty and classified employees.
4	VMSDEP Funding	2	\$0	\$0	\$0	\$0	\$0	\$0	\$700,000	\$700,000	This program of tuition and fee waivers has become a significant impact to revenues, growing significantly in recent years.
5	Core Course in "American Constitutional History"	3	\$0	\$0	\$90,000	\$90,000	\$0	\$0	\$90,000	\$90,000	Develop and add a course to the Core Curriculum to ensure all cadets have a solid understanding of US History, the Constitution, and Civics.
	Renovate Admissions and Financial Aid Offices	2	\$0	\$0	\$0	\$0	\$0	\$0	\$202,000	\$202,000	Detailed Planning funds for renovations of key offices located in historic houses on the VMI Post.
	Improvements to Hinty Hall and Facilities Infrastructure	2	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000	Detailed Planning funds for additional maintenance/storage facilities at various locations on Post.
	New Market Battlefield State Historical Park Renovations and Operations	3	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$2,000,000	Detailed Planning fund to address significant capital needs on existing park facilities and ongoing operational support.
			\$0	\$0	\$90,000	\$90,000	\$0	\$0	\$8,771,475	\$8,559,500	

2022 SIX-YEAR PLAN NARRATIVE (Part II)

INSTITUTION:

OVERVIEW

The totality of the six-year plan should describe the institution's goals as they relate to state goals found in the *Pathways to Opportunity: The Virginia Plan for Higher Education*; the Higher Education Opportunity Act of 2011 (TJ21); and the Restructured Higher Education Financial and Administrative Operations Act of 2005.

The instructions under institutional mission and alignment to state goals, below, ask for specific strategies, in particular related to equity, affordability and transformative outcomes. Other sections will offer institutions the opportunity to describe additional strategies to advance institutional goals and state needs. *Please be as concise as possible with responses and save this narrative document with your institution's name added to the file name.*

SECTIONS

Section A. Pandemic Impact: Briefly discuss, in one to two paragraphs, how the pandemic has impacted your institution. What things did your institution already have in place that proved helpful? What lessons were learned? What short-term changes have been made? What long-term changes will be made? What are the concerns moving forward?

RESPONSE:

Like most schools, VMI converted to a primarily remote working and teaching environment in March 2020. This continued through early summer 2020 when some key personnel returned to on-Post activities to prepare for the 2020-2021 academic year. During the 2020-2021 academic year, a number of employees whose job duties did not require a presence on Post continued to work remotely. Instruction during the year was offered in a mix of in-person, hybrid, and on-line courses. In addition, remote learning resources (e.g., Zoom and Teams) were used to remotely provide guest lecturers and academic speakers.

The VMI Summer Session, the Summer Transition Program, and the Summer Undergraduate Research Program are being conducted in-person in summer 2021. No summer study abroad programs are being conducted in the summer of 2021 due to foreign travel restrictions. Language intensive instructional programs in Chinese and Arabic, which would normally be conducted abroad, are being conducted at VMI.

Depending on the need for continued social distancing, the mix of instructional methods in the 2021-2022 academic year may continue due to scheduling constraints and classroom seating capacities. However, the goal is to shift as much academic instruction to in-person as possible in the 2021-2022 academic year. Teleworking options for staff in administrative areas may also continue to reduce the population in common area workspaces and in limited areas they may continue on a more permanent basis. COVID testing for cadets upon arrival in the fall will continue, as will established operational procedures for isolation and quarantine of sick and COVID-exposed cadets. Daily cleaning and sanitization of common areas will continue, requiring more staff than in pre-pandemic conditions.

In general, the faculty and staff demonstrated the ability to quickly adapt to the remote work environment. The ability to use remote learning resources to augment in-person instruction provides opportunities to expose cadets to guest lecturers/speakers who might not otherwise be able to visit Post due to scheduling/travel issues at a reduced cost to the Institute. In addition, these resources can be used to conduct administrative meetings more conveniently/efficiently/cost-effectively by eliminating the need for people to gather in one meeting location.

No major long-term instructional changes are anticipated as VMI will continue to offer a 100 percent inperson academic program during the academic year. To augment in-person instruction, the use of remote learning resources for guest lecturers/speakers may continue, and faculty may use these resources to occasionally conduct classes remotely while away from Post as an alternative to rescheduling. The trend toward declining enrollment in the VMI Summer Session in recent years, which saw increased enrollment in summer 2020 when classes were offered 100 percent remotely, warrants consideration of some summer courses being offered remotely in FY 23 and beyond. In addition, options for hybrid remote working arrangements for eligible employees may expand in the future due to the generally positive results experienced during the pandemic-necessitated remote work period.

2022 Update

For FY 2022, VMI operated 100% in-person including summer 2021 and summer 2022 programs. In addition, study abroad programs resumed for summer 2022.

Section B. Institutional Mission, Vision, Goals, Strategies, and Alignment to State Goals: Provide a statement of institutional mission and indicate if there are plans to change the mission over the six-year period.

Provide a brief description of your institutional vision and goals over the next six years, including numeric targets where appropriate. Include specific strategies (from Part 3 – Academic-Financial Plan and Part 4 – General Fund Request) related to the following state themes and goals:

- Equitable: Close access and completion gaps. Remove barriers to access and attainment especially for Black, Hispanic, Native American, and rural students; students learning English as a second language; students from economically disadvantaged backgrounds; and students with disabilities.
- **Affordable:** Lower costs to students. Invest in and support the development of initiatives that provide cost savings to students while maintaining the effectiveness of instruction.
- **Transformative:** Expand prosperity. Increase the social, cultural, and economic well-being of individuals and communities within the Commonwealth and its regions. This goal includes efforts to diversify staff and faculty pools.

Strategies also can cross several state goals, notably those related to improved two-year and four-year transfer, and should be included here. If applicable, include a short summary of strategies related to research. The description of any strategy should be one-half page or less in length. Be sure to use the same short title as used in the Part 3 and Part 4 worksheets. If federal stimulus funds will fund activities and are included in Part 3 as reallocations, please note how they will be used.

RESPONSE:

The Virginia Military Institute believes that the measure of a college lies in the quality and performance of its graduates and their contributions to society. The Institute is guided by Vision 2039 which focuses on

leadership and stresses that graduates serve the nation in times of peace and war. Therefore, it is the mission of the Virginia Military Institute to produce educated, honorable men and women, prepared for the varied work of civil life, imbued with love of learning, confident in the functions and attitudes of leadership, possessing a high sense of public service, advocates of the American Democracy and free enterprise system, and ready as citizen-soldiers to defend their country in time of national peril.

To accomplish this result, the Virginia Military Institute shall provide to qualified young men and women undergraduate education of highest quality – embracing engineering, science, and the arts – conducted in, and facilitated by, the unique VMI system of military discipline.

Cadet life at VMI is defined by the Institute's Honor Code. Cadets live by the Honor Code and are responsible for all aspects of its governance. More than a simple statement, the VMI Honor Code pervades all aspects of Cadet life, rapidly becoming a lasting lifestyle, a guarded possession of honorable living and attribute of leadership. They are also charged with maintaining the military structures and protocols of life in Barracks. Since all cadets reside on Post throughout their four years at VMI, Barracks is the focal point of cadet life and an important laboratory for building and exercising leadership and teamwork skills.

The combination of VMI's rigorous academic program with its disciplined military organization and system distinguishes the Institute from most institutions of higher education in the United States. Our comprehensive institutional mission is to educate the cadet intellectually, physically, morally, and ethically through challenging and integrated curricular and co-curricular experiences. The Virginia Military Institute maintains a clear educational focus and a well-established niche in the higher education marketplace. We aspire to become neither a large institution nor a research institution.

We believe that this institution offers cadets not only an excellent academic education but also many additional benefits: a disciplined approach to overcoming obstacles, an understanding of the principles of leadership and of working in an organizational setting, and the experience of living in an environment that greatly values personal integrity, ethical inquiry, and physical well-being. Because of these many benefits, the VMI graduate is an educated and honorable citizen-soldier.

Specific Strategies to address the three Commonwealth priority areas:

 Equitable – Consistent with the One Corps – One VMI: Unifying Action Plan and the VMI Inclusive Excellence strategic plan, the Institute is identifying new diversity strategies to increase access for minorities and other underrepresented populations within the prospective cadet and faculty/staff applicant pools.

VMI's ongoing plan of action to address attainment gaps in graduation, time-to-degree, and degree completion is facilitated, largely, through outstanding cadet advising and academic support services. These services include early identification and intervention of academically vulnerable cadets, traditional and augmented cadet advising, comprehensive tutoring services, group study sessions, and special academic training. VMI's academic support services, along with other high impact practices, such as the mandatory first year experience (Rat Line), senior capstone, and outstanding International Programs, allow VMI to retain and graduate cadets at very high rates under unique and challenging conditions. VMI's retention rate and six-year graduation rate goals are as follows:

Retention rate:	80% (+/- 4%)
Six-year graduation rate:	71% (+/- 4%)

Notes:

The graduation rate is based on those cadets who were enrolled as first-time, full-time cadets and completed their degree within 150 percent of the four-year time frame. The retention rate is based on those cadets who remain at the Institute from their freshman to sophomore year.

- 2. Affordable VMI focuses on containment of annual tuition and fee increases by seeking efficiencies in the delivery of the entire education program. A key component of making VMI more affordable is the ability to package financial aid from multiple sources: need, merit, and ROTC. The Institute continually strives to bolster the amount of need-based and merit aid available to control overall costs to cadets and their families while attracting more applicants. Of the 220 in-state cadets who graduated in May 2021, 127, or 57.7 percent, graduated with Federal Loans (Direct Subsidized/Unsubsidized) with an average debt of \$20,752.
- Transformative VMI offers 14 majors and more than 30 minors and concentrations, providing a curriculum aligned with the current needs of employers. Annually, within 6 months of graduation, 98-99 percent of each graduating class is employed in the field of his/her discipline, with US Department of Education data reflecting significantly high mid-career earnings.

One of the ways that VMI works to prepare graduates for the workforce in their respective disciplines is through the promotion of internship opportunities for all cadets. Historically, administration and facilitation of internships are housed within each academic department. Department heads and faculty, as part of their cadet development responsibilities, help facilitate internships. Career Services has an active role in working across departments to allow prospective employers more efficient access to cadets from the various disciplines, without having to coordinate with each department head. Serving in a consultative role, Career Services assist departments to increase the internship opportunities for cadets, especially from academic departments which traditionally have lower achievement levels in securing internships for cadets.

#1: VMI Inclusive Excellence

The One Corps – One VMI: Unifying Action Plan and the VMI Inclusive Excellence Strategic Plan are two documents that inform and outline the diversity and inclusion strategies for the Institute. The One Corps – One VMI plan focuses on five outcomes: honor, diversity, and inclusion, the VMI brand, competing and winning and one VMI. Informed by these outcomes, the overarching goals of the strategic plan address access and success, climate and intergroup relations, education and scholarship, organizational culture and accountability, and community engagement.

Consistent with its efforts on diversity and inclusion, VMI has recruited its first Chief Diversity Officer. Dr. Jamica Love will join the Institute on 9 July and will oversee the DEI efforts on Post, reporting directly to the Superintendent.

On 1 June 2021, VMI received the final investigative report on the equity audit conducted by Barnes and Thornburg for the Commonwealth of Virginia. Forty-two recommendations were provided in the report. The Board of Visitors has begun its work in addressing the recommendations by appointing a review committee that will commend specific actions to the full Board for its approval. The recommendations will be addressed as a part of the larger DEI efforts underway at the Institute with oversight from the Board of Visitors and under the guidance and direction of the Superintendent.

An assessment is currently underway to determine the resources necessary to implement the strategies in the VMI Inclusive Excellence Strategic Plan and the recommendations in the investigative report.

Expanded and enhanced academic support in the Miller Academic Center remains a priority. Coupled with support from the Office of Assessment and Institutional Research, the Miller Academic Center focuses on the identification and monitoring of cadets who meet predictive criteria for academic vulnerability. Conducting interventions as needed on an individual basis is expected to result in continuously improving longer term outcomes across a spectrum of measures to include admissions, enrollment, retention, grade point averages, and graduation rates. As part of VMI's inclusive excellence initiatives, these measures are annually disaggregated and reported.

2022 Update

Governor Northam included in his introduced budget \$2.6M in general funds for the One Corps, One VMI program. This funding was included in the introduced budget in response to a request submitted by the Institute as a part of the budget process. Given that the Governor's funding was well short of the Institute's \$6.2M request, VMI submitted a budget amendment during the 2022 General Assembly Session to increase the general funds for this initiative. The final conference report on the budget contained an increase in general funds to \$4.0M. According to budget language, these general funds can be used to support the following initiatives within the One Corps, One VMI request: Title IX Coordination, the Commandant Staff, the Legal Affairs Office, Academic and Student Programs, Compliance and Reporting, and Commemorations and Memorials as well as targeted staff salary compression issues.

VMI submitted two quarterly reports detailing review and progress on the Equity Audit recommendations as required by its Board of Visitors. These reports were submitted to the Governor, leadership within the House of Delegates and Senate and SCHEV. Future quarterly reports will focus not on the recommendations, but on the ongoing efforts on diversity and inclusion at the Institute.

#2: Increase T&R Faculty Salaries

An important factor in maintaining VMI's reputation for academic excellence, and in meeting the Vision 2039 objective of becoming a "Premier Undergraduate College in America," is a vibrant, active, and enthusiastic faculty. As VMI seeks to recruit and retain the best faculty – Ph.D. level men and women from diverse backgrounds who are excellent teachers, productive scholars, active in their professions, and engaged in the lives of cadets – it is imperative that the Institute offer competitive salaries.

Difficulty in filling vacant faculty positions with the top applicants led to the Dean in Spring 2012 charging the Faculty Compensation Committee (FCC) with evaluating the adequacy of the VMI faculty compensation model for determining faculty salaries. The FCC was also charged with comparing VMI salaries to other Virginia colleges and universities, to professional discipline indices, and to selected peer groups. The FCC found that, when compared to the 14 Virginia public colleges and universities, VMI's average faculty salary ranked 11th. When compared to 23 of 25 SCHEV peer group schools for which information was available, VMI's average faculty salary ranked 23rd. In fall of 2016, the Superintendent established the goal of raising VMI's average faculty salary into the top five amongst Virginia public colleges and universities. Approximately \$2.5 million in new funding is required to achieve this goal.

From 2014 to 2017, the new Institute Compensation Committee reviewed several iterations of the Institute's Faculty Compensation Model before adopting a relative market value model, which establishes target salaries for all faculty based on their academic discipline and years of service. It uses the College and

University Professional Association for Human Resources (CUPA-HR) salary survey to determine the average salary for each academic discipline at VMI, and adjusts the average based on the funding required in order to raise VMI's average faculty salary into the top five amongst Virginia public colleges and universities. Much of the funding to be used to increase faculty salaries will come from private funds used to established distinguished faculty chairs. Private funds will assume the full cost of the faculty position (i.e., salary and benefits) and provide the chair with a merit-based salary supplement. The reallocated E&G funds will then be used to adjust other faculty salaries toward their Compensation Model target salaries.

2022 Update

For FY 2023, VMI will provide all faculty with a state-supported, five percent, across-the-board salary increase. In addition, approximately \$500K in private funds and reallocated E&G funds will be used to make faculty salary adjustments towards Compensation Model target salaries.

#4: Core Course in "American Constitutional History"

Although many students are exposed to US History and Civics in their secondary school education, the preparation is not sufficiently rigorous. As a college wherein more than 50 percent of each year's graduating class commissions in the US armed forces and a significant percentage of all current cadets and graduates actively participate in civic engagement, it is imperative the students have a robust understanding of US History, the Constitution, and Civics. History and International Studies majors are required to take courses in US History, the Constitution, and Civics, but together these two majors represent a minority of the entire Corps of Cadets (Corps).

To bolster understanding and appreciation of this topic area, the Institute offered in the fall '20 term a pilot course (History 300) in civics titled "American Constitutional History." The course charts the foundational development of the Constitution, followed with a rigorous reading of key amendments and Supreme Court rulings, to include those addressing slavery and civil rights. The pilot course curriculum and execution were developed and undertaken with existing resources. The Institute secured a private endowment in order to recruit a distinguished professor to hold the Chair in American Constitutional History. The pilot course will be offered again in Fall '21. When the course becomes required of all cadets, we anticipate that the History Department will need additional faculty lines to augment existing faculty resources, in order to serve the entire Corps and keep section sizes "small" and consistent with the VMI academic model.

2022 Update

The pilot course (HI 300 - American Constitutional History) was again offered in Fall '21, and a new Chair in American Constitutional History was hired starting in August 2022. The new Chair will assume responsibility for development of HI 300, as well as associated, educational programing, during the 2022-23 AY.

#5: Faculty/Staff Uniform Conversion to new Army Service Uniform

The US Army is converting to a new service uniform beginning with the initial issues of this uniform occurring in the first quarter of FY 21. Beginning in the second quarter of FY 21, the uniform was made available for all authorized users. Because the old service uniform is no longer being issued and its use is being phased out, manufacturers and suppliers are scaling back their

production and limited supplies of the old uniforms are making it very difficult to provide uniforms to new faculty/staff and for current uniformed staff to obtain replacement items. VMI must transition to the new service uniform in order to ensure uniformed faculty/staff can obtain the appropriate uniform items for wear to support VMI's unique military mission. The projected cost to transition VMI faculty and staff to the new Army Service Uniform is \$394,921.

2022 Update

VMI received one-time funds to support the conversion of uniformed faculty and staff to the new Army Service Uniform.

#6: Financial Aid

VMI projects an enrollment for Fall 2021 of 1697 cadets, consisting of approximately 1075 in-state cadets (63.3%) and 622 out-of-state cadets (36.7%). In 2020-21, VMI awarded over \$29.3 million in grants and scholarships to include Federal (Pell Grant and Supplemental Educational Opportunity Grant), State (VSFAP-VGAP, COMM, and State Cadetship), ROTC (Army, Navy, Marine Corps and Air Force) and institutional aid. Private and institutional aid accounted for over \$13.1 million and ROTC scholarships for over \$13.5 million (approximately 29% of cadets qualified for ROTC scholarships in 20-21).

An additional 77 cadets received Post 9/11 GI Bill tuition and fees benefits (Chapter 33) totaling \$1.1 million and 31 in-state cadets received waivers of their tuition and fees through the Virginia Military Survivors and Dependent Educational Program (VMSDEP), accounting for \$539,191.

The annual percentage of in-state cadets and out-of-state cadets qualifying for need-based aid remains around 45-50 percent and 60-65 percent, respectively.

Policies and Commitment

VMI strives to meet 100 percent of the demonstrated need of in-state cadets with grants and Federal Direct Subsidized Loans for those who meet the March 1st application deadline and as funds are available. The Institute continues to maintain a "need-blind" admissions policy ensuring that no qualified applicant is denied admission based on his or her ability to pay. See Part II Item H of VMI's Six-Year Plan for a description of its Financial Aid Plan to include addressing the impact of tuition and fee increases on low-income and middle-income cadets and their families.

VMI's Vision 2039 includes a goal of commissioning 70 percent of graduates into the Armed Forces so the Institute continues to emphasize and support cadet efforts to participate in ROTC scholarship and other military-based aid programs.

2022 Update

VMI projects an enrollment for Fall 2022 of 1,558 cadets, consisting of approximately 977 in-state cadets (62.7%) and 581 out-of-state cadets (37.3%). In 2021-22, VMI awarded over \$29.3 million in grants and scholarships to include Federal (Pell Grant and Supplemental Educational Opportunity Grant), State (VSFAP-VGAP, COMM, and State Cadetship), ROTC (Army, Navy, Marine Corps and Air Force) and institutional aid. Private and institutional aid accounted for over \$14.23 million and ROTC scholarships for over \$12.56 million (approximately 26.5% of cadets qualified for ROTC scholarships in 21-22).

An additional 72 cadets received Post 9/11 GI Bill tuition and fees benefits (Chapter 33) totaling \$1.2 million and 41 in-state cadets received waivers of their tuition and fees through the Virginia Military Survivors and

Dependent Educational Program (40) and Virginia Line of Duty Act (1), accounting for \$746,760 in waived tuition and fee revenue from 4% of VMI's in-state cadets.

#7: Cybersecurity Education

VMI offers an expansive program in cybersecurity education, which contributes to the talent pipeline to graduate cybersecurity professionals who will go on to serve in industry and in support of the military. The foundation of this program is the multi-disciplinary, cybersecurity minor. Under the direction of the Computer and Information Sciences Department, cadets have the option of specializing in different areas of cybersecurity through "tracks," which include Technical, Management and Policy, and Humanistic and Social Studies. Six different departments representing a wide spectrum of academic disciplines collaborate in the delivery of this program.

With the support of a three-year, \$4.4 million grant from the Department of Defense (DoD), VMI operates the Cyber Defense Laboratory (CyDef), which addresses the critical need for cyber defense leaders capable and ready to serve and protect our nation from existing and emerging cybersecurity challenges. Through CyDef, cadets complete rigorous cyber defense and leadership training, and have immersive experiences in a dynamic, predictive, and responsive program. Cadets also engage the local community through outreach programs with local high schools to generate interest in cybersecurity as a future career. CyDef capitalizes on the power of partnership by working closely in coordination with all six Senior Military Colleges on diverse cyber defense activities. The DoD CyDef grant funds six faculty and staff positions and provides support for cyber defense research programs and equipment.

VMI is also an active member of the Southwest Virginia Node of the Commonwealth Cyber Initiative (CCI). Collaborations with our CCI partners on research and education projects provide numerous opportunities for our faculty and cadets to advance their knowledge and skills; to interact with experts from defense, government, and industry; and to jointly develop novel solutions to address complex and fluid cyber defense challenges. CCI is providing \$310K over two years to support faculty recruitment, research, and retention in the high-demand cyber marketplace.

Through the support of DoD and CCI funding, VMI provides a multi-disciplinary and innovative cybersecurity curriculum that provides premier cyber defense leadership education. These efforts contribute to a diverse workforce in critical, technical fields that are in high demand in the Commonwealth and in the nation.

2022 Update

DoD and CCI funding support remains robust, including a new \$100K CCI grant entitled "Future Cyber Security Educators: Empowering Cadets as Educators," and all aspects of this strategy remain in effect.

#8: Leadership Development Program

VMI is a unique educational system within the Commonwealth of Virginia that provides undergraduate education and leadership training in a military environment. As one of the nation's six senior military colleges, continuous improvement in leadership training programs is required to properly prepare cadets for their future leadership roles both in the military and in society. A key component of VMI's Strategic Plan is the Leadership Development Program. Leadership is the tie that binds the Corps and the faculty and staff at VMI as all participate in the development process and learn together in VMI's unique leadership laboratory. The Program, led by the Center for Leadership and Ethics (CLE), consists of two deliberate

lines of effort - one for cadets and one for faculty and staff. By design, the Leadership Development Program reinforces VMI's unique leadership journey experience through its history and culture, provides participants with enhanced self-awareness, teaches baseline leadership skills, and offers opportunities for critical thinking. The foundation for the Leadership Development Program for cadets is the Core leadership course LEAD 344 - Leadership in Organizations. This required, three-credit hour course, emphasizes practical leadership experience. Similarly, the Leadership Development Program for the faculty and staff consists of a three-tiered progressive professional development program to enhance their interpersonal, teaching, and leadership skills, which helps them to reinforce the cadets' own leader journey. These programs are augmented through hands-on knowledge of items from the VMI Museum's growing historical collection. Learning from VMI's history and successful VMI Alumni is directly applicable to meeting many of today's on-going leader challenges. The Leadership Development Program provides a commonality of purpose across Post.

2022 Update

A fourth, full-time faculty member teaching leadership courses was hired in the 2021-22 AY. In addition, Leadership Fellows taught ten sections of the Core leadership course LEAD 344. This expansion of the leadership faculty will enable us to expand leadership course offerings going forward.

#9: Military Commissioning

VMI possesses a proud tradition of educating citizen-soldiers, ready to defend the country in time of national peril. Toward this end, the Institute encourages all qualified cadets to pursue commissions in the Active Duty, National Guard, and other Reserve components of the U.S. Armed Forces. In addition, curriculum requirements for graduation include four years of ROTC instruction, regardless of a cadet's intention to seek a commission. This instruction provides valuable leadership training and positions the cadet to seek a commission should his or her plans change.

Financial Aid Component

As part of its efforts to assist cadets with financial aid opportunities and increase the number accepting commissions, VMI encourages cadets to seek military financial assistance. In addition to those who matriculate with a four-year ROTC scholarship, VMI assists cadets with seeking three-year, two-year, and one-year scholarships. The number of cadets commissioned at graduation is significantly influenced by the number of ROTC scholarships awarded. Various one-to-three-year ROTC scholarships are available to cadets who do not matriculate with an ROTC scholarship.

Commitment to Maintenance of Effort

VMI is committed to maintaining a high commissioning percentage as a part of its Vision 2039 Strategic Plan. Since the inception of Vision 2039, the percentage of graduates accepting commissions has risen markedly from less than 40 percent in 2003 to 54 percent for the 2021 graduating class. The five-year average for the classes of 2015 through 2019 is approximately 53 percent, up two percentage points over the last reported five-year average. Vision 2039 includes a visionary goal of reaching 70 percent commissioning which is balanced with a competitive job placement program.

The Commonwealth benefits significantly from individuals who accept commissions, complete their service obligations, and return to the state to pursue employment in the professions of their choice. These young

officers return to become productive members of the state's workforce with a level of maturity and leadership acumen unsurpassed by their peers. The cadets benefit in that many receive scholarship assistance while in college and all are gainfully employed upon graduation. Likewise, their time in the service offers them invaluable training that is attractive to employers.

2022 Update

In May 2022, 182 of 332 graduates commissioned in the Armed Services for a commissioning percentage of 54.8 percent. The breakdown is as follows: Army 106, Air Force 30, Navy 27, and Marines 19. Of those commissioning in the Air Force, 4 joined the Space Force.

#10: Math that Matters: Contextualizing Mathematics in a Computational World

In order to prepare today's graduates to succeed in a world where rapidly changing technology is transforming how individuals relate to and function within their environment, the Institute considers it a priority to ensure that all cadets become literate in the language of math and computational technology and its application in solving real-world problems. Most STEM majors at VMI are exposed to programming and mathematical problem-solving through the course work in their curriculum, but approximately 50-60 percent of cadets could benefit significantly from additional course work in these areas. Therefore, this initiative focuses on improving the common core math requirement by developing a new, two-course math sequence that will include technology-driven mathematical topics and basic computational skills.

This innovative curriculum will emphasize the contextualization of mathematics within a cadet's discipline by incorporating contemporary pedagogical methods (e.g., problem-based learning) and modern problemsolving tools into one powerful educational package. This new pedagogical paradigm will better prepare VMI graduates to: (a) think critically and solve complex problems within their disciplines that require significant computational, data analytic, and critical thinking skills, (b) better understand the nuances of how technology informs and affects interactions with the environment, and (c) better negotiate the technological-mathematical terrain that pervades the modern world.

Stated simply, the idea is to have cadets, particularly non-STEM majors, engage with math in ways that are meaningful and useful for solving domain-specific problems using computers. Active problem-based projects will be designed and used to apply mathematical skills to realistic math problems including statistics and modeling. In addition, basic computational thinking skills will be developed using software, like Microsoft Excel, in order to teach cadets to solve the problems and understand the capacity and the limitations of both the model and technology. These projects will be developed through collaborations between the Applied Mathematics Department and other departments whose cadets will be required to take this new math core sequence.

VMI's accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) was reaffirmed in 2017. The concept of quality enhancement is at the heart of the SACSCOC philosophy of accreditation, and each institution that seeks reaffirmation of accreditation is required to develop a Quality Enhancement Plan (QEP). Math that Matters was approved as VMI's QEP, and notably, received <u>no recommendations</u>, a result that nearly 60 percent of institutions fail to achieve.

2022 Update

The Math that Matters two-course sequence (MA 101 and MA 102) has been fully integrated into the Core Curriculum. The final QEP report will be submitted to SACSCOC as part of the Institute's Fifth Year Report in September 2022.

#13: Technology Enhanced Instruction

VMI's integrated academic and military life program requires cadets to live on campus and to meet specific accountability requirements throughout the day. Accountability requires that cadets attend all of their classes. To accommodate the military demands of the VMI experience, classes are scheduled between the hours of 8 a.m. and 4 p.m. – the academic day. Consequently, enrollment in VMI courses reflects actual attendance and all classes are taught during the prescribed academic day. This model is inherent to VMI's mission and it does not facilitate independent distance learning.

Faculty are encouraged and expected to use appropriate technology in the development of their courses as stated in the VMI Statement on Faculty Expectations. Approximately 90 percent of the Institute's courses use the course management software, *Canvas*. In addition, course instructors are encouraged to develop websites to accompany their courses and many distribute and collect information through drives on the VMI network and through electronic reserves in Preston Library. For many courses, *ePortfolio* is an integral component that is used for both teaching and reflective learning fostered by the use of technology. The Applied Mathematics Department has developed several open-source textbooks for use in some of their courses that are available in electronic form and have been adopted for use by other schools.

VMI science and engineering instructional and research laboratories are equipped with state-of-the-art technology, including capabilities that are not readily available elsewhere in Virginia. The capabilities in many of these laboratories were acquired by federal grants, private industry, and foundation funding. VMI maintains 106 Smart classrooms and maintains e-instructional resources in nearly all other classrooms. These facilities are fully supported by VMI's Information Technology (IT) Department, which also maintains several computer laboratories to provide cadet access to specialty software applications. VMI's IT Department also provides technical support for cadet-owned computers with a Help Desk in Barracks. The VMI Post has 100 percent WIFI coverage and cadets also have access to wired data ports in many academic buildings, including Preston Library, and in their rooms in Barracks. VMI is an active participant in RANA (Rockbridge Area Network Authority) and provides up to 4,000 Mbps of Internet bandwidth to meet the demand of its 1,700 cadets.

2022 Update

During the 2021-22 AY, VMI continued its efforts to use technology in order to enrich the opportunities for VMI cadets and faculty to engage in innovative educational experiences. Based on the recommendations of the Committee for Enhanced Learning Environments, approximately \$580K in new equipment was purchased to support the education program using a combination of State Equipment Trust Funding, local funds, and reallocation of E&G funds. In addition, in response to the state's requirement to livestream all Board of Visitor meetings, three meeting rooms will be equipped with 360-degree audio/visual capabilities beginning in the 2022-23 AY. These rooms will be available for academic/instructional use as well.

#14: Emphasizing STEM Majors

The VMI Core Curriculum, which defines coursework required of all cadets, includes a two-semester sequence in a laboratory science (eight credit-hours in Biology, Chemistry, or Physics) and a two-semester sequence in mathematics (six credit-hours), regardless of the major. As a result, every VMI graduate has a basic background in science and mathematics.

Success in most STEM majors requires high-level math skills. VMI supports the development of these skills with the Open Mathematics Laboratory (OML). The OML employs both professional and cadet tutors who work with cadets one-on-one to develop mathematics skills, to understand strategies useful in solving mathematics problems, to guide efforts in completing course assignments, and to prepare for tests and final exams.

Revisions to curricula in several majors have been implemented since the 2011-12 AY to respond to cadet interests with the intent of attracting additional majors and improving retention. The Biology Department established a concentration in Ecology, Conservation, and Organismal Sciences (ECOS) for cadets who wish to explore field-based and organismal disciplines of biology, including plant and animal biology, conservation, and ecology. Additionally, VMI continues to enhance the teaching and research capabilities of the STEM department labs by investing in state-of-the-art equipment (see "Technology Enhanced Instruction").

The Computer Science program was transformed into a Computer and Information Sciences (CIS) program designed to produce graduates prepared for careers influenced strongly by a firm understanding of the role of technology and its place in military, for-profit and not-for-profit career environments. In addition, the CIS program implemented a multi-disciplined, Cybersecurity minor.

The Psychology Department eliminated the B.A. degree in Psychology and offers only a B.S. degree. The B.S. Psychology curriculum has a strong foundation in science and research methods and has firmly established the VMI Psychology program as a STEM major.

In addition to curricular changes, an Enrollment Management Committee was established in the 2012-13 AY to develop policies and procedures to address the unequal distribution across majors at VMI in order to achieve a better balance of STEM and non-STEM majors.

2022 Update

All aspects of this strategy remain in effect. During the 2021-22 AY, 57% (934) cadets were enrolled in STEM majors; 43% (718) in non-STEM majors. Of 332 May 2022 graduates, 61% (201) received STEM degrees; 39% (131) received non-STEM degrees.

#15: Accreditation for the Department of Computer and Information Sciences

The renaming of the Computer Science (CS) program as the Computer and Information Sciences (CIS) program was undertaken to facilitate a curriculum that prepares graduates for careers influenced strongly by a firm understanding of the role of technology and its place in military and non-military career environments. A central goal of the Institute is to pursue discipline-specific accreditation from an outside agency, where available. The Civil, Mechanical, and Electrical and Computer Engineering departments are accredited by the Accreditation Board for Engineering and Technology (ABET). The Economics and

Business department is accredited by the Association to Advance Collegiate Schools of Business, International (AACSB). The Chemistry department is an American Chemical Society (ACS) – Approved program.

With the ongoing maturation of the Computer and Information Sciences Department, offering the Computer Science degree, the Institute plans to pursue ABET accreditation.

2022 Update

The CIS Department continues to work towards ABET accreditation. A new department head, with extensive experience in ABET accreditation, was hired to start in August 2022 who will evaluate the current CS curriculum against ABET accreditation standards and develop a plan forward.

#16: Commonwealth Cyber Fusion and Collegiate Cyber Cup Competition

VMI founded and has hosted the Commonwealth Cyber Fusion and Virginia Collegiate Cyber Cup Competition since 2017. Commonwealth Cyber Fusion is an invitation only event for colleges (Community, public, and private 4-year colleges) that are NSA/DHS Centers of Academic Excellence in Cyber Defense. The competition portion of the event was hosted by the Virginia Cyber Range.

This event has been co-hosted with Senator Mark Warner and the Cyber Range. It is designed to help build Virginia's cyber security workforce through collaboration with the participating institutions. It is designed to not only challenge the students through the competition portion hosted by the Virginia Cyber Range, but it also offers a job fair and panel discussion with employers eager to offer jobs and internships. By doing so, VMI helps advance the economic prosperity of the Commonwealth and optimize student success for work and life.

During the competition portion of the event, faculty from the colleges take part in a roundtable discussion on the state of cyber security education.

While we were unable to hold the event in 2021, planning has already begun to hold the 5th Annual Commonwealth Cyber Fusion on Feb. 25-26, 2022. We will know by June 30, 2021, whether the Commonwealth Cyber Initiative will join as a co-host of this event.

2022 Update

Commonwealth Cyber Fusion is an invitation-only event for the 23 Virginia colleges that are NSA/NHS designated National Centers of Academic Excellence (CAE) in Cyber Defense. The two-day event included a job fair, speakers and panels, a networking dinner, and half-day Capture-the-Flag style cyber competition designed and hosted by the Virginia Cyber Range. Our co-hosts for this event are Senator Mark Warner, the Virginia Cyber Range, and new this year, the Commonwealth Cyber Initiative, which provided \$20,000 to underwrite the costs of this event. To prevent any barriers to participation, hotel rooms are provided at no cost to the participating schools and students. This year's event, held February 25- 26, hosted 130 students, plus their faculty advisors. A professional photographer was on-site to provide free headshots to all attendees

Faculty from other colleges attending the event provided feedback that included comments such as "I would opine that the event is very well run as a fast-paced, activity filled, and productive opportunity for CAE schools to collaborate in cyber" and "Best competition that I have seen. very well organized and

places the student/skills as the focus." Typical students comments were "I just want to mention that this was a complete success and that I am very thankful to have been given the opportunity to participate in this;" "The most valuable aspect of the event was exposure to the information and people I did not have previously;" "The whole event was spectacular- I cannot chose only one thing, I took away a lot;" and "Seeing the concepts I have been studying be applied by very impressive people I hope to collaborate with one day...The confidence gained from the experience. It sparked a deeper interest in becoming an expert in the field for more reasons than getting a high-paying job."

#18: Year-Round Facility Use

VMI Post

The VMI Post is a relatively small campus in which all 1,700 cadets live in residence. The Barracks provides housing and support services for all cadets. The Mess Hall provides food service to cadets, who are required to eat there. Eight academic buildings, including Preston Library, provide faculty and administrative support offices, instructional and research laboratories, classrooms, cadet study areas, and spaces for other academic support functions. In addition, administrative offices are located in the main administrative building and a few smaller structures such as converted residences. The Post also includes athletic program venues and offices, a conference center, and a physical plant.

Academic Program

The VMI academic program schedule includes two regular semesters, each lasting 15 weeks. During the regular semesters, class enrollment is limited to VMI cadets and, by special agreement, Washington & Lee University students. VMI's ROTC programs also enroll students from Mary Baldwin College, Southern Virginia University, and Washington & Lee University. VMI also offers two summer semesters each lasting five weeks. Summer sessions are open enrollment and serve the educational interests of Rockbridge County and surrounding area residents; enrollment averages approximately 600. In addition to summer session, a Summer Transition Program (STP) lasting four weeks is available for incoming freshmen. Approximately 40-45 percent of the incoming freshman class of about 500 participate in STP. All STP students are required to live in Barracks and eat in the Mess Hall.

Academic and Extracurricular Program Demands

During the summer, VMI hosts numerous academic and athletic camps, conferences and symposia, and the College Orientation Workshop (COW), a program to encourage high school-age minority males to attend college. Faculty and cadets are also on Post conducting research. Incoming freshmen participating in initial military training exercises, and the upper-class cadets who conduct the training, return from summer break one to two weeks early thereby extending their fall semester. Faculty use the winter, spring, and Thanksgiving breaks as uninterrupted periods for focused scholarly work and research. Consequently, VMI facilities are in constant year-round use. In addition, more than half of VMI cadets are NCAA or club sport athletes, and all cadets participate in ROTC programs, which impose additional physical training requirements on cadets. This interest in and emphasis on athletics and physical fitness creates a heavy demand on practice and competition venues.

Cadet Life

The unique nature of cadet life ensures high use of VMI facilities. All cadets live and eat on Post and are subject to a demanding schedule resulting in all facilities operating at or near full capacity. Facilities use is expected to remain substantial, with some increasing burden, into the foreseeable future.

2022 Update

Year-round use of VMI facilities remains substantial. Facility use during the regular academic year remains unchanged as the demands of the academic program, extracurricular programs and cadet life have remained unchanged. VMI continues to offer a summer program and the Summer Transition Program for new cadets. Other summer programs, such as athletic camps (resident and day camps), conferences and symposia, the Summer Undergraduate Research Institute, and the College Orientation Workshop for atrisk youth, remain active.

#19: Shared Resources

VMI is involved in several resource-sharing programs with other colleges and universities in the region.

Collaborative Programs

VMI and Washington & Lee University (WLU), which share a common boundary, maintain an agreement to allow their students to enroll in courses at both institutions. This is particularly attractive to WLU students seeking engineering courses, and to VMI cadets seeking foreign language courses not offered at VMI. VMI offers all four ROTC programs, and students enrolled at Mary Baldwin College, Southern Virginia University, and WLU may participate in ROTC at VMI through cross-enrollment agreements. The ROTC programs are important to these students because they provide substantial scholarship opportunities to help them meet tuition and other educational expenses. VMI waives tuition for non-VMI students who enroll in a VMI-sponsored ROTC program. About 50 non-VMI students typically enroll in VMI ROTC programs each year.

Engineering Graduate Program Research Agreements

VMI has agreements with the Virginia Commonwealth University (VCU) and Virginia Tech engineering departments. These agreements provide for shared laboratory facilities and internship and research opportunities for undergraduate and graduate students.

Shepherd Higher Education Consortium on Poverty

VMI was one of the nine founding institutions of the Shepherd Higher Education Consortium on Poverty - a national consortium to develop a curriculum and internship experiences that allow students to understand issues related to poverty in the United States. All partner schools promote civic engagement and research that improves local communities. VMI and WLU each offer classes consistent with the goals of the consortium with enrollment open to students from both institutions. The Consortium has continued to grow, and currently includes twenty-five member schools.

Open Enrollment Summer Semesters

The two VMI summer semesters are open enrollment and serve the educational interests of Rockbridge County and surrounding area residents as well as cadets. Total enrollment is approximately 600, of which about four percent are not VMI cadets.

Transfer Credit

VMI accepts International Baccalaureate, Advanced Placement and Cambridge Examination credits and transfer credit from other accredited colleges and universities. The Institute also allows cadets who are within 10 credits of completing their VMI degree requirements to do so at other institutions. These policies serve the needs of cadets, allowing them to seek a wider range of course offerings by effectively expanding VMI's academic resources.

VMI Preston Library Programs

VMI's Preston Library collaborates at the local, regional, state, and national levels in multiple ways. It maintains reciprocal borrowing agreements with local institutions. It has been a member of VIVA, the Virtual Library of Virginia, since 1994, which expands access to materials and provides consortia purchasing benefits. Preston Library is also a member of the Virginia Library Association, OCLC (the world's largest library cooperative) and Lyrasis (the largest regional library membership organization), and it participates as a selective depository library in the Federal Depository Library Program of the Government Publishing Office. The VMI Archives is a member of Virginia Heritage, which provides a consolidated database of finding aids for manuscripts and archival materials housed in Virginia and West Virginia.

2022 Update

A new Library Director was hired in 2021-22 AY who spent much of the year assessing/reviewing all facets of library operation. He is making strategic adjustments in personnel responsibilities and financial resource allocation to better position the library to serve 21st century patron needs. All other aspects of this strategy remain in effect.

Section C. In-state Undergraduate Tuition and Fee Increase Plans: Provide information about the assumptions used to develop tuition and fee information the institution provided in the Excel workbook Part 1. The tuition and fee charges for in-state undergraduate students should reflect the institution's estimate of reasonable and necessary charges to students based on the institution's mission, market capacity and other factors.

RESPONSE:

VMI's Tuition and Fees assume no new State general fund support in either FY 23 or FY 24. The rates also assume a steady enrollment and in-state and out-of-state mix. The tuition and fees are set to cover estimated inflationary cost increases in area such as utilities, non-personnel operations, fringe benefits, and also cover planned targeted salary increases for current faculty, administrative staff, and classified employees to attract and retain a qualified workforce to support the overall mission of the Institute. Another contributing factor is the growth in tuition and fee waivers as a result of an expanded Virginia Military Survivors and Dependent Education Program (VMSDEP). The amount of tuition and fees waived under this program has increased from approximately \$93,000 in FY 18 to over \$726,000 in FY 21. It is not readily

determinable how much more this program may grow. Continued growth in this unfunded program will likely require larger increases in tuition and fees to make up for these waived revenues.

Section D. Tuition and Other Nongeneral Fund (NGF) Revenue: Provide information about factors that went into the calculations of projected revenue, including how stimulus funds may mitigate tuition increases.

RESPONSE:

The Tuition and other Nongeneral Fund Revenues were calculated based on projected steady enrollments. Other NGF fees reflect increases of approximately three percent each year to cover inflationary operating cost increases. Because VMI's enrollment is steady, unavoidable cost increases must be primarily funded through tuition and fee increases rather than growth in the size of the Corps. The projected stimulus funds allowed VMI to reduce planned contingency budgets which otherwise would have been budgeted to cover future COVID related costs. This, in turn, reduced the need for tuition increases to fund additional contingency costs; however, most of the institutional stimulus funds are anticipated to be fully expended by the end of FY 22.

Section E. Other Budget Items: This section includes any other budget items for which the institution wishes to provide detail. Descriptions of each of these items should be one-half page or less.

RESPONSE:

N/A

Section F. Enrollment Projections: Include in this section information about how your institution developed its enrollment projections, whether your institution is concerned about future enrollment trends, and, if so, what planning is underway to address this concern. How have enrollment plans been impacted by the pandemic? For example, does your institution plan on enrolling more online students?

RESPONSE:

Enrollment projections were developed using historical trend data along with future estimates. VMI has no immediate plans to increase the size of the Corps nor to make any significant changes to the in-state and out-of-state mix of cadets. The Vision 2039 goal is to have an average fall/spring Corps size of approximately 1,625 cadets with 55 percent in-state and 45 percent out-of-state. Due to strong demand, recent average Corps size has been higher with a FY 2021 average of 1,663. The FY 2021 actual in-state and out-of-state mix was 64 percent in-state and 36 percent out-of-state. Attaining 45 percent out-of-state enrollment has been challenging in recent years for several reasons: increased demand from qualified instate applicants, financial challenges due to higher out-of-state tuition despite significant VMI-provided financial aid, and continued competition from federal academies and quality schools in applicants' home states.

2022 Update

At the time of this submission, the Institute anticipates a significant reduction in enrollment for the incoming new cadet class in AY 2022-2023. Current figures indicate that enrollment could be down as much as 100 cadets from the typical number of 500 to approximately 400.

The approach to address the decline in application and yield numbers for this cycle involves all aspects of the admissions process. Strategies to address the shortfall include addressing the staffing in the Admissions Office, offering the full complement of Open Houses that were reduced due to COVID

concerns, enhance the Institute's digital marketing presence, and explore the possibility of becoming a member of the *Common Application* to market VMI to a wider audience.

In order to determine the reasons for candidates' decisions, the Admissions office does an annual *Matriculate and a Non-Matriculate Survey* through the Office of Institutional Research to collect data on what drives individual choices. In August, another survey of the full group of cancellations is planned to collect more extensive data. In addition, the Institute is migrating to a new Student Web Interface platform which is more modern and streamlined and has more mobile friendly characteristics which will facilitate the on-line admissions application process.

Section G. Programs and Instructional Sites: Provide information on any new academic programs, including credentials and certificates, new instructional sites, new schools, or mergers supported by all types of funding, that the institutions will be undertaking during the six-year period. Note that as part of the revised SCHEV program approval process, institutions will be asked to indicate if a proposed new program was included in its six-year plan. Also, provide information on plans to discontinue any programs.

RESPONSE:

The Institute has no plans for new programs or new instructional sites.

Section H. Financial Aid: Discuss plans for providing financial aid, not including stimulus funds, to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families, including the projected mix of grants and loans. Virginia's definitions of low-income and middle-income are based on HHS Poverty Guidelines. A table that outlines the HHS guidelines and the definitions is attached.

RESPONSE:

Award Package Guidelines

Virginia Military Institute's 2022-23 AY "packaging guidelines" funds 65-70 percent of the demonstrated need for non-Virginia cadets and works to meet 100 percent of the need for Virginia cadets who meet the March 1st application deadline and as funds are available. For both groups, loans (Federal Direct – Subsidized) are used to meet need. The maximum amount of subsidized loan is based on the cadet's year in college (\$3,500 1st year, \$4,500 2nd year, and \$5,500 thereafter up to the aggregate limit for dependent students of \$31,000, \$23,000 of which may be subsidized or need-based). Packaging guidelines are reviewed annually to ensure consistency in financial aid awards, to review compliance with policies and procedures, and to mitigate, to the extent possible, tuition and fee increases.

Low-Income and Middle-Income Families

VMI uses SCHEV guidelines (HHS website, https://aspe.hhs.gov/poverty-guidelines) which, for 2022, define low-income families as a family of four with total family income of \$55,500 or less and middle-income as those with family income of \$55,501 to \$111,000. The low-income threshold represents less than 200 percent of the Virginia poverty level for a family of four while middle-income represents 200 percent up to 400 percent of the poverty level for a family of four. High-income families are defined as those with total family income greater than \$111,001 for a family of four which is 400 percent greater than the Virginia poverty level.

Low-income	Total family income less than/equal to \$55,500
Middle-income	Total family income between \$55,501 and \$111,000

High-Income Total family income greater than \$111,001

For the 2021-22 AY, 728 of the 1,658 Virginia cadets enrolled applied for financial aid with 128 (17.6% of 728) reporting total family income of \$55,500 or less and defined as low-income; another 183 (25.1% of 728) reported total family income of \$55,501 to \$111,000 and are defined as middle-income; the remaining 417 who applied for aid reported total family income above \$111,001.

Steps to Mitigate Impact of Tuition and Fee Increases

VMI takes multiple steps to mitigate the impact of tuition and fee increases on low- and middle-income cadets. In additional to Federal and State need-based aid programs, VMI provides significant institutional financial resources for Virginia cadets and institutional aid funds the majority of need-based scholarship aid provided to all cadets. As in the past, VMI continues to use a significant portion of its endowment funds to provide assistance to cadets who without such aid may not be able to attend the Institute.

For the 2021-22 AY, 500 Virginia cadets demonstrated financial need or 48 percent of the Virginia cadets enrolled. Excluding Federal, State, VA Benefits, Waivers, and ROTC Scholarships, the 500 Virginia cadets who demonstrated need in 2021-22 received almost \$4.1 million of institutional financial assistance to help defray their costs.

Additionally, of those cadets graduating during the 2021-22 AY, 57.5% had used Federal student loans during their cadetship with an average indebtedness of \$19,377

Use of Tuition Revenue for Financial Aid

VMI uses a portion of its tuition revenue to fund need–based financial aid. In the 2021-22 AY, tuition revenue used for need-based aid totaled \$929,700 for in-state cadets and \$1,902,320 for out-of-state cadets for a total of \$2,832,021. The total aid awarded represented 8.5 percent of total tuition revenue.

Tuition revenue used for in-state cadets is much less than for out-of-state cadets due primarily to the following factors:

- 1. The State provides need-based aid for in-state cadets (\$1,118,218 in FY 22).
- 2. VMI has significant private endowments that provide scholarships to needy in-state cadets.
- 3. Approximately 40-45 percent of in-state cadets qualify for need-based aid versus 60-65 percent of outof-state cadets.
- Out-of-state cadet tuition is almost four times greater (3.93) than in-state tuition (\$34,436 versus \$9,782 for FY 22); out-of-state tuition revenue comprised 70 percent of the total E&G tuition revenue in FY 22 although out-of-state cadets comprised only 37 percent of the total Corps.

Out-of-state cadet tuition in FY 22 represented about 166 percent of the total cost of education, significantly exceeding the State minimum requirement of 100 percent. In-state tuition represented only about 42 percent of the total cost of education. Tuition revenue from out-of-state cadets has helped to mitigate the shortfall in State general funds in meeting its goal of funding 67 percent of the cost of education for in-state cadets. Out-of-state tuition revenue is significantly helping to minimize in-state tuition increases that would otherwise be necessary to make up this shortfall in State general funds.

To attract and retain out-of-state cadets, it is important that VMI provide sufficient financial aid to help meet their demonstrated need. VMI strives to meet 65-70 percent of this need and the use of tuition revenue is essential in doing so.

Section I. Capital Outlay: Discuss the impact, if any, that the pandemic has had on capital planning, such as decreasing the need for space or other aspects. Provide information on your institution's main Education and General Programs capital outlay projects, including new construction as well as renovations that might be proposed over the Six-Year Plan period that could have a significant impact on strategies, funding, student charges, or current square footage. Do not include projects for which construction (not planning) funding has been appropriated. *Special Note: The requested information is for discussion purposes only and inclusion of this information in the plans does not signify approval of the projects.*

RESPONSE:

The pandemic did not have any significant impact on the VMI Capital Improvement Program. Short-term accommodations were made to VMI's unique leadership and educational programs to respond to the pandemic; however, the short-term accommodations are being eliminated as VMI returns to pre-pandemic operations and tempo.

Construct Center for Leadership and Ethics Phase 2 (Leadership Development Facility)

This project constructs a new facility adjacent to the existing Marshall Hall (Center for Leadership and Ethics). The project will bring together portions of the Leadership Development Program and the VMI Museum in a new facility, allowing them to share resources, collaborate on programming, and grow the VMI leadership development experience for leaders at all levels. The facility will include learning classrooms and auditorium, group collaboration areas, museum display spaces, interactive learning opportunities, storage space, office space, catering space, and general support space. This project has been authorized for detailed planning.

Construct Parking Structure

This project constructs a new 425-car five level parking structure. The Corps has grown from 1,300 to 1,700. The number of VMI faculty and staff has grown as well. Participants and spectators have grown at on-Post events in proportion to the growth of the Corps. As a result, the need for parking across Post has increased significantly.

Repair Barracks Windows and Doors

The project refurbishes 793 exterior windows and window frames in New and Old Barracks. The project also refurbishes or replaces 411 exterior doors, door frames, transoms, and locksets including all cadet room doors in New and Old Barracks. A comprehensive architectural survey was completed in 2007. The survey noted that most windows had deteriorated to a state in which major repairs or replacement was needed. A select number of "the worst first" windows were renovated through smaller non-capital projects. A larger comprehensive project is required to prevent total failure of the window systems. Exterior doors are also aging and require replacement with installation of new electronic lock sets.

Moody Hall Construction

Built in 1969, Moody Hall is home to the VMI Alumni Association and is heavily used by visitors to the Post. The building is also used for educational and administrative meetings and conferences. Given its

heavy use as a multi-purpose facility, the building and associated infrastructure systems are aging. Water infiltration is a constant concern and is impacting the building's structural integrity. While repairs to the mechanical and electrical systems have been made over the years, it is time for complete replacement of the building infrastructure systems. This project will expand the building to meet current program requirements, bring the building up to current code requirements, and will completely replace the building infrastructure systems.

Section J. Restructuring: Provide information about any plans your institution has to seek an increased level of authority, relief from administrative or operational requirements, or renegotiation of existing management agreements.

RESPONSE:

VMI continues to enjoy and benefit from its Level 2 Restructuring authority and has no immediate plans to seek increased levels of authority.

Section K. Evaluation of Previous Six-Year Plan: Briefly summarize progress made in strategies identified in your institution's previous six-year plan. Note how additional general fund support and reallocations were used to further the strategies.

RESPONSE:

Increase T&R Faculty Salaries – 2021 Update

Since establishing the goal of raising VMI's average faculty salary into the top five amongst Virginia public colleges and universities in fall 2016, approximately \$2 million has been applied to faculty salaries. Of this amount, approximately \$900K has been from privately funded distinguished chairs. VMI's average faculty salary remains ranked 7th amongst the 14 Virginia public colleges and universities according to the 2020-21 American Association of University Professors Faculty Salary Survey. For FY 2022, VMI will provide all faculty with a five percent, across-the-board salary increase. In addition, approximately \$320K will be applied to faculty salaries for promotions, meritorious chair supplements, and adjustments towards Compensation Model target salaries.

"Right-Sizing" – 2021 Update

The Right-Size Studies identified a need for 152 full-time faculty positions to support a Corps of 1,700, and as of FY21, we have reached that level. We continue to monitor the need for, and the correct distribution of, additional faculty positions. However, having largely achieved the original goal of this strategy, we are removing it from our Six-Year Plan.

Financial Aid – 2021 Update

Financial aid resources provided to "needy" in-state cadets included \$1,118,218 of State General Funds (VSFAP-Virginia State Financial Aid Program) in the 2020-21 AY; the total projected for the 2021-22 AY will be \$1,144,918

Of the 220 in-state cadets who graduated in May 2021, 127 or 57.7 percent graduated with Federal loans (Direct Subsidized/Unsubsidized). Their average debt was \$20,752.

Math that Matters: Contextualizing Mathematics in a Computational World – 2021 Update

The implementation the Math that Matters Quality Enhancement Plan (QEP) as a two-course, Core Curriculum sequence (MA 101 and MA 102) continues to progress as planned, even amidst difficulties posed by the pandemic. Each semester, approximately 15 sections of MA 101 & 102 are taught, reaching approximately 300 cadets. The course materials have undergone revision in accordance with cadet and instructor feedback, and a textbook for the course is under development. Of the 12 full-time and 4 regular, part-time faculty in the Applied Mathematics (AM) Department, 9 full-time and 3 part-time faculty have taught at least one section of MA 101/102, demonstrating broad support across the AM faculty. Training sessions are conducted each fall semester for the faculty who are teaching MA 101/102 for the first time that year, and weekly meetings are held for all MA 101/102 instructors to ensure commonality, discuss teaching strategies, and for the QEP Director to receive real-time feedback. During the 2020-21 academic year, all sections of MA 101/102 were taught in an all-virtual environment because of the pandemic, and important lessons were learned that will continue to the improve the course going forward. Assessments have been taken to study the downstream impacts of the course and the new teaching methodology, including a survey given to all faculty of departments served by the Math That Matters sequence, along with focus group meetings with seniors. Going forward, emphasis will be placed on a rigorous analysis of assessment data for the final QEP report and for peer-reviewed publications.

Core Course in "American Civics" – 2021 Update

The pilot course, HI 300 - American Constitutional History, was taught in the fall of 2020. The course will be offered again in fall 2021, incorporating lessons learned from the first pilot, in order to finalize the curriculum and proceed with final approval by the Academic Board as an addition to the Core Curriculum. Based on the evolution of this course during its development, this strategy has been re-named "Core Course in 'American Civics'." In addition, the Institute secured a private endowment to fund a new Chair in American Constitutional History, who will be responsible for oversight of the course.

Re-Imagination of Core Leadership Course – 2021 Update

PS 344 - Leadership in Organizations, a required, 3-credit hour course in the theory and practice of leadership, has been redesigned with an increased emphasis on practical leadership experience, and it has been re-designated as LEAD 344. The Director of the Center for Leadership and Ethics has been assigned as the course director, and with the establishment of the Leadership Fellows program, the course is no longer solely taught by psychology faculty. Leadership Fellows can be Teaching and Research Faculty from other academic disciplines or Administrative and Professional Faculty with extensive leadership experience. With the additional general fund support received starting in FY22, we are well supported, in terms of personnel, in the delivery of the Core Leadership Course, and we can shift the focus to other areas of Leadership Education in a new, expanded strategy in our Six-Year Plan.

VMI's Center for Undergraduate Research (V-CUR) - 2021 Update

All aspects of this strategy remain in effect predominantly through private funding, which has supported V-CUR for 20 years. While V-CUR will continue, the private funding source is stable, and no additional general fund support is required; therefore, we are removing it as a strategy in our Six-Year Plan.

Math Education and Resource Center (MERC) – 2021 Update

The Mathematics Education and Resource Center (MERC) and the Open Math Lab (OML) continue to support cadets in their mathematics coursework. Starting in FY22, the cost of OML tutors will be covered through general fund support, which removes our reliance on private funds and guarantees the continuation of this valuable academic support service to cadets in perpetuity. No additional general fund support is required to support the MERC; therefore, we are removing it as a strategy in our Six-Year Plan.

Technology Enhanced Instruction – 2021 Update

In FY 2020, VMI continued its efforts to improve laboratories in order to enrich the opportunities for VMI cadets and faculty to engage in innovative educational experiences. Based on the recommendations of the Committee for Enhanced Learning Environments, approximately \$404K in laboratory equipment was purchased using a combination of State Equipment Trust Funding, local funds, and reallocation of E&G funds.

The COVID-19 pandemic necessitated a combination of in person and remote learning courses. Web cameras were installed in all technology enhanced classrooms along with numerous higher resolution cameras provided to faculty to accommodate distance learning. Cadets quarantined in contracted hotels were provided "hotspots" in cases where the hotel wireless network was inadequate. The Information Technology Department provided laptop computers to cadets attending classes remotely who did not own one.

Military Commissioning – 2021 Update

Given the Institute's unique mission, this strategy remains central to the VMI experience. Commissioning numbers remain consistently above 50 percent for graduating classes with few exceptions. The goal as established in Vision 2039 remains at 70 percent commissioning.

"New Directions" Grant Program – 2021 Update

Since the inception of the "New Directions" program in 2011, 21 awards have been made totaling over \$1 million. These funds have been used to purchase equipment to be used in new areas of research, and to support new academic initiatives. All aspects of this strategy remain in effect with stable, private funding support. No additional general fund support is required; therefore, we are removing this as a strategy in our Six-Year Plan.

Engineering Graduate Program Research Agreements – 2021 Update

The efforts with the VCU College of Engineering and Virginia Tech have been maintained and are currently in force. While we intend to continue these relationships, as they support our strategies for increasing STEM majors and shared resources, no additional general fund support is required. Therefore, we are removing this as a separate strategy in our Six-Year Plan.

Articulation Agreements – 2021 Update

VMI has 13 current agreements with Virginia universities including the two Engineering Graduate Program Research Agreements. While all aspects of this strategy will remain in effect with stable, no additional general fund support is required; therefore, we are removing this as a strategy in our Six-Year Plan.

Increasing STEM Majors – 2021 Update

All aspects of this strategy remain in effect. Based on fall 2020 enrollment figures, the emphasis on increasing STEM majors continues to show positive results as 58 percent of cadets were enrolled in STEM majors. This is consistent with our five-year average for 59 percent of cadets enrolled in STEM majors. At approximately 60 percent STEM majors, we are likely at, or close to, our maximum STEM production. Therefore, we are changing the name of this strategy to "Emphasizing STEM Majors" as we will continue to invest in our already strong STEM programs in order to maintain our current STEM/non-STEM ratio.

Accreditation for the Department of Computer and Information Sciences – 2021 Update

Computer and Information Sciences department successfully completed an ABET Readiness Review of its Computer Science degree program during the 20-21 AY, and the program remains on track in its goal of obtaining ABET accreditation.

Learning Services Program – 2021 Update

The Learning Services Program continues to support cadets to empower them with the resources to achieve their educational goals. Starting in FY22, the cost of cadet and faculty study session facilitators will be covered through general fund support, which removes our reliance on private funds and guarantees the continuation of this valuable academic support service to cadets in perpetuity. No additional general fund support is required to support the MERC; therefore, we are removing it as a strategy in our Six-Year Plan.

Year-Round Facility Use – 2021 Update

The COVID-19 pandemic necessitated a temporary shift to on-line education and widespread telecommuting in spring 2020. As we gradually return to pre-pandemic operations, year-round use of VMI facilities remains substantial. Facility use during the regular academic year remains unchanged as the demands of the academic program, extracurricular programs and cadet life have remained unchanged. VMI continues to offer a summer program and the Summer Transition Program for new cadets. Other summer programs, such as athletic camps, conferences and symposia, the Summer Undergraduate Research Institute, and the College Orientation Workshop for at-risk youth, remain active, or are expected to return to pre-pandemic levels of activity.

Shared Resources – 2021 Update

All aspects of this strategy remain in effect.

Increased Degree Completion for Virginia Residents – 2021 Update

VMI has reached a steady-state in terms of addressing this initiative so we are removing it as a strategy in the Six-Year Plan.

Commonwealth Cyber Fusion and Collegiate Cyber Cup Competition – 2021 Update

The event has grown from 11 colleges participating to 20 colleges in 2020, when 150 college students from across the Commonwealth participated.

Section L. Diversity, Equity, and Inclusion (DEI) Strategic Plan: Provide an update on the completion status of your institution's plan that is being coordinated with the Governor's Director of Diversity, Equity,

and Inclusion. If a copy of the plan is available, please include it when your institution submits its initial plan. If a copy of the plan is not available for July 1 or if changes are made, please provide a copy with your institution's final plan submission on October 1.

RESPONSE:

VMI is completing the Diversity, Equity, and Inclusion (DEI) Strategic Plan, titled "VMI Inclusive Excellence, One Virginia Strategic Plan." The Institute has been granted an extension on the 1 July due date but will work to complete the plan as quickly as possible after its new Chief Diversity Officer arrives on Post and has an opportunity to provide input.

Section M. Economic Development Annual Report: Provide a copy of any report your institution has produced about its economic development contributions.

RESPONSE:

VMI's contribution to local and regional economic development can be seen along two major axes. The first is in its commitment to produce graduates who are in demand for their skills and leadership abilities. Secondly, VMI's position as a significant employer in the local community drives a series of programs which provide outreach to local and regional elementary and secondary students as well as programs which impact citizens and educators from across the Commonwealth.

Cyber security is one of the nation's and Commonwealth's top priorities. In order for Virginia to continue leading in this rapidly evolving space, it needs to develop a sustainable talent pipeline capable of providing skilled, industry-ready workers to meet the increasing demand. VMI transformed its Computer Science Program into a Computer and Information Sciences Program and established a minor in cyber security, described in the "Emphasizing STEM Majors" strategy. In addition, VMI plans to pursue ABET accreditation for the Computer and Information Sciences Department as described in the "Accreditation for the Department of Computer and Information Sciences" strategy. Formal accreditation will give graduate schools and future employers of graduates of the Department assurance regarding the rigor and relevance of their classes.

VMI has hosted the Commonwealth Cyber Fusion event since 2017. This cyber security competition typically brings 15 college students together for a cyber job fair, keynote speaker, and panel discussions in addition to a "Jeopardy" style team challenge. In 2020, VMI hosted a specialized Cyber Fusion event featuring cyber students from all six Senior Military Colleges. In addition to Cyber Fusion the CIS Department conducted a week-long workshop for regional High School students entitled "Cyber Smart". Students heard from cyber experts, learned about cybersecurity attacks and defense, developed skills to detect, identify, and mitigate attacks, and worked to analyze problems and build solutions in the cyber realm.

In an effort to support broad interest in STEM fields, VMI supports several outreach programs targeted at Virginia students who may find a career in math and science. VMI's Applied Mathematics department hosts two separate American Mathematics Competitions targeting students from 7th- 12th grades. This year over 725 students participated in the competitions. VMI also hosted the Shenandoah Valley Math Modeling Challenge with 13 college students from Appalachian State, Virginia Commonwealth University, VMI, and University of Virginia.

Reaching more broadly, VMI's Center for Leadership and Ethics hosted a series of annual STEM Education Conferences. In 2019, 150 educators and administrators from Virginia's elementary and middle schools joined to share ideas, best practices, and educational opportunities. Returning to their respective

schools, the ideas and inspiration shared at the STEM Education Conference impacted over 3,000 students in Virginia. In 2020, VMI's Center for Leadership and Ethics hosted a series of virtual "STEM Shorts", reaching back to some of the best keynote speaker presentations from past conferences to inspire educators during the academic year.

In addition to support of current students of all ages, VMI has also hosted the Environment Virginia Symposium for many years, with an average attendance of nearly 600 to enjoy the mutual exchange of ideas, best practices, and knowledge. In addition to Continuing Education opportunities and networking, the Symposium offers career and recruitment opportunities for new and emerging "green" jobs throughout the Commonwealth. In 2021, the conference was held virtually, with Governor Northam as the keynote speaker and a moderated interview with Secretary of Natural Resources Matthew Strickler and Secretary of Agriculture and Forestry Bettina Ring. In addition, retired Rear Admiral Ann Phillips was the plenary speaker, on the topic of the Virginia Coastal Resilience Master Planning Framework. Plans are already being made for an in-person event in 2022 with networking and career opportunities sessions.

VMI's Center for Leadership and Ethics also provides faculty and staff core professional development leadership training its employees to help them in their career advancement, from new hires to supervisor training to "emerging leaders."

Section N. Freedom of Expression and Inquiry, Free Speech, Academic Freedom, and Diversity of Thought

RESPONSE:

VMI is committed to free speech and expression and to the use of its facilities and spaces to enhance the cultural experience of its cadets, employees, and members of the local community. VMI has established reasonable time, place, and manner restrictions and rules for events on post concerning constitutionally protected speech. This policy will be applied and enforced in a view point-neutral manner. VMI's policies concerning constitutionally protected speech and the process to report incidents of disruption of such constitutionally protected speech can be found in General Order 72 and General Order 79.

General Order 72 *Facilities Utilization, Events, and Speech* applies to the use of Institute property for events and other gatherings by VMI cadets, employees, the alumni agencies, the George C. Marshall Foundation, and non-affiliated individuals. This policy states that VMI shall not abridge the constitutional freedom of any individual, including cadets, employees, and invited guests, to speak on Post, except as otherwise permitted by the First Amendment. It also defines types of events and details the specific approval/permitting requirements for various types of events.

General Order 79 *Distinguished Visitor and Speaker Policy* establishes standard procedures and guidelines for invitation and approval of distinguished guests and speakers. This policy will be applied equally and without regard to political affiliation of a distinguished visitor or speaker and except as otherwise permitted by the First Amendment of the United States Constitution, VMI will not abridge the freedom of invited guests to speak on Post.

VMI publishes and provides access to policies governing free speech as outlined in the Institute General Orders number 72 and 79. There is no specific annual training on these or other general orders beyond orientation on the access, use and applicability of the General Orders for all employees, cadets, and volunteers. All employees of VMI, including those responsible for the discipline or education of enrolled cadets, are expected to comply with these policies. In addition, *The Regulation For The Order and*

Discipline of the VMI Corps of Cadets includes a chapter on constitutionally protected speech and provides specific examples of speech that is not protected such as libel and slander, threats, etc.