

2019 SIX-YEAR PLAN: NARRATIVE INSTITUTION: GEORGE MASON UNIVERSITY

OVERVIEW:

The totality of the six-year plan should describe the institution's goals as they relate to goals of 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 around four priority areas. 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.*

Section A. 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 areas: (1) access and enrollment, particularly for underrepresented students; (2) retention, completion and time to degree; (3) affordability and funding; and (4) workforce alignment and retention of graduates. 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.

RESPONSE: George Mason University has grown rapidly over the last half-century to become the largest and most diverse public research university in Virginia. Our commitment to providing access to excellence has positioned Mason as a leader in the commonwealth and an innovation engine in Northern Virginia.

Mason enrolls nearly 38,000 students from all 50 states and 130 countries on three campuses in Northern Virginia and its international campus in Songdo, Korea. Students choose from 82 undergraduate programs and 129 graduate programs (including law) in 10 colleges and schools.

Our success has greatly benefited the commonwealth. Mason has driven 64 percent of net public university enrollment growth in Virginia between 2010 and 2018. We are experiencing record enrollments and graduating classes. Many of our graduates live and work in Northern Virginia, adding to the vibrancy and economic success of the region.

Furthermore, Mason's commitment to providing pathways to underserved communities, through initiatives such as our Early Identification Program and the ADVANCE partnership, have created greater access for students from a broad range of socioeconomic and demographic backgrounds, helping to diversify the state's talent pool, which results in a diversified workforce for Virginia employers.

An important factor in our success has been our ability to deliver value to our students. Mason's tuition has the lowest among Virginia's Tier-1 research universities—our price point is 35 percent below the closest peer. Mason exceeds national graduation rates regardless of ethnicity or economic status. Thirty-six percent of Mason students are first generation, and twenty-nine percent of Mason students qualify for Pell Grants. Our graduates earn among the highest starting salaries of graduates from Virginia public universities, while our student loan default rate of 2 percent is among the lowest in the nation.

Proud as we are of these achievements, this path is precarious and likely unsustainable without funding structures that serve to invest in this growth. We receive state funding that is nearly 40 percent lower than the average for Virginia doctoral universities. Faculty salaries are among the lowest in the state, particularly when factoring in the cost of living in Northern Virginia.

It is critical that Mason continue to operate at this high level as our goals are closely aligned with the commonwealth's. Mason produces the state's largest number of graduates in highly-sought tech talent majors, a primary reason cited by Amazon in its decision to build its second headquarters in Northern Virginia. In the next decade we plan to triple the number of graduates in tech talent fields to meet the workforce demands of industry leaders and our partners in the community. Our plan allows us to continue to drive enrollment for the commonwealth, create pathways for our diverse talent pool and produce graduates who are engaged citizens, well-rounded scholars and prepared to act.

Strategy 1. Provide Affordable Access for All Students: To provide an increasingly diverse student body with access to the enormous and tangible benefits of higher education, Mason must make available additional student aid resources at both undergraduate and graduate levels.

Despite our rapid growth, Mason is one of the lowest-funded institutions in the commonwealth. This means that Mason students receive fewer financial aid resources than their peers attending other Virginia public research institutions. Mason students should have comparable financial footing to students at other Virginia public doctoral institutions when pursuing their education.

Increase undergraduate student grant aid. Mason's primary recruiting market is among the most diverse in the commonwealth. As a result, the university draws a large number of talented in-state students from a lower income stratum--students who are challenged to cover their educational costs. Many begin their postsecondary education at Northern Virginia Community College and choose to live at home while attending college. A large number of these students work at off-campus jobs for considerably more than the recommended 10 hours per week, some enroll only part time, and many are less likely to use loans to pay for their education. As a result, these students often take longer to graduate. With additional grant support, we can assist these students and, in turn, provide a timely path to degree completion that enables them to enter their professional careers more quickly.

Many believe that because Fairfax County has a high per capita income, Mason students have less need for financial aid. In reality, this is not the case. In the Fall of 2017, 32.8% of Mason's undergraduate population were Pell-eligible students, high in comparison to the majority of our peer research universities in the commonwealth.

INSTITUTION	PERCENT OF FALL 2017 UNDERGRADUATES WHO RECEIVED PELL GRANTS
College of William & Mary	12.5%
University of Virginia	13.3%
Christopher Newport University	15.0%
Virginia Military Institute	15.3%
James Madison University	15.7%
Virginia Tech	16.0%
University of Mary Washington	21.6%
Longwood University	26.0%
Virginia Commonwealth University	29.4%
George Mason University	32.8%
Radford University	37.2%
Old Dominion University	42.2%

INSTITUTION	PERCENT OF FALL 2017 UNDERGRADUATES WHO RECEIVED PELL GRANTS
Norfolk State University	68.7%
Virginia State University	71.2%
Total Public Four-year Institutions	27.2%

Source: http://research.schev.edu/fair/pell_trend_rerport.asp

Mason’s goal is to reduce unmet financial need for undergraduate students by providing more grant funding. Mason is actively developing new strategies to meet the increasing financial needs of its students.

Increase graduate student grant aid. Mason graduate programs provide Virginia’s economy with a world-class professional workforce in high-demand areas such as STEM fields, information technology, cybersecurity, healthcare, education and business services. Employers consistently report unfilled vacancies, signaling increased shortages in these areas. Many students work part-time to complete their degrees, which significantly affect their time to degree. With additional grant support, we can assist these students and in turn provide a timely path to degree completion that enables them to enter the workforce sooner. Workforce demand and current shortages are likely to hamper the pace of commonwealth’s economic growth unless investment keeps pace with the need. Amazon’s arrival to Northern Virginia, while creating exciting job opportunities, will exacerbate the issue.

Currently, sources for graduate aid support are primarily from internal resources, generated in part from out-of-state enrollment growth. This approach is insufficient to meet the increasing demands for graduate education. Due to time and costs, many students are discouraged from entering graduate programs—essential for upgrading their professional skills for higher-pay, higher-growth positions. Therefore, additional state sources of funding are desperately needed and will help directly accelerate economic expansion in Virginia. The investment made in both undergraduate and graduate education will be a positive return on investment and take advantage of the current market demand for a diversified workforce. Another underlying premise for our additional student aid funding request is to obtain parity in financial aid resources in terms of per student funding.

Strategy 2. Enrollment Growth and Degree Awards for Virginia Undergraduate and Graduate Residents: George Mason University has excelled as one of the largest four-year public research institutions in the commonwealth, serving one of the largest populations of Pell grant recipients with no disparities in learning outcomes. The university has been and continues to be committed to the commonwealth’s higher education goals for enrollment growth, two-year transfers, and educational program development to support economic growth.

Despite rapid growth for in-state student enrollment, commonwealth investments in Mason have not kept pace, creating an unsustainable financial outlook and no incentives for continued growth (see table below). From a General Fund per in-state student FTE perspective, Mason’s per student allocation is only 74.3% of the average allocation available to the other public research universities.

To address the disparity in General Fund resources provided per in-state student to Virginia’s research universities, a base budget augmentation to Mason of approximately \$48.3 million is required. This base differential amount will continue to grow each year without an increase to address the disparity in funding. Mason will request base budget augmentation funding to close the current gap over the next six years.

**EDUCATIONAL AND GENERAL ESTIMATED FUNDING PER IN-STATE FTE STUDENT, FY 2019
General Fund, Tuition and Mandatory E&G Fees**

DOCTORAL INSTITUTIONS	GENERAL FUND FY 2019*	IN-STATE TUITION FY 2019	TOTAL
College of William & Mary	\$7,824	\$17,570	\$25,394
University of Virginia	8,694	14,148	22,842
Virginia Commonwealth Univ.	6,989	12,247	19,236
Virginia Tech	7,025	11,595	18,620
Old Dominion	6,395	7,047	13,442
Doctoral avg. excl. Mason	\$7,385	\$12,521	\$19,907
Mason	\$5,728	\$9,060	\$14,788
Mason % of average	77.6%	72.4%	74.3%

* General Fund estimate based on SCHEV FTE projection in the 2B report; numbers for all institutions will change with actual revised numbers.

For the next biennium, the university has set long-term enrollment growth targets. We plan to grow headcount enrollment to 45,115 by 2024-25, a 24.3% increase over 2017-18 enrollment of 36,297. During this same period, Mason plans to grow FTE enrollment to 37,993, a 24.6% increase. These numbers exclude additional potential growth in Tech Talent areas, which have been filed separately with the commonwealth.

Initiatives like the ADVANCE program with Northern Virginia Community College will support this additional enrollment. In addition to growing new enrollments, Mason continues to focus on improving retention, which also contributes to sustained growth.

While we remain committed to serving the commonwealth by providing educational opportunities for our citizens, we can no longer afford increasing in-state enrollments without base budget augmentation. If additional funding is not provided, Mason must explore other enrollment strategies or difficult tuition adjustments so that we can continue to provide a quality education for all students while maintaining our status as a top-tier research institution.

Strategy 3. Student Success Initiatives – Student Experience Redesign: To serve an increasingly diverse student population, Mason is going through a major enhancement of its student success and advising model that will increase academic success, enhance retention and strengthen four/six-year graduation rates. Another outcome of this redesign is to further instill a sense of belonging and pride among our students. The Student Experience Redesign initiative creates an integrated system of people, processes and technologies that support a comprehensive student care network. The planning process started in 2016 with six workstreams including an integrated coaching/advising system, physical and virtual student care network, and a constituency relationship management (CRM) system. Mason is now entering full implementation of the project and state funding is requested to supplemental major institutional investments.

As part of the initial planning process, Mason contracted with Blackboard Student Services to facilitate the identification of 1) the current state of Mason student experience; 2) the ideal Mason student experience; 3) the gaps between where Mason is right now and where it wants to be; and 4) a roadmap or recommendations regarding action items. Blackboard conducted 160 hours of on-campus research, reviewed 115 existing reports/datasets on the Mason student experience, and interviewed with more than 130 faculty, staff, and students.

The redesigned program focuses on the following areas: developing a self-service and 24/7 student support strategy; building a comprehensive student care network integrating coaching and advising; expanding

campus-wide student initiation experiences; implementing a lifecycle constituent relationship management platform; and building an institution-wide culture of service.

New students (freshman and transfer) will work with success coaches and academic advisors who will help them set and achieve academic, career, and personal goals, and connect them to campus and community resources. After the transition period, students will be advised primarily by their major advisors in the units, while continue to be supported by the success coaches.

Strategy 4. New and Enhanced Programs: New Programs

Mason Impact. Mason has embarked on an inquiry-based, experiential learning paradigm, Mason Impact which leads to graduates who are engaged citizens and well-rounded scholars who are prepared to act. Under Mason Impact, students incorporate high-impact experiential learning into their curricula through undergraduate research, social impact, global engagement, and entrepreneurship projects. Upon completion, they earn a notation on their transcripts. The program will be available to all students beginning in Fall 2019, with new minors and programs added as they are developed.

The program builds on our nationally-recognized undergraduate research program, which was initiated in 2011 as the focus of a SACSCOC Quality Enhancement Plan, and has involved more than 30,000 students in all aspects of undergraduate research.

Our goal is that by 2024, all graduating students will have completed at least one Mason Impact project, preparing them for the complex challenges they will face in the workplace and in their communities. We will expand existing programs and develop new Mason Impact curricular and co-curricular opportunities that emphasize student development through undergraduate research and creative activity, civic engagement, and entrepreneurship.

Mason is establishing an Office of Civic Engagement and Community Learning to launch new educational programming by summer 2020. We have dedicated funding and personnel to build existing successful courses and programs, and create new programs, for students and faculty to serve the region through innovative campus-community initiatives.

To offer these enhanced opportunities to our students, we have to support our faculty. In many cases, developing new experiences means that faculty have to adapt to new and unfamiliar teaching and learning strategies. We must offer workshops to support course re-development and buy-out time. These strategies require investment but have substantial long-term benefits. Direct support for student projects, including money for summer stipends, supplies and travel is also required for our population to have access to these opportunities. This support is aligned with Strategy 6 (Accessible Pathways), Strategy 7 (Support new faculty hires), Strategy 10 (Elevate Research), and Strategy 11 (Research of Consequence).

The Mason Core, our successful general education program, will be redesigned to meet the changing needs of our students and to continue to meet the standards set by SCHEV, SACSCOC, and other accrediting bodies. A faculty committee is reviewing the existing program and will make recommendations about changing both the types of courses required and the way in which they are taught (including more Mason Impact project-based learning, for example). A successful transition will require additional faculty development support.

Strategy 5. Online Degrees: Mason remains committed to the expansion of higher education through the continual exploration and development of innovative methods of delivering the George Mason University experience. The launch of the Online Virginia Network (OVN) exemplifies Mason's unflagging persistence to pursue and provide multiple pathways and delivery formats to better serve the needs of diverse and non-

traditional students. Mason also anticipates significant growth in the number of programs and overall enrollment in graduate programs through its partnership with Wiley Educational Services.

In 2016, Mason joined forces with Old Dominion University (ODU) and launched a shared web portal to deliver a selection of Mason and ODU online programs to one location, allowing busy adult learners to find and enroll in high-demand degree programs and finish their bachelor’s degrees online. With the inclusion of the Virginia Community College System and the fact that Mason has outpaced its first year’s enrollment targets, new targets **have** been adjusted to include

MASON ANNUAL GROWTH - PROJECTED

TIME PERIOD	+/-
Fall 2019-20 - Year 3	+300
Fall 2020-21 - Year 4	+335
Fall 2021-22 - Year 5	+375
Fall 2019-21 - Year 6	+415
Fall 2020-22 - Year 7	+515

These OVN enrollments in online programs at the undergraduate level are not reflected in the SCHEV 2B submission.

The Wiley Educational Services partnership has produced remarkable results in its first year of operating and is expected to produce enrollment growth in existing, as well as new, programs for years to come:

**Wiley Forecast - Based on Existing Programs
(New Starts)**



Given external partnerships and an appropriate level of state investments, Mason is poised to grow its online student headcount by 25,000 by 2025 (see details under the Performance Pilot section). Mason will engage employers in program development that includes work-based and project-based experiences as a learning feature, and create hybrid programs where online students from outside the region may complete their degrees in face-to-face programs sponsored by employers in Virginia, and generate an entering workforce that contributes directly to commonwealth’s economy. Note that the OVN and Wiley projections are not formally included in Mason’s SCHEV 2B projections.

Strategy 6. Accessible Pathways: Mason remains committed to the creation of innovative, accessible pathways. The ADVANCE program, our partnership with the Northern Virginia Community College (NOVA), exemplifies Mason's commitment to extend educational and economic opportunity to a diverse student population. Building upon the commonwealth's most successful transfer partnership, ADVANCE offers community college students streamlined paths to four-year degrees by eliminating traditional transfer obstacles, providing students with additional coaching and financial incentives, and highlighting pathways to high-demand careers. Through ADVANCE, transfer students—many of them adult learners, first-generation, and low-income students—have increased access to degrees and high-demand jobs, enabling Mason to deliver on our mission of access while meeting the region's economic needs.

Strategy 7. Support New Faculty Hires: Like other institutions, Mason operates within an increasingly competitive environment that threatens our continued growth as the youngest R1 institution in the commonwealth. To meet university and commonwealth goals around student access and success, research, innovation, and economic development, we must recruit and retain top talent across all levels of the university. Investing in the Mason workforce will drive change and improvement, yielding significant return on investment to the commonwealth, both directly and indirectly. Mason anticipates increased demand and enrollment over the six years covered in this plan, especially the first two (the 2021-2023 biennium). Enrollment increases will impact every Mason college and school, and some will likely be affected more than others. For example, impressive enrollment increases in the engineering, science, business, and health fields will continue to drive a growing number of STEM-H offerings. With the support of the commonwealth, the university can expand its educational opportunities, producing a three-fold economic return on investment: 1) preparing a world-class workforce, especially in STEM-H fields; 2) enhancing the commonwealth's competitiveness in research and development, which is essential to success in the knowledge economy; and 3) translating the advances generated by university researchers into products and services that contribute to improved Virginia's health, wealth, and prosperity.

The projected enrollment growth will require a significant increase in full-time faculty lines over the next six years. While most of the growth will be funded by tuition revenues, Mason requests funding for total compensation packages for 20 new faculty lines that will add new full-time tenure-track faculty necessary to 1) provide a high-quality education experience to a growing student body, and 2) boost the university's research and innovation productivity. These new hires address the Virginia Plan in multiple ways, especially the impactful effect of driving change through investment and innovation. Each faculty line is estimated at \$135,000 for salaries and fringe benefits (as provided by the Department of Planning and Budget). In addition, each faculty line will come with an estimated start-up package of \$250,000. These estimates are in alignment with recent faculty recruitments. Mason is requesting General Funds to support approximately one-half the costs for the new faculty hires and plans to use Non-General Funds for the remaining portion.

Strategy 8. Support Salary Compensation Increases: Mason's success as a nationally-ranked R1 university is directly linked to the talented, dedicated faculty and staff who are committed to and strive for outstanding achievement in education, research, and public service. Their outstanding contributions have brought Mason regional, national and international recognition. However, compensation is key element in attracting and retaining the brightest and most talented individuals, and Mason's salary appropriation continues to lag behind the majority of public research institutions in the commonwealth, despite the fact that we operate in a location with a high cost of living. When comparing Mason's appropriated salary to its peers, Mason is the lowest among all institutions of higher education within the commonwealth. According to SCHEV's calculation, Mason needs a 24.5 percent increase, approximately \$46.8 million, to be funded at the 60th percentile of its peers for teaching and research faculty salaries. Staff compensation also has been impacted and continues to be a barrier to our recruitment and retention efforts. Without an increase, the trend for faculty and staff salaries will continue to decline, in comparison to our peers, which will have

a significant impact on our ability to be competitive in this market. Competitive salary increases based on an annual merit and recognition process for contributions and efforts is crucial in keeping pace with market competition and reducing turnover for both faculty and classified staff.

Mason's requested funding would provide a salary increase of 4.0 percent for Teaching and Research Faculty, Administrative Faculty, and Classified Staff. Specifically, Mason is requesting General Funds to support approximately one-half the costs for the compensation increase while Non-General Funds will make up the remaining portion.

Strategy 9. Support Emergency Retention Funding: While Mason's external recognition for quality of work life speaks to its productive and rewarding work environment, compensation packages remain key to attracting and retaining high-quality faculty and staff. For Mason, compensation includes salary, benefits, startup packages and cost-of-living adjustments.

In the short term, Mason must manage both increasing competition for faculty talent and significant attrition through faculty retirements. For top-notch talent, Mason competes with universities regionally (e.g., GWU, Georgetown, American and University of Maryland) and nationally (e.g., Northeastern, Temple, UCLA), as well as with private companies and government agencies in Northern Virginia. In the coming decade, Mason anticipates up to a 50 percent turnover in its faculty ranks due to retirements. This will have a profound impact on our ability to maintain our current quality and mix of faculty. First, hiring new faculty talent is subject to intense regional and national competition, and Mason's current salary levels are significantly below market causing major challenges in recruitment. Second, most faculty retirees will be full or associate professors. In order to maintain an appropriate mix of faculty ranks, we will need to replace many of these open positions at comparable levels.

In an increasingly competitive landscape and with limited resources, Mason is unable to retain talented human capital when local private and public universities provide more competitive compensation packages that do not require a personal residential move. Failure to address this issue will reduce Mason's ability to provide students a world-class education and could jeopardize the institution's R1 status.

Mason is requesting funding that would provide retention interventions to at-risk talent. Mason is requesting General Fund support for approximately one-half the costs for the creation and maintenance of an emergency retention fund while Non-General Funds will make up the remaining portion.

Strategy 10. Effectiveness and Efficiency: To successfully meet the aggressive goals outlined in the six-year plan, it is necessary for Mason to become even more efficient in business execution, such that as the mission expands, the institution can economically scale service delivery, continue to improve the academic experience, satisfy stakeholders and improve institutional effectiveness. Mason's NGF revenues are used to supplement state support and, since state appropriations do not fully support the costs of our academic and research mission, \$10.8 M of the additional \$45.9M in gross tuition revenues in FY21 will be used to pay for current infrastructure and operations supporting students, faculty, staff and research. This infrastructure funding will provide funding for research governance and support, improve our capacity for innovation, enhance student support services as well as the technology to keep pace with growth, and support institutional units responsible for academic success.

To improve institutional efficiency, it is necessary to reflect on the current state of service delivery and make near-term, deliberate decisions and investments that support the mission objective, inclusive of the following items:

Organizational Design: Efficient organizations are intentionally modelled to maximize the value of outcomes, while minimizing unnecessary investment, with clearly defined roles, responsibilities and lines

of demarcation. There are several areas within Mason today where this can be better optimized, which will contribute to better efficiency and customer satisfaction. Since form follows function with respect to achieving business goals and objectives, by establishing a sound organizational design that facilitates the delivery of the 6-year plan, Mason will lay the necessary foundation for institutional success as an R1 institution.

Business Process Rationalization and Standardization: Variability in core service delivery to stakeholders due to inarticulate process leads to inefficiency and poor customer satisfaction. Recent assessments have highlighted this as an important area in which to focus resources. Making investments in addressing deficiencies in service delivery and standardizing business processes improves the institution's ability to scale service delivery without compromising (and often improving) quality. It also establishes a foundation for Data-Driven Decision Making.

Data-Driven Decision Making: High-performing organizations leverage data to make key decisions, yet "data" is only as valuable as it is authoritative. By making the necessary investments and establishing a clear organizational design, with assigned responsibilities, process standardization and authoritative source data, Mason will be positioned to maximize investments that are currently being made in Information Technology (CRM, Banner (ERP) and Business Intelligence/Analytics). These investments will allow Mason to achieve the goal of personalizing transactions against the stakeholder population and create actionable business intelligence from data, which will lead to better reporting and actionable business decisions.

Strategy 11. Elevate Research: Mason met an institutional goal and entered the upper echelon of U.S. research universities as a Carnegie Research 1 (R1) University in 2016, which was reaffirmed in 2018. This remarkable achievement for an institution less than 50 years old was made possible by the world-class contributions of our faculty, staff, and students in fields such as economics, history, psychology, criminology, and computing, among others. Mason researchers and scholars continue to produce knowledge and insights that address pressing world problems and reveal promising new futures. Moreover, we integrate the knowledge we create into state-of-the-art education programs to prepare a creative and engaged workforce that will use this knowledge to create economic opportunities and a better quality of life for all. By strengthening our capacity to conduct world-class research and scholarship, Mason serves as an engine for innovation and growth in our region, the commonwealth, and the nation.

We continue to make strategic investments that ensure our long-term performance—recruiting and retaining eminent tenure-line faculty at all levels of seniority, and generating more high-quality scholarly outputs and outcomes reported by our faculty in leading publications, journals, international conferences, and other venues. In AY 2019, we added 118 new tenure-line faculty members, nearly half of them in STEM-H programs.

We also continue to make investments that support our faculty's efforts to increase sponsored support for our programs, with targeted efforts to stimulate revenue growth from federal and industry sources. In the last two years, we have reported significant growth in R&D expenditures, increasing from \$114 million in AY 2017 to \$149 million in AY 2018. We project expenditures of ~\$170 million in AY 2019. On our current trajectory—we continue to see growth in total award dollars—we are likely to exceed the goal described in our Strategic Plan of reporting \$225 million R&D expenditures in AY 2024.

For our research and scholarship programs to grow and prosper, we must provide our faculty, staff, and student researchers with access to world-class research infrastructure, including state-of-the-art research labs, facilities, equipment and instruments, and an empowering research administration enterprise that minimizes administrative burdens while promoting the ethical and responsible conduct of research and scholarship. Making sustained investments in research infrastructure has been very challenging at Mason

largely because most external sponsors require matching funds, and the commonwealth's HEETF allocation to Mason is significantly lower than allocations at other Virginia R1 institutions. We cannot stress enough how important it is that the administration make an adjustment in Mason's HEETF allocation for AY 2020 and beyond. We request an additional \$5 million per year to support investments in research equipment.

To further strengthen our performance, we are engaged in several comprehensive campus planning exercises at our SciTech and Arlington Campuses that align and elevate our multidisciplinary research and education programs and initiatives. We are making good progress, with plans to concentrate and expand 1) our wet lab-intensive STEM-H research and education programs at both undergraduate and graduate levels on our SciTech Campus, and 2) our professional graduate education and research programs in computing, law, business, and public policy on our Arlington Campus with new programs added to strengthen the tech innovation ecosystem.

We continue to seek strategic partnerships with other entities with similar interests. For example, we are working closely with Miller & Smith and Prince William County on the development of a mixed-use Innovation Town Center adjacent to our SciTech Campus. This development promises to provide much-needed residential options for our faculty, staff, and students immediately adjacent to campus, as well as critical university life amenities. In Arlington, we are working closely with a number of partners—including Arlington Economic Development, Amazon, our academic partners, and others—to develop an innovation district at Virginia Square that will drive economic development and long-term support for a tech innovation ecosystem that promotes economic and social inclusion.

Finally, to support our increasing research capacity, we are actively engaged in the redesign of Mason's support for graduate education, with the goal of attracting and supporting a larger and more vibrant graduate student community with a higher percentage of full-time PhD students.

Strategy 12. Research of Consequence: In addition to elevating the quantity and quality of our research, scholarship, and creative activities, Mason is strengthening the impact of its research outcomes. In the last four years, we have created three new university-wide institutes to support multidisciplinary research, innovation, and economic development initiatives. These institutes provide support for our faculty, staff and student researchers and scholars, facilitate the engagement and support of external partners and individuals with similar interests, and strengthen the impact of the outcomes that we generate. They support our increasing engagement with stakeholders in the communities we serve—local to global—to support the mutually beneficial exchange of knowledge and resources in the context of partnership and reciprocity.

The ***Institute for Biohealth Innovation (IBI)***, formed in December 2015, brings together 150+ faculty from across 10 colleges/schools with a mission to advance human health and wellness at multiple scales. IBI seeds and supports the development of new multidisciplinary research and education programs, attracting additional external funding to enable their implementation and success. IBI supports partnerships with external private- and public-sector organizations, such as the National Institutes for Health, Inova Health System, and the Department of Justice, providing a one-stop shop for partner organizations who seek access to Mason's world-class faculty, staff, students, and postdoctoral trainees with relevant expertise. IBI actively supports the translation of research outcomes into impact, including nurturing an emergent biohealth innovation ecosystem that includes support for new venture formation in partnership with other external stakeholders like VA BIO and the Virginia Catalyst. IBI faculty are currently leading the development of a commonwealth-wide strategy to create and support growth of new life sciences companies in partnership with Virginia's research universities, health systems, private-sector entities and the renowned Consortium for Improving Medicine through Innovation and Technology (CIMIT). ibi.gmu.edu

The ***Institute for a Sustainable Earth (ISE)*** was launched in February 2019 to advance research and education programs that contribute to the development and support of communities here and around the world that are just, safe, economically secure, and environmentally sustainable. Mobilized by the challenges of our 21st century world including, but not limited to, those associated with climate change and extreme weather events (including the impact of sea level rise on Virginia communities), political and economic disruptions around the world, and transnational crime, ISE brings together some 200+ faculty from across 10 colleges/schools. ISE seeds and supports the development of new multidisciplinary research and education programs and projects, attracting additional external funding to enable their implementation and growth. ISE promotes and supports partnerships with external private- and public-sector organizations, such as the United Nations, the U.S. Sustainable Development Solutions Network, and the National Oceanic and Atmospheric Administration, and is one of only three U.S. Global Future Earth sites focused on accelerating transformations to global sustainability through research and innovation. ISE actively supports the translational research and will inform the development of new methodologies, technologies, and approaches to make our socio-political, built- and eco-systems more resilient to disruptive, undesirable change and better positioned to thrive in a rapidly changing world. We are requesting \$1 million in annual support for ISE, which will support community-engaged projects that enhance the resilience of Virginia communities in the face of the increasing occurrence of extreme weather and socioeconomic disruptions. ise.gmu.edu

The ***Institute for Digital InnovAtion (IDIA)*** will launch in AY 2020 with a mission to create and harness the power of advanced computing techniques, technologies, and systems to democratize opportunity and advance economic and cultural prosperity. IDIA brings together some 200+ faculty from across 10 colleges/schools and seeds and supports the development of new multidisciplinary research and education programs, attracting additional external funding to enable their implementation and growth. IDIA promotes partnerships with external private- and public-sector organizations, such as Mitre, Amazon Web Services, Apple, Northrop Grumman, the Department of Defense, and the Department of Homeland Security, providing a one-stop shop for partner organizations like who seek access to Mason's world-class faculty, staff, students, and postdoctoral trainees. An integral component in our contributions to the commonwealth's Tech Talent initiative, IDIA will have a significant presence in the new innovation district under development in Arlington's Virginia Square neighborhood. Led by Mason in partnership with numerous public- and private-sector organizations, including Arlington Economic Development, Arlington Public Schools, Northern Virginia Community College, Marymount University, Booz Allen Hamilton, Amazon Web Services, and many others, the Innovation@Virginia Square initiative will engage and empower a diverse community of Arlington entrepreneurs to strengthen the commonwealth's innovation economy. We are requesting support of \$1.5 million annually to increase the number of successful tech start-ups created and residing in Virginia to grow our innovation economy.

Implemented as inclusive initiatives that leverage the full complement of our university community's expertise—including the arts, humanities, and social and behavioral sciences as well as the natural, computing, and engineering sciences—these three Mason institutes promise significant long-term impact.

Section B. Tuition and Fees Predictability Plans: Provide information about the assumptions used to develop tuition and fee charges shown in 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. Include information, if applicable, on tuition increase plans for program- and level-specific charges or on any other alternative tuition and fee arrangement.

As part of the biennial six-year financial plan required in the provisions of § 23.1-306, Code of Virginia, each public four-year institution of higher education, Richard Bland College, and the Virginia Community College

System shall include in its six-year plan submitted to the State Council of Higher Education for Virginia (SCHEV) a tuition and fee transparency and predictability plan for in-state undergraduate students. Such tuition and fee predictability plans shall be for a period of not less than three years and must cover at least tuition and mandatory educational and general fees. Plans shall include a percentage and dollar increase or decrease of any size the institution determines to be appropriate from one year to the next or for the entire duration covered by the plan. Plans shall indicate a range of tuitions based upon available state resources, but must contain a scenario that includes the assumption of no new state general fund support. SCHEV shall develop instructions related to the submission of such plans in conjunction with the six-year financial plans as required by § 23.1-306, Code of Virginia.

RESPONSE: Access for all students is key to our measured success—we measure our success by how many we accept, not how many we turn away. We serve one of the largest populations of Pell grant recipients and have no disparities in our graduation rates. Based on the Fall 2018 SCHEV data, Mason is the single largest institution serving in-state students. Mason was a major contributor to the commonwealth’s growth of in-state enrollment over the last decade with undergraduate enrollment growing 36.9% or 6,042 students. In fact, in Fall 2018, Mason accounted for 17.7% of all in-state enrollment among the 15 public four-year institutions, which is an increase from 15.7% in Fall 2008.

Each doctoral institution within the Commonwealth of Virginia has a unique mission, funding comparisons may present an interesting analysis. The following table illustrates both the institutional differences in total funding within the Commonwealth of Virginia and the relationship between tuition and General Fund support at the Virginia doctoral universities. In FY 2019 Mason is operating with approximately 74.3 percent of the total resources available to the other doctoral universities.

**AND GENERALESTIMATED TOTAL FUNDING PER IN-STATE STUDENT FTE, FY 2019
General Fund, Tuition and Mandatory E&G Fees**

DOCTORAL INSTITUTIONS	GENERAL FUND FY 2019*	IN-STATE TUITION FY 2019	TOTAL
College of William & Mary	\$7,824	\$17,570	\$25,394
University of Virginia	8,694	14,148	22,842
Virginia Commonwealth Univ	6,989	12,247	19,236
Virginia Tech	7,025	11,595	18,620
Old Dominion	6,395	7,047	13,442
Doctoral Avg. excl. Mason	\$7,385	\$12,521	\$19,907
Mason	\$5,728	\$9,060	\$14,788
Mason % of Average	77.6%	72.4%	74.3%

* General Fund estimate based on SCHEV FTE projection in the 2B report; numbers for all institutions will change with actual revised numbers.

The Mason board of visitors unanimously approved no tuition increase in FY 2020 for undergraduate students. Even before the freeze, Mason charged in-state undergraduate students an average 40 percent less than the state’s three other top-tier research institutions, a difference of \$3,603. Over the previous six years, Mason has maintained a moderate increase in its tuition rate and has been consistent with or below the rates proposed in its six-year plans. The university seeks to keep tuition increases moderate at 5 percent each year in the current six-year plan to maintain access and affordability to our students.

Even with the proposed tuition increase, Mason will remain in the same position relative to the other doctoral institutions in the commonwealth. Without additional General Fund resources, Mason will be forced to consider changes to the way the university charges for education and services. This would

include looking at the costs and further charging for each credit hour to generate sufficient funding to support the cost of education. Three scenarios are possible:

1. The legislature could provide additional financial support to offset the difference between Mason's share of commonwealth resources and those of its peers. This could mitigate or eliminate the need for increases like those described below.
2. Under the current system, Mason undergraduate students could pay a per-credit-hour rate for taking 1 to 12 credit hours. For students taking 13 to 15 credit hours, the tuition assessed is the same as the 12-credit hour rate (currently \$4,530 for Virginia residents and \$16,260 for non-residents). Mason is considering moving to a system where students are charged a standard per-credit hour rate to all new undergraduates, regardless of the number of credit hours they take. This would be implemented first for new students and take four years to be fully implemented across all undergraduates.
3. As indicated in the worksheet, Mason could increase university tuition by 5 percent for each year in the six-year plan.

Over the next biennium, George Mason University will employ twelve strategies that are paramount for the university's continued growth and momentum. These key strategies, outlined in our academic plan, are supported by tuition revenue. Our strategies relate to the Virginia Plan Goals and are outlined below; the university plans to:

1. **Provide affordable access for all:** The University will address student financial assistance, enrollment growth and degree awards for Virginia undergraduate and graduate residents, and redesign the student experience. Collectively these strategies will require approximately 2.0 percent growth in tuition over the biennium.
2. **Optimize student success for work and life:** The University will develop new and enhanced programs, shift additional programs overtime to an online format, and expand partnerships with Northern Virginia Community College. These enhancements will impact our commitment towards optimizing our students' success now and in their future. Collectively these strategies will require approximately 0.3 percent growth in tuition over the biennium.
3. **Drive change and improvement through innovation and investment:** Investing in the most valuable capital, our human capital, drives change and innovation by recruiting new faculty, attaining more marketable salary levels, and developing an on-going retention fund to retain our talented faculty and staff. Collectively these strategies will require approximately 4.7 percent growth in tuition over the biennium.
4. **Advance the economic and cultural prosperity of the commonwealth and its regions:** The University will invest in research activities and institutes to develop economic and cultural prosperity of the region and commonwealth as a whole. Further we will invest in our facilities and infrastructure to support its growth in this area. Collectively these strategies and other investments will require approximately 3.0 percent growth in tuition over the biennium.

The investments from the commonwealth and from our students and parents are necessary to ensure we can continue to provide a high-quality education as we prepare students for meaningful work and life. Whether it's through student-faculty research opportunities, a transformative educational experience, or opportunities to learn from renown faculty that open up new ways of thinking, these experiences will

spark passion in each individual as they shift from a George Mason University student into the world with the confidence and skills needed for our increasing complex society.

Section C. 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:

Tech Talent Initiative: The Greater Washington Region is a global hotspot for tech talent with almost a quarter of a million people employed in computer and mathematical occupations, defined here as tech occupations, more than twice the national average for a region of comparable size. The sheer number and diversity of tech employment opportunities in the region attract students to Mason's tech programs, where they accrue advantages from the university's proximity to and relationships with tech employers. Washington, D.C., area universities, in fact, produce the largest number of tech graduates in the country, attracting employers like Amazon who are looking to tap the breadth and depth of our globally competitive and culturally diverse workforce.

Not surprisingly, Mason enrolls the largest number of undergraduate and graduate students in tech programs in the commonwealth. In AY 2019, almost 5,000 students enrolled in Mason's undergraduate programs and more than 1,100 students enrolled in our master's programs. In AY 2018, 756 and 330 students respectively, graduated with the BS and MS degrees in Applied Computer Science, Computer Engineering, Cybersecurity Engineering, Software Engineering, and Data Analytics Engineering, among others. By 2024, we expect to enroll ~10,000 students in our undergraduate programs and ~5,000 students in our MS programs, supported by our new School of Computing, the first of its kind in the commonwealth. Similarly, the number of degrees conferred annually will more than double by 2024.

Mason's tech talent student body is both large and diverse, and our tech programs have been designed and evolve in close collaboration with our academic, corporate, and government partners. Mason already matriculates the largest number of community college transfer students in the commonwealth, with community college transfer students representing 53 percent of all Mason first-time students in AY 2019. Several of the tech programs enroll even higher percentages of community college transfer students. For example, more than 80 percent of the students enrolled in our Information Technology (IT) and Information Systems and Operations Management (ISOM) programs began their academic careers in community college. These programs have been designed to articulate with associate's degree programs in the community college system. Aided by our ADVANCE partnership with Northern Virginia Community College (NOVA), we project significant enrollment growth in these programs over the next 10 years. In addition, in the last year alone, Mason has developed two new tech BAS programs, a BAS in Cybersecurity and a BAS in Cloud Computing, which was launched in June 2019 in partnership with Amazon. Both of these programs were developed with NOVA with community college transfer students in mind. It is a point of pride that with our large transfer student cohorts, Mason's IT and ISOM programs, as well as the BAS Cybersecurity program, support much more diverse student populations, including women and students from underrepresented minority (URM) groups, as well as individuals who are economically disadvantaged. For example, approximately 27% of ISOM and IT students are from URM groups, compared with 15.3 percent in computing programs nationally. Similarly, almost 40 percent of students in the IT and ISOM programs are Pell-eligible, and many are first generation. The BAS in Cybersecurity, in particular, includes larger cohorts of individuals who are veterans (18 percent) and/or Pell-eligible (49 percent).

Mason's commitment to grow and diversify the commonwealth's tech talent pipeline and its innovation economy is also reflected in our ambitious plans for professional master's programs that will significantly increase the number of graduate degrees conferred at Mason, as well as support the creation of promising

high-growth tech start-ups and a substantially richer innovation ecosystem in the region. We are also working closely with our partners in Arlington the planning and implementation of a new innovation district at Virginia Square with funds committed by Governor Northam to the Tech Talent Initiative. The site preparation for a mixed-use facility with community spaces scheduled to begin in fall 2019. Our new Institute for Digital Innovation, which will anchor the innovation district, will house academic, corporate, and community partners and deliver state-of-the-art programming developed to serve Arlington's diverse community of creatives, innovators, and entrepreneurs to strengthen and grow Northern Virginia's digital innovation economy.

Section D. Programs and Instructional Sites: Provide information on any new academic programs, including credentials and certificates, or new instructional sites, 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: In line with Mason's goal of enrollment growth and our function as an economic engine of the state, Mason expects to initiate new programs that will meet the needs of the region, the commonwealth, the nation. and beyond.

Anticipated New Programs:

University-wide: Mason is conducting feasibility studies on the potential for a School of Medicine in Northern Virginia. The emergence of Mason as a tier-one research university significantly enhanced this potential. The university is exploring clinical partnerships and financial relationships as well as identifying sources of philanthropic funding. Mason has started the process of transforming the College of Health and Human Services to the College of Public Health (the first in Virginia). The medical school feasibility study will explore the significant synergy between public health and medicine.

Law: LLM in Cyber Security Law

Business: PhD in Business; MS in Finance; MS in Information Systems

Science: PhD and PSM in Biology; PhD and/or MS in Geology; MS in Climate Science; MS in Urban Science; MS/PSM in Actuarial Science; MS/PSM in Genetic Counseling; PSM in Geomarketing; MS/PSM in Medical Laboratory Science; PSM in Environmental & Sustainability Management; PSM in Forensic Science; MS in Energy and Sustainability; MS in Quantum Materials/Quantum Science; BA in Computer Science; Graduate Certificate in Action Research; Undergraduate Certificate in Scientific Leadership and Practice

Education and Human Development: PhD and MS in Kinesiology; MEd in Elementary Education; MEd in Secondary Education; MEd in Literacy; MEd in Early Childhood Education for Diverse Learners; MEd in Advanced Educator Preparation; MEd in Teaching English to Speakers of Other Languages; MS in Learning Design and Technology; MEd in Foreign Language Education; Med and EdS in School Psychology; BS in Sport Management; BS in Recreation Management; BS in Sport Coaching; BSEd in Secondary Education; BSEd in Foreign Language Education; Graduate Certificate in Special Education; Graduate Certificate in Curriculum and Instruction; Graduate Certificate in Tactical Athlete Strength, Conditioning and Injury Prevention; Graduate Certificate in International ESOL/ESL Teacher Education; Graduate Certificate in Teaching English to Speakers of Other Languages across the Lifespan (TESOL); Graduate Certificate in Orthopedic Physical Extender; Graduate Certificate in Gender Development Specialist; Graduate Certificate in Engineering Education; Graduate Certificate in Computing Education; Undergraduate Certificate in Food and Beverage Management; Undergraduate Certificate in

Early Childhood Education PK3; Undergraduate Certificate in Elementary Education; Undergraduate Certificate in Early Childhood Special Education; Undergraduate Certificate in Secondary Education English; Undergraduate Certificate in Secondary Education Mathematics; Undergraduate Certificate in Secondary Education Biology; Undergraduate Certificate in Secondary Education Chemistry; Undergraduate Certificate in Secondary Education Physics; Undergraduate Certificate in Secondary Education Earth Science

Engineering: PhD in Mechanical Engineering; PhD and MS in Cyber Security Engineering; MS in Artificial Intelligence; MS in Construction Management; MS in Digital Engineering; MS in Mechanical Engineering; MS Sustainability Engineering; MS in Robotics; MEd in Computing and Engineering; BS in Construction Management; BS in Engineering Technology; BA in Computing

Health and Human Services: PhD in Public Health; PhD in Health Informatics; PhD in Social Work; BS in Nutrition; BS in Health Informatics; Graduate Certificate in Population Health. These programs are required for the accreditation process in transforming the college into the College of Public Health.

Humanities and Social Sciences: MA in Linguistics; MA in Applied Linguistics; BA in Intelligence Analysis; BA in Classical Studies; BA in Japanese Studies; Graduate Certificate in Science Communication; Graduate Certificate in Spanish Heritage Language Education; Graduate Certificate in Forensic Mental Health; Graduate Certificate in Social Justice and Advocacy

Provost: BS in Global Conservation

Policy & Government: Graduate Certificate in Strategic Trade; Graduate Certificate in Public Management; Graduate Certificate in Science, Technology, and Security

Visual and Performing Arts: PhD in Computer Game Design; Graduate Certificate in Music for Well-Being; Graduate Certificate in Art Education Licensure; Graduate Certificate in Marching and Pageantry Arts; Undergraduate Certificate in Graphic Design

Discontinued:

DAED in Community College Education; MS in Peace Operations; MA in History of Decorative Arts; MEng in Geotechnical, Construction, and Structural Engineering; BA in Dance; BA in Latin American Studies; Graduate certificate in Conflict Resolution in Health Professions; Graduate Certificate in Community College Education; Graduate Certificate in Theater Education

Re-organization:

School of Public Health (new)

School of Computing (new)

Department of Rehabilitation Science (discontinue)

Department of Cyber Security (new)

Section E. Financial Aid: TJ21 requires “plans for providing financial aid 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 under TJ21 are based on HHS Poverty Guidelines. A table that outlines the HHS guidelines and the definitions is attached.

RESPONSE: The proportion of Mason students with financial need continues to increase more rapidly than available resources. Despite increases in commonwealth student financial assistance, the demand is rapidly outpacing state resources. Data from our most recent Common Data Set (CDS H2,i), shows that Mason met 55.2 percent of need for our full-time undergraduates, and 62.5 percent for first time, full-time freshmen.

As Mason expands its capacity to serve an ever-increasing number of transfer students, as well as underserved populations including adults, active military, and veterans, students' financial need will only increase. Very few resources are available to support these students beyond federal financial aid and state grant support. In 2018-19 we awarded \$24,050,565 in state aid to 10,166 in state students, that represents an additional 3,400 additional in-state students who received these awards over the number we awarded in 2017-18. For 2019-20, we have been allocated \$28,046,653, \$3,996,000 more than 2018-19. With the majority of 2019-19 packaging complete at this point (June 2019), we have exhausted the entire increase and have remaining needy in-state students who qualify for state assistance, but are not currently receiving it. As this troubling trend continues, Mason will need additional state support for our in-state students.

In the current federal political climate, there is substantial debate on the amount and direction Title IV federal aid is heading. Some are advocating for increases in the current funds (Pell and SEOG), some for an overhaul of the system, and major changes to student lending and institutional "skin in the game" approaches." Regardless of the resolution to this federal debate, the resource base for aid has not increased at the same rate as enrollment growth. Similarly, aid for graduate students is also limited but necessary to be competitive in recruiting and retaining talented students that will contribute to furthering Mason's educational and research goals and contribute to the commonwealth's economy.

Section F. Capital Outlay: Provide information on your institution's top two 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.

RESPONSE: Mason continues to align facilities plans to the university's strategic plan, taking steps to improve asset utilization at its Arlington and Prince William County campuses and reduce pressure on overcrowded facilities at the Fairfax campus. Through long-term capital planning, the university will ensure its ability to produce career-ready graduates in the future by prioritizing investments in underlying infrastructure and existing assets, as well as addressing the following high-impact projects that support the university's strategy:

Construct Academic VIII – SciTech (\$186M). This project supports Mason's continuing expansion of STEM-H programs and is the first of several buildings in a new STEM-H complex on our Science and Technology Campus in Manassas, Virginia. The 200,000 GSF building will support students enrolled in STEM-H majors, such as kinesiology, materials science, forensic science, bioengineering, and mechanical engineering, as well as post-baccalaureate and graduate-level medical/health programs for students pursuing careers in the health care and wellness professions. The building will include specialized instructional labs, classrooms, experiential learning collaborations, and faculty/administration offices to support growing student and faculty communities on SciTech campus. With the co-development of the Innovation Town Center immediately adjacent to its SciTech campus, Mason will provide a residential campus experience for students enrolling in relevant STEM-H programs from freshman year through PhD. Mason's SciTech campus will serve as a magnet to attract new and retain existing businesses in Prince

William County's Innovation Park, advancing the region's innovation industries and driving associated economic growth.

Renovate Science & Tech I (Planetary Hall) – Fairfax (\$75M) This project includes the phased renovation of 100,000 GSF of the Planetary Hall/Science and Technology I building on the Fairfax Campus, which has not undergone a renovation to upgrade its learning laboratories and classrooms since the building was constructed ~30 years ago. The facility's physical limitations and outdated equipment and infrastructure now negatively impact STEM and IT program offerings. In addition to providing of state-of-the-art classrooms and instructional labs to support student learning, the renovation will address the current backlog of deferred maintenance budget requests for the building. A complete renovation of HVAC and infrastructure systems, including IT/cyberinfrastructure, is necessary to support 21st-century learning objectives of the programs supported there. As this is an occupied and functionally unique building, to undertake the renovation will require providing an alternate facility to offer equivalent functionality during renovations adding complexity and cost to the project.

Funding for the Institute for Digital Innovation Building & Garage – Arlington (\$250M) will be requested through a separate process, however funding for this project has significant strategic implications. This project provides a large-scale expansion of the Arlington Campus to grow Mason's computing programs, advance research in high-tech fields, and rapidly increase the number of highly skilled technical graduates for regional employers. This project will construct the Institute for Digital Innovation (IDIA) Tower on the Arlington Campus, which will house Mason's new School of Computing. The envisioned 400,000 GSF, mixed-use facility will bring together, academic, research and commercial partners to support workforce development for technology employers such as Amazon. Funding for the project will come from a combination of philanthropy and commercial partners to be matched by commonwealth's capital funding of up to \$125M for a total project cost of at least \$250M. Mason seeks authority to design and construct the facility using either traditional Capital Outlay (CapOut) procedures or through use of Public Private Infrastructure and Infrastructure Authority (PPEA). The university anticipates soliciting aligned, commercial partners through PPEA procedures, but should it be unsuccessful negotiating interim and/or comprehensive agreements, may shift to CapOut procedures. This project follows one authorized in 2019 to demolish the Original Building—the site of the new building—and to re-route storm water infrastructure.

Section G. 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: The five-year pilot program under the Restructuring Act has provided additional financial and administrative authority to George Mason University, which has allowed our university to be proactive in the ever-changing higher education environment. In 2009, Mason entered Level 2 status. Changes and growth in authority in information technology, procurement, and capital projects have been approved by our Board of Visitors and submitted to the commonwealth. The university has made great gains in efficiency and effectiveness with these changes and the additional authority has helped the university align efforts and position the university for continued success.

In 2016, Mason was granted additional financial and administrative authority to move from a Level 2 to a Level 2.5 institution. It is Mason's goal to achieve Level 3 authority at the conclusion of the five-year pilot. We are taking the necessary steps to position the university for this milestone. We will spend the next year focusing university managers on required actions necessary to meet the thresholds in achieving Level 3, which will focus on establishing the required credit rating. We are confident that we currently meet the threshold credit rating of AA. We will also work to establish management agreements with the departments

at the Commonwealth and Administration and General Assembly with the intent of achieving Level 3 authority by July 1, 2021.

Section H. Performance Pilots (optional): For this topic, any institution that wishes to include a Performance Pilot and provided notification by April 1 to relevant parties, should select one or more of the strategies presented in the institution's Academic and Financial plan (PART 3) and General Fund Request (PART 4) that constitute(s) "one innovative proposal" as defined in subsection F of § 23.1-306. Describe the proposal, the proposed performance measures and the requested authority or support from the commonwealth.

RESPONSE: While the greater Washington region has the third highest concentration of tech workers in the nation, regional employers have consistently raised concerns about their ability to hire qualified talent. The Greater Washington Partnership has made clear that employers desperately need job-ready graduates with skills essential to leadership in the digital economy. The impending arrival of Amazon's headquarters and its promise to add 25,000 new tech jobs elevates the urgency of this issue. There is both a regional and a national imperative to increase student enrollment in critical high demand areas like computer and information science and engineering, as well as to integrate the development of strong computing competencies into many additional academic programs including engineering, health, education and business among others.

Employers are asking universities to take a more active role in supporting their talent pipeline and are increasingly signaling their willingness to collaborate. It's clear that universities and employers must work together to provide job-ready graduates and to support professional development at different stages of individuals' career paths.

Sustaining a strong innovation economy requires development of a diverse, multi-sourced talent pipeline. In Virginia and the mid-Atlantic region, the number of traditional-age college graduates is not growing. However, the commonwealth has more than 1 million adults with some college credit and no degree. This mirrors current national data which identify more than 30 million American adults who have stopped or dropped out of college.

If the performance pilot is funded by the commonwealth, Mason can potentially grow its online student headcount to 25,000 by 2025. The university will launch ~20 undergraduate fully online programs in the next five years, growing its fully/mostly online undergraduate enrollment to 15,000 students by 2025 and redistributing its mix of undergraduate online students to 40 percent in-state, 60 percent out-of-state. Mason will engage employers in development of programming to include the inclusion of work-based and project-based experiences as a learning feature, and create hybrid programs where online students from outside the region may complete their degree in face-to-face programs sponsored by employers.

Through its new interdisciplinary [School of Computing](#), George Mason University will support the expansion of online undergraduate and graduate program initiatives in computing, as well as provide micro-credential and life-long learning options for working adults.

For graduate programs, Mason will continue its strategy of launching professional master's and certificate programs online, with the goal of building ~5 fully online stackable master's programs in ultra-high demand disciplines at large scale (1,000+ students each) with affordable tuition rates (priced one-third of the cost of national average).

Through state-of-the-art learning science and education technology innovations, the University will prepare more graduates with expertise in high demand areas such as cyber, AI/machine learning, cloud computing and data analytics. The university's goal is to enroll more than 3,000 new students in these

programs by 2022 to rapidly meet the needs of Virginia employers. Investment in infrastructure to support dramatic online expansion in these areas is essential to meeting this goal. We will create a virtual campus with rich connections to our physical campuses, offering all of our students, and in many cases working adults, broad access to Mason resources via on campus, online and blended education.

Mason is currently seeking external partnership to provide upfront investments to ramp up our online operations to scale. Mason is requesting \$11 million in infrastructure investment from the commonwealth to support the creation of next generation facilities to support these online programs. Existing facilities on the Arlington, Science and Technology, and Fairfax campuses will be reconfigured and upgraded to house: video production and interactive digital design studios, media support, advanced instructional design, remote learner testing and assessment, a 24/7 student support “call center” and advising, and creative design and marketing/market research, as well as state-of-the-art interactive classrooms and related IT infrastructure necessary to support contemporary distance learning. Funds provided will allow for physical reconfiguration of existing buildings, as well as provide the IT infrastructure and equipment necessary for these endeavors.

Mason currently enrolls nearly 5,000 undergraduate students and more than 1,100 master’s students majoring in computing fields – computer science, computer engineering, information technology, information systems and operations management, cybersecurity engineering, and systems engineering – substantially more than Virginia’s other public universities.

Certifications and skill building: In partnership with employers, Mason will build/launch high demand industry-linked and -backed credentials, such as the GWP Digital Credential, and short courses that a) can be embedded within degrees, b) lead into degrees, and c) can be taken as standalone modules that provide value for employees. Mason will also develop certifications and continuous learning modules in partnership with employers to include a mix of job-specific skills (e.g., artificial intelligence, data analytics) and soft skills (e.g., resiliency, negotiation, working in diverse teams). Mason will also create and offer virtual and place-based options for adult students to get the socio-academic-industry guidance and support they need to graduate and accelerate careers

Performance measures: Mason’s goal is to triple the number of students in computing fields from 5,000 to 15,000 by 2024. In addition to growth in computing disciplines, we recognize that there are other high-demand areas for talent, including in the business, education and health sectors. For example, Virginia, like other states, has huge unmet demand for teachers and social workers.

Section I. 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.

Strategy 1. Provide Affordable Access for All Students:

Increase undergraduate student grant aid. As enrollments have increased and our student body has become more diverse, the university has seen an increase in the number of students applying for financial aid, growing from 12,931 in FY 2011 (65.9 percent of the undergraduate population) to 16,304 in FY 2018 (66.9 percent of the undergraduate population).

PERCENTAGE OF DEGREE-SEEKING UNDERGRADUATE STUDENTS APPLYING FOR FINANCIAL AID, FY 2011-FY 2018

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
UG Degree Seeking	19,623	20,194	20,067	21,324	21,678	22,307	23,179	24,372
Applied for Aid	65.9%	64.0%	65.0%	65.0%	65.0%	66.0%	67.0%	66.9%
Did Not Apply	34.1%	36.0%	35.0%	35.0%	35.0%	34.0%	33.0%	33.1%

In FY 2018, Mason provided financial aid to more than 22,000 undergraduate and graduate students. Comparisons to other Virginia universities are shown in the table below. Mason's level of need met remains less than that of University of Virginia, College of William and Mary, and Virginia Tech. The average Mason package covered about 63 percent of the evidenced need of full-time freshmen, whereas for all Mason full-time undergraduates the average level rose slightly to 58 percent in FY 2018.

PERCENTAGE OF DEMONSTRATED STUDENT FINANCIAL NEED MET BY VIRGINIA DOCTORAL INSTITUTIONS, FY 2018

Institution	Full-Time Freshmen	Full-Time Undergraduate
University of Virginia	100%	100%
College of William and Mary	79%	80%
Virginia Tech	66%	65%
George Mason University	63%	58%
Virginia Commonwealth University	57%	54%
Old Dominion University	51%	47%

The average debt for a Mason graduate earning an undergraduate degree is \$30,790 and the percentage of graduates with no debt is 40%. This metric will be hard to maintain without even more investment from the commonwealth.

MASON CUMULATIVE INDEBTEDNESS FROM ALL SOURCES AND PERCENTAGE OF STUDENTS INCURRING DEBT, GRADUATING UNDERGRADUATE STUDENTS, FY2010-2017

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Average debt	\$23,506	\$25,822	\$26,710	\$27,206	\$27,373	\$30,132	\$30,755	\$30,790
% Grads w/debt	57%	57%	58%	60%	58%	56%	56%	60%
% Grads no debt	43%	43%	42%	40%	42%	44%	44%	40%

Source: Common Data Set 2018-2019, metric H5a

Increase graduate student grant aid. Currently, sources for aid support within the tuition increase are solely from out-of-state enrollment growth, which helps fund some but not all graduate grant aid. Therefore, additional state sources of funding are desperately needed. One underlying premise for our request for additional student aid funding is to obtain parity in financial aid resources in terms of per student funding. In Fall 2017, Mason had double the number of in-state graduate students when compared to the Virginia research universities, yet the amount for funding in graduate aid per in-state student does not reflect that.

**COMMONWEALTH OF VIRGINIA
Graduate In-State Projected FTE 2019**

Doctoral Institutions	Estimated General Fund FY 2019*	Projected In-State FTE**	Projected Amount Per Student
Virginia Tech	\$5,175,125	1,905	\$2,717

Doctoral Institutions	Estimated General Fund FY 2019*	Projected In-State FTE**	Projected Amount Per Student
University of Virginia	5,340,583	2,127	2,511
Old Dominion	2,125,993	1,498	1,419
Virginia Commonwealth Univ.	2,705,027	2,563	1,055
College of William & Mary	909,978	921	988
Doctoral avg. excl. Mason	\$3,251,341	1,803	\$1,738
Mason	\$2,753,941	3,700	\$744
Mason percent of average	85%	205%	43%

* Estimated General Fund amounts per each institution's Student Financial Assistance appropriations

** Excludes First Professional Student FTEs

Source: <http://research.schev.edu/enrollment/projections/submissionsummary.asp>

Strategy 2. Enrollment Growth and Degree Awards for Virginia Undergraduate and Graduate Residents:

Between 2010 and 2018, Mason has been a major contributor to the commonwealth's growth in enrollment—accounting for 64.1 percent of growth among all public universities. During this period, Mason has shown that growth is compatible with improvements in quality. Entering students show increases in average SAT scores from 1197 to 1218, and high school GPAs from 3.66 to 3.7. In addition, Mason continues to welcome the largest transfer student body, particularly for two-year college transfers. In fact, more than 3,000 community college students join Mason each year to complete their baccalaureate degrees, which represents more than 25 percent of the total transfer population for the commonwealth of Virginia.

Based on Fall 2018 SCHEV data, Mason is the single largest in-state student-serving institution in the commonwealth. In Fall 2018, Mason accounted for 17.7 percent of all in-state enrollments—undergraduate and graduate—among the 15 public four-year institutions. In Fall 2018, Mason supported 15.8 percent of all undergraduate in-state enrollment, up from 13.1 percent in Fall 2008. Our growth in undergraduate enrollment accounted for approximately 37.5 percent of the increase in total in-state undergraduates in Virginia four-year public institutions. Undergraduate education is not the only area where Mason excels. During the same time period, Mason's in-state graduate population has also increased. In Fall 2018, Mason supported 28.7 percent of the commonwealth's in-state graduate students, which had grown from 25.9 percent in Fall 2008.

Strategy 3. Student Success Initiatives—Student Experience Redesign (SER): Six working groups of Mason staff and students have been created to implement specific action items associated with improving the Mason Student Experience. These working groups focused on developing a self-service and a 24/7 student support strategy; building a comprehensive student care network integrating coaching and advising; expanding campus-wide student initiation experiences; implementation of a LifeCycle Constituent Relationship Management (CRM) platform; and building an institution-wide culture of service.

- Mason launched its Mason Student Services Center in June 2019, integrating the walk-up services for Student Accounts, Financial Aid, and Admissions.
- Mason selected Salesforce as its platform for CRM and has implemented the first phases of Lifecycle CRM in Admissions (both undergraduate and graduate) and orientation, and for the Mason Student Services Center.
- Mason has reorganized its centralized advising/coaching services to better integrate University Life and academic functions into a singular student experience.

- Initiation programs have been expanded for the Fall 2019 cohorts and multiple pilots are underway for new UNIV 100 classes.

Strategy 4. New and Enhanced Programs:

New Programs. Mason has embarked on an inquiry-based, experiential learning paradigm called Mason Impact. The goal of Mason Impact is to graduate students who are engaged citizens and well-rounded scholars who are prepared to act. Mason Impact builds on our nationally recognized undergraduate research program, which was initiated in 2011 as the focus of a SACS Quality Enhancement Plan, and has involved more than 30,000 students in aspects of undergraduate research.

Under Mason Impact, students are offered the opportunity to complete projects in these areas that will be noted on their transcripts. Faculty and staff developed more than 140 Mason Impact experiences. In the pilot program, students submitted 340 independently designed projects for approval. The program will be available to all students in Fall 2019.

Several internal grant programs increased faculty and student engagement. Curriculum Impact Grants, building on successful Multidisciplinary Research Seed Grants and OSCAR's Scholarship Development Grants, support teams of faculty working together from across campus to create new courses, certificates, concentrations, or majors (undergraduate and graduate programs). More than 400 faculty members are already participating. New minors have already been approved, and additional programs will be developed.

In 2017, the Office of the Provost supported eight competitively-chosen multidisciplinary summer impact projects that had teams of undergraduate and graduate students working with faculty on a shared question or challenge. These flagship projects, explored topics as diverse as the water quality of the Chesapeake Bay, the lives of those enslaved at Gunston Hall, and the effects of solitary confinement. Additional teams worked full time to develop entrepreneurial projects. In summer 2018, we supported nine additional projects.

Several new study-abroad programs have been started to encourage participation. The first cohort of Global Gateway first-year students completed many of their Mason Core requirements while studying at one of five locations across the globe in their second semester in Spring 2019. The Global Education Office also offered grants to support Global Discovery Courses (regular term courses with an abroad component) and course development. The office is also working with undergraduate education to create global Mason Impact projects.

Enhanced Programs—Mason's College of Education and Human Development takes pride in its Learning Into Future Environments program, better known as Mason LIFE. This program is an innovative post-secondary opportunity for young adults with intellectual and developmental disabilities who desire a university experience in a supportive academic environment. When Mason LIFE began in 2002, it was one of only 12 such programs nationwide and as such, it has served as a model program for other universities. With the passing of the Higher Education Opportunity Act of 2008, access to university learning for students with intellectual and developmental disabilities was mandated and the number of programs increased substantially. Mason LIFE remains a pioneer in this field as only 16 universities (including Mason LIFE) offer the combination of a four-year educational program, employment integration opportunities, access to residential housing, and recognition as an approved Comprehensive Transition and Postsecondary (CTP) provider.

Mason LIFE supports approximately 54 full-time students annually, two-thirds of whom are residents of the Commonwealth of Virginia. These students engage in 555 clock hours of coursework, which is the equivalent load of almost 15-credit hours each semester. While the content of their coursework differs from that of their peers without disabilities, these students matriculate through a rigorous course of study with

required benchmarks of achievement toward a certificate of completion. No state funding has been provided for these full-time, in-state students. Although these students are on an alternative pathway to graduation, federal, state, and local entities have begun to recognize and support their educational pursuits (e.g., U.S. Department of Veterans Affairs and community services boards). Providing state support for Mason LIFE’s in-state students will allow the program to further customize the individualized supports these students need in order to be more fully included in Mason classrooms and campus activities, as well as in our regional community via employment integration and recreational opportunities.

Strategy 5. Online Degrees: Mason has continued to progress in this effort with the development of a new partnership and by strengthening an existing one. For undergraduates, Mason continues to outpace its enrollment projections in the Online Virginia Network (OVN) during FY19, with an increase the number of total undergraduate students pursuing all of their coursework over the previous FY by 25.9 percent. The network also recently added the Virginia Community College System to its membership. Enrollment growth of fully online undergraduates continues to grow, with increases of 267 enrollments in AY 2018-19 and 101 in AY 2017-18.

Spring 2019	664 from 528 (+136)
Fall 2018	634 from 503 (+131)
Spring 2018	528 from 480 (+48)
Fall 2017	505 from 452 (+53)

Additionally, in partnership with Wiley Educational Services, Mason added new fully online graduate programs. As of summer 2019, Mason has 11 active programs, built in partnership with Wiley—eight degree programs and three certificates. Those programs include:

PROGRAM	START
Graduate Degree Programs	
Master of Special Education with ABA or Autism Spectrum Certification	Spring 2018
Master of Science in Health Informatics (MSHI)	Spring 2018
Master of Science in Health Systems Management (MHA)	Spring 2018
LLM United States Law	Fall 2018
LLM in Global Antitrust Law and Economics	Spring 2018
Master of Business Administration	Fall 2018
Master of Science in Data Analytics Engineering	Spring 2019
Master of Professional Studies—Applied Industrial/Organizational Psychology	Summer 2019
Certificate Programs	
Certificate in Applied Behavior Analysis	Spring 2018
Certificate in Autism Spectrum Disorders	Spring 2018
Certificate in Health Informatics and Data Analytics	Spring 2019

Strategy 6: Accessible Pathways: Since its Fall 2018 launch, the ADVANCE program has welcomed 319 students and introduced 21 degree program pathways in high-demand areas. The program has been particularly effective in promoting diversity—minority students made up more than 50 percent of ADVANCE’s inaugural cohort. The ADVANCE staff also continues to grow. The team now includes an executive director, assistant director of admissions, success coach coordinator, and four success coaches who collectively serve as the central point of contact for ADVANCE across both institutions. This year, ADVANCE received national recognition and external support in the form of programmatic grants and scholarships for its students. Expectations for ADVANCE’s second year are high, as enrollment is

anticipated to surpass this year's goals, and more than 100 program pathways will be available to prospective ADVANCE students.

Strategy 7: Support New Faculty Hires: Since Fall 2015, Mason's Volgenau School of Engineering has increased the numbers of full-time instructional faculty by approximately 30 percent. Most of the new hires are in tenure track positions, representing 96 percent growth in tenure track positions. The College of Science is also seeing a 24 percent increase in new tenure track positions. The strong STEM enrollment growth in both of these colleges are reflected in the growth of new faculty to 1) provide a high-quality education experience to a growing student body, and 2) boost the university's research and innovation productivity.

Strategy 8: Support Salary Compensation Increases: Over the past year, Mason has worked with the academic units to analyze and assess the current salaries of faculty in comparison to CUPA data for our SCHEV-approved peer group and R1 institutions. Mason has developed strategies with the schools/colleges to address compression and increase the minimum starting salaries for entry-level faculty.

Strategy 9: Support Emergency Retention Funding: Mason has joined the Collaborative on Academic Careers in Higher Education (COACHE) at the Harvard Graduate School of Education to gain greater insight into faculty job satisfaction. This is part of a multiyear initiative prompted by challenges reported in the Quality of Work Life survey administered to faculty and staff in the 2017–18 academic year. The COACHE research-practice partnership is dedicated to improving outcomes in faculty recruitment, development, and retention. Data from the COACHE survey will be benchmarked with that of five peer institutions. The survey will help Mason understand faculty satisfaction with the clarity and consistency of institutional expectations for research/scholarship and teaching productivity and the resources colleges and universities provide faculty to meet those expectations. The survey will provide Mason with faculty views about the physical workplace, technological and administrative support, work-life balance policies, and health and retirement benefits. Mason will gain faculty perspectives on the clarity and quality of policies surrounding tenure and promotion, as well as information on faculty governance, institutional leadership, and retention.

Additionally, Mason's leadership formalized a dual career hire policy to assist in the recruitment and retention of faculty.

Strategy 10: Effectiveness and Efficiency: To successfully meet the aggressive goals outlined in the six-year strategic plan, it has been necessary for Mason to become more efficient in business execution, such that as the mission expands, the institution can economically scale service delivery, continue to improve the academic experience, satisfy stakeholders and improve institutional effectiveness.

To maximize institutional efficiency, it has been necessary to reflect on the existing state of service delivery and make near-term, deliberate decisions and investments that support the mission objective. Mason has convened an internal committee to review necessary steps toward more effective and efficient operations. The following items were identified for focused efforts and are included in the new six year plan:

- **Organizational Design:** Mason needs to continue to improve optimization in its organization, resulting in better efficiency and customer satisfaction. Mason is laying the necessary foundation for institutional success as an R1 university.
- **Business Process Rationalization and Standardization:** Consistency in core service delivery to stakeholders depends on articulated process. Mason has made continued investments to address deficiencies in service delivery and standardize business processes, yielding improvements in the institution's ability to scale service delivery and improve service quality.

- **Data-Driven Decision Making:** High-performing organizations leverage data to make key decisions, yet “data” is only as valuable as it is authoritative. Mason needs data infrastructure to do so.

These identified areas of investment allow Mason to achieve the goal of personalizing transactions against the Stakeholder population and create actionable business intelligence from data, which continue to improve reporting and actionable business decisions

Strategy 11. Multidisciplinary Institutes: Mason currently supports three multidisciplinary institutes – the Institute for Biohealth Innovation (IBI), the Virginia Serious Games Institute, and the Institute for a Sustainable Earth. Mason’s R&D expenditures continue to show considerable growth, and our partnerships with external entities continue to grow and prosper.

Each Mason institute is designed with three strategic, inter-related thrusts:

Discovery: to advance knowledge through innovative multidisciplinary research and scholarship inspired by unmet societal needs and emerging opportunities.

Innovation: to strengthen the research-innovation cycle through academic, industry and investor partnerships in support of a robust innovation ecosystem.

Learning: to develop current and future generations of Virginians prepared to contribute to growth in our increasingly knowledge-intensive economy.

The multidisciplinary research programs within each institute draw on strong relationships with both external partners and among faculty in all of Mason’s colleges and schools. For example, Mason’s strategic partnership with the Inova Health System and the University of Virginia amplifies the breadth and depth of the impact of IBI. In 2017, this partnership led to the creation of the Genomics and Bioinformatics Research Institute (GBRI), an ~170,000 square foot research and innovation facility to be located on the campus of the Inova Center for Personalized Health (ICPH). Beginning in 2020, IBI faculty and students will work side-by-side with Inova clinicians and other academic and corporate partners in GBRI, as well as in complementary state-of-the-art research facilities located on Mason’s SciTech and Fairfax campuses. Through IBI and the multi-institutional GBRI, multidisciplinary, multi-functional teams of faculty, students, clinicians, and other healthcare and business professionals are identifying translational research opportunities that promise significant advances in personalized medicine, spawn new companies, create jobs, enhance the health of citizens in Virginia and beyond, and position the Commonwealth of Virginia as a pioneer in the personalized health and wellness revolution.

Support provided by the commonwealth for IBI has already contributed to improved competitiveness and new translational research and innovation opportunities. For example, a multidisciplinary team of IBI investigators recently competed for and won almost \$2 million of federal support for a state-of-the-art 3.0T MRI. The only one of its kind in Northern Virginia, the system will allow our investigators and their collaborators to explore the interrelations of brain and body functions from a biological, psychological, and social perspective, including the alterations of those relationships in the presence of acute and chronic stress such as trauma and pain. Commissioned in July 2018 in Mason’s new Peterson Health Sciences Hall, this world-class system will be operated as a clinical research core and will be made available to researchers and clinicians at other commonwealth institutions and health systems through the ongoing Virginia Neuroscience Initiative.

Update: In accordance with our strategic plan, Mason will launch the **Institute for Digital Innovation**, part of the Commonwealth’s Tech Talent initiative, in AY 2020.

Strategy 12. Enhance Research Infrastructure and Grow Research, R1 Status and Economic

Growth: Mason's discovery and innovation programs are inspired by and add value to advanced industries located in the Northern Virginia region and in the commonwealth more broadly. Mason has identified the following three multidisciplinary discovery and innovation areas for growth in the 2018 to 2024 period, priorities identified in collaboration with public and private sector partners in the region.

Pervasive, Trusted Information, and Communication Technologies. Mason seeks to double its sponsored research portfolio in Information and Communication Technologies (ICT), creating critical innovation capacity in the increasingly important subfields of cybersecurity and data analytics. Mason's research expenditures in ICT increased by almost \$10 million in just one year, from just more than \$10 million in AY 2017 to just under \$20 million in AY 2018. Growth in our ICT research portfolio inspires the development of new products and services in the region's technology-intensive industries, and supports a rapidly growing number of Mason students. Mason ICT graduates—the university currently enrolls ~5,000 students in its computer and information science and technology programs at the bachelor's, master's and PhD levels, and expects to double this number over the next 6 years—will help meet a global shortfall in ICT workers. A shortage of more than 1.5 million cyber workers globally is predicted by the year 2020. These contributions will help attract and retain ICT-intensive industries in the commonwealth.

Promoting Health and Well-being. Mason's Institute for Biohealth Innovation (IBI) will continue to focus on driving advances in technologies and interventions developed to improve the health and well-being of the citizens of the commonwealth and beyond. Enabled by translational partnerships with clinical organizations and private-sector companies, IBI researchers are helping drive the personalized medicine revolution. In the next six-year period, the university will serve as a founding member of the Genomics and Bioinformatics Research Institute (GBRI), in partnership with the University of Virginia and the Inova Health System. GBRI researchers, including an additional 30+ IBI research-active faculty, will engage in cutting-edge translational research and training in domains such as proteomics, systems biology, bioengineering, bioinformatics, and public health. Mason will prepare thousands of new Mason graduates to participate in the innovation and delivery of increasingly technology-intensive personalized health and well-being services, making Virginia a leader in this area.

Resilience—Thriving Together during Change. Mason's third multidisciplinary priority lies at the intersection of resilient social, engineered, and environmental systems. Mason is examining, for example, the interdependencies among the increasing prevalence of extreme weather events, including solar weather events, and their current and projected impact on communities here in Virginia and others around the world. Increases in our understanding will inform the development of new methodologies, technologies, and approaches to make our socio-political, built- and eco-systems more resilient to disruptive, undesirable change and better positioned to thrive in a rapidly changing world.

Virginia Research Investment Fund (VRIF). The Mason community is fully engaged in planning and executing the research, innovation, and workforce economic development strategies enabled by the GO Virginia and Virginia Research Investment Fund (VRIF) initiatives. Mason, the University of Virginia, and the Inova Health System are founding partners of the Genomics and Bioinformatics Research Institute (GBRI), a new 501c3 located on the Inova Center for Personalized Health (ICPH) campus with support provided by the founding partners and VRIF. GBRI will enable collaborative research and translational impact that improves the health and wellness of the citizens of Virginia. GBRI-enabled research outcomes will accelerate the personalized health and wellness revolution, promising more cost-effective health and wellbeing interventions with excellent individual and population outcomes. With VRIF support and working with our partners in GBRI, Mason plans to recruit three Eminent Researchers who will increase research productivity at Mason, generate translational innovation outcomes including improvements in the quality of care provided to millions of Virginians, and attract a growing number of biotech and other health and well-

being industries to the commonwealth. Mason is also developing research innovation and workforce development initiatives aligned with other VRIF priorities, including the Commonwealth Cyber Initiative (CCI) and the Tech Talent Initiative. Given Mason's considerable capacity (we have the largest number of undergraduate and graduate students enrolled in computing programs of all the Virginia institutions, with commensurate numbers of world-class faculty) and growing success in computing (we are the only Virginia university to be nationally ranked in the top 10 for our cybersecurity programs and we run the commonwealth's only federally funded national center of research excellence), we expect to play a significant role in CCI and in the Tech Talent Initiative. For example, we are leading the largest of the four CCI Regional Nodes—the Northern Virginia Node, which currently has more than 60 partner organizations. As part of the Tech Talent Initiative, Mason had committed to double the number of undergraduates in its computing programs and to develop a digital innovation district at Arlington's Virginia Square. Mason is also working with its academic partners on additional life sciences/health programs and initiatives that align with priorities identified for VRIF funding, including a multi-institutional research initiative being developed to combat the opioid epidemic and other substance abuse challenges and a multi-partner life sciences venture that seeks to increase the number of successful life sciences start-ups created and nurtured in the commonwealth.

Section J. Economic Development Annual Report (Due October 1): Describe the institution's contributions to stimulate the economic development of the Commonwealth and/or area in which the institution is located. If applicable, the information should include:

1. University-led or public-private partnerships in real estate and/or community redevelopment.
2. State industries to which the institution's research efforts have direct relevance.
3. High-impact programs designed to meet the needs of local families, community partners, and businesses.
4. Business management/consulting assistance.

RESPONSE: Due October 1.

2019 SIX-YEAR PLAN: 2020-22 through 2024-26

Due: July 1, 2019

Institution:

Institution UNITID:

Individual responsible for plan

Name:

Email address:

Telephone number:

**Part 1A: Tuition and Fees Predictability Plans for Institutions without Undergraduate Tuition Differentials
George Mason University**

In-State Undergraduate Tuition and Fees Predictability Plans

Instructions: Provide no less than three years (the worksheet allows for four years based on the biennial budget structure) of planned increases in in-state undergraduate tuition and mandatory E&G fees and mandatory non-E&G fees. 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 mission, market capacity and other factors. Plans shall include a range of tuitions based on available state resources, but must contain a scenario that includes the assumption of no new state general fund support (SCENARIO 1). Add scenarios and tables, if more are needed, and provide brief information about the assumptions for each scenario. Include more detailed information about assumptions used to calculate increases in Section B of the Narrative document. Include anticipated tuition and fee charges affecting first-year students. (Please do not alter the shaded cells that contain formulas.)

In-State Undergraduate Tuition and Mandatory E&G Fees

	2019-20	2020-21		2021-22		2022-23		2023-24	
	Charge	Charge	% Increase	Charge	% Increase	Charge	% Increase	Charge	% Increase
Scenario 1: No new GF	9,060	9,513	5.0%	9,989	5.0%	10,488	5.0%	11,012	5.0%
Scenario 2: new GF	9,060	9,060	0.0%	9,060	0.0%	9,060	0.0%	9,060	0.0%
Scenario 3:			%		%		%		%

Assumptions for:

Scenario 1	5% Undergraduate Tuition and Mandatory E&G Fees
Scenario 2: No new GF	* The 0% scenario assumes that the legislature provides additional financial support to offset the difference between Mason's share of commonwealth resources and those of its peers.
Scenario 3	

In-State Undergraduate Mandatory Non-E&G Fees

	2019-20	2020-21		2021-22		2022-23		2023-24	
	Charge	Charge	% Increase	Charge	% Increase	Charge	% Increase	Charge	% Increase
Scenario 1:	3,504	3,609	3.0%	3,717	3.0%	3,829	3.0%	3,944	3.0%
Scenario 2:			%		%		%		%

Assumptions for:

Scenario 1	3% Undergraduate Mandatory Non-E&G Fees in compliance with Commonwealth budgetary requirements.
Scenario 2	

**Part 2: Tuition and Other Nongeneral Fund (NGF) Revenue
George Mason University**

Tuition and Fee Increases and Nongeneral Fund (NGF) Revenue Estimates Based on the Assumption of No New General Fund (GF)

Instructions: Based on enrollment changes and other institution-specific assumptions, provide the total revenue for educational and general (E&G) programs, by student level and domicile. Provide other anticipated NGF revenue, tuition used for financial aid (Program 108) and anticipated non-E&G fee revenue for in-state undergraduates and then all other students. (Please do not alter the shaded cells that contain formulas.)

Items	2018-2019 (Estimated)	2019-2020 (Estimated)	2020-2021 (Planned)	2021-2022 (Planned)
	Total Revenue	Total Revenue	Total Revenue	Total Revenue
E&G Programs				
Undergraduate, In-State	\$195,008,730	\$206,353,346	\$219,987,728	\$234,809,089
Undergraduate, Out-of-State	\$114,018,080	\$162,594,994	\$182,758,255	\$205,346,905
Graduate, In-State	\$44,564,585	\$48,293,406	\$52,216,070	\$57,310,637
Graduate, Out-of-State	\$33,882,555	\$56,715,759	\$64,478,392	\$73,806,173
Law, In-State	\$4,757,854	\$4,245,709	\$4,245,709	\$4,245,709
Law, Out-of-State	\$10,766,739	\$9,734,938	\$9,734,938	\$9,734,938
Medicine, In-State	\$0	\$0	\$0	\$0
Medicine, Out-of-State	\$0	\$0	\$0	\$0
Dentistry, In-State	\$0	\$0	\$0	\$0
Dentistry, Out-of-State	\$0	\$0	\$0	\$0
PharmD, In-State	\$0	\$0	\$0	\$0
PharmD, Out-of-State	\$0	\$0	\$0	\$0
Veterinary Medicine, In-State	\$0	\$0	\$0	\$0
Veterinary Medicine, Out-of-State	\$0	\$0	\$0	\$0
Other NGF	\$45,800,000	\$46,500,000	\$47,895,000	\$49,331,850
Total E&G Revenue - Gross	\$448,798,543	\$534,438,152	\$581,316,092	\$634,585,301
Total E&G Revenue - Net of Financial Aid	\$435,702,543	\$520,342,152	\$562,220,092	\$613,989,301
Tuition used for Financial Aid (Pgm 108)	\$13,096,000	\$14,096,000	\$19,096,000	\$20,596,000
Non-E&G Fee Revenue				
In-State undergraduates	\$69,542,000	\$73,220,800	\$76,832,000	\$80,454,500
All Other students	\$34,864,100	\$34,779,200	\$39,642,300	\$43,648,200
Total non-E&G fee revenue	\$104,406,100	\$108,000,000	\$116,474,300	\$124,102,700

Total E&G Revenue Gross \$46,877,940 \$53,269,209

Part 3: ACADEMIC-FINANCIAL PLAN
George Mason University

Academic and Financial Plan												
3A: Six-Year Plan for Academic and Support Service Strategies for Six-year Period (2020-2026)												
<p>Instructions for 3A: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2020-2026)," please provide short titles to identify institutional strategies associated with goals in the Virginia Plan. Provide a concise description of the strategy in the Description of Strategy column (column J). Within this column, provide a specific reference as to where more detailed information can be found in the Narrative document. Note the goal(s) with which the strategy is aligned with the Virginia Plan (in particular, the related priority areas) in the VP Goal column and give it a Priority Ranking in column A. Additional information for 2022-2026 should be provided in column K (Two Additional Biennia). Strategies for student financial aid, other than those that are provided through tuition revenue, should not be included on this table; they should be included in Part 4, General Fund Request, of the plan. If an institution wishes to include any information about FTEs or fringe benefit adjustments (using DPB's FY2020 start-up instructions available by the end of May), it should list them as strategies in the Academic Plan not the Financial Plan. Funding amounts in the first year should be incremental. However, if the costs continue into the second year, they should be reflected cumulatively. Additional rows for strategies must be added before the gray line. Please update total cost formulas if necessary. ASSUME NO ADDITIONAL GENERAL FUND IN THIS WORKSHEET.</p>												
Priority Ranking	SECTION A: ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2020-2026)											
	Strategies (Short Title)	VP Goal	Biennium 2020-2022 (7/1/20-6/30/22)						Description of Strategy	Two Additional Biennia		
			2020-2021			2021-2022					Concise Information for Each Strategy	Information for 2022- 2026
			Total Amount	Reallocation	Amount From Tuition Revenue	Total Amount	Reallocation	Amount From Tuition Revenue				
1	Strategy 1: Provide Affordable Access for All Students. Increase student financial aid for both undergraduate and graduate students. (Costs are included in 3B.)	1	\$0	\$0	\$0	\$0	\$0	\$0	To provide an increasingly diverse student body with access to the enormous and tangible benefits of higher education, Mason must make available additional student aid resources at both undergraduate and graduate levels. (Narrative - page 2)	Mason will continue to provide access to a variety of students who will require financial aid.		
3	Strategy 2: Enrollment Growth and Degree Awards for Virginia Undergraduate and Graduate Residents. Seek equitable resources for past enrollment growth.	1,2,4	\$10,000,000	\$0	\$10,000,000	\$12,000,000	\$0	\$12,000,000	George Mason University has excelled as one of the largest four-year public research institutions in the commonwealth, serving one of the largest populations of Pell grant recipients with no disparities in learning outcomes. The university has been and continues to be committed to the commonwealth's higher education goals for enrollment growth, two-year transfers, and educational program development to support economic growth. (Narrative - page 3)	Mason will continue to be committed to the Commonwealth's higher education goals for enrollment growth.		
7	Strategy 3: Student Success Initiatives - Student Experience Redesign. Focus on the integration of technologies used by students, faculty, and advisors to improve student success.	2	\$500,000	\$0	\$500,000	\$600,000	\$0	\$600,000	To serve an increasingly diverse student population, Mason is going through a major enhancement of its student success and advising model to increase academic success and enhance retention and four/six-year graduation rates. Another goal is to instill a sense of belonging and pride among our students. The Student Experience Redesign initiative creates an integrated system of people, processes, and technologies that support a comprehensive student care network. (Narrative - page 4)	Mason will continue to focus on providing technology-based resources for students and faculty to assist with the learning process.		
9	Strategy 4: New and Enhanced Programs: New Programs. New vision for Undergraduate Education - Mason Impact and enhance current programs.	1,2,4	\$1,000,000	\$0	\$1,000,000	\$1,200,000	\$0	\$1,200,000	Continuation of strategy to provide a variety of learning modalities, such as the Mason Impact and Mason Core. (Narrative - page 5)	Mason will continue strategies, new and current, that provide a variety of learning modalities.		
12	Strategy 5: Online Degrees. Provide some of Mason's leading programs online through the Online Virginia Network partnership.	2,3	\$0	\$0	\$0	\$0	\$0	\$0	Mason remains committed to the expansion of higher education through the continual exploration and development of innovative methods of delivering the George Mason University experience. (Narrative - page 5)	Mason will continue strategies, new and current, that provide a variety of learning modalities.		
8	Strategy 6: Accessible Pathways. Commit to creation of innovative, accessible pathways.	1,2	\$600,000	\$0	\$600,000	\$600,000	\$0	\$600,000	Mason remains committed to the creation of innovative, accessible pathways. The ADVANCE program, our partnership with the Northern Virginia Community College (NOVA), exemplifies Mason's commitment to extend educational and economic opportunity to a diverse student population (Narrative - page 6)	Mason will continue its commitment for this program.		

Part 3: ACADEMIC-FINANCIAL PLAN
George Mason University

Academic and Financial Plan												
3A: Six-Year Plan for Academic and Support Service Strategies for Six-year Period (2020-2026)												
<p>Instructions for 3A: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2020-2026)," please provide short titles to identify institutional strategies associated with goals in the Virginia Plan. Provide a concise description of the strategy in the Description of Strategy column (column J). Within this column, provide a specific reference as to where more detailed information can be found in the Narrative document. Note the goal(s) with which the strategy is aligned with the Virginia Plan (in particular, the related priority areas) in the VP Goal column and give it a Priority Ranking in column A. Additional information for 2022-2026 should be provided in column K (Two Additional Biennia). Strategies for student financial aid, other than those that are provided through tuition revenue, should not be included on this table; they should be included in Part 4, General Fund Request, of the plan. If an institution wishes to include any information about FTEs or fringe benefit adjustments (using DPB's FY2020 start-up instructions available by the end of May), it should list them as strategies in the Academic Plan not the Financial Plan. Funding amounts in the first year should be incremental. However, if the costs continue into the second year, they should be reflected cumulatively. Additional rows for strategies must be added before the gray line. Please update total cost formulas if necessary. ASSUME NO ADDITIONAL GENERAL FUND IN THIS WORKSHEET.</p>												
Priority Ranking	SECTION A: ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2020-2026)											
	Strategies (Short Title)	VP Goal	Biennium 2020-2022 (7/1/20-6/30/22)						Description of Strategy	Two Additional Biennia		
			2020-2021			2021-2022					Concise Information for Each Strategy	Information for 2022- 2026
			Total Amount	Reallocation	Amount From Tuition Revenue	Total Amount	Reallocation	Amount From Tuition Revenue				
5	Strategy 7: Support New Faculty Hires. With anticipated enrollment growth over the biennium, provide teaching lines to accommodate the growth.	3,4	\$5,000,000	\$0	\$5,000,000	\$6,250,000	\$0	\$6,250,000	We will continue to focus on reaching our 2024 goal of 100,000 career-ready graduates. Given enrollment growth, new faculty lines and support are required in order to support the growth. (Narrative - page 7)	Mason will continue to focus on reaching goals related to career-ready graduates.		
2	Strategy 8: Support Salary Compensation Increases. Recognize high quality faculty and staff by providing an annual merit based salary compensation increase. (Costs are included in 3B)	3,4	\$0	\$0	\$0	\$0	\$0	\$0	Mason must continue to retain and recruit top talent. (Narrative - page 7)	Mason must continue to retain and recruit top talent.		
6	Strategy 9: Support Emergency Retention Funding. To create and maintain an emergency retention fund . Funds will be used to maintain the university's most critical asset, its human capital.	3,4	\$1,000,000	\$0	\$1,000,000	\$1,500,000	\$0	\$1,500,000	Mason is committed to creating and maintaining an emergency retention fund to ensure we retain our human capital needs. (Narrative - page 8)	Mason is committed to maintaining an emergency retention fund to ensure we retain our human capital needs.		
11	Strategy 10. Effectiveness and Efficiency: The university is undergoing process re-engineering in a variety of areas to improve effectiveness and efficiency. Reallocation to help fund Strategy 9: Emergency Retention Funding.	3	\$0	\$1,000,000	\$1,000,000	\$0	\$1,000,000	\$1,000,000	To successfully meet the aggressive goals outlined in the six year strategic plan, it is necessary for Mason to become very efficient in business execution, such that as the mission expands, the Institution can economically scale service delivery, continue to improve the academic experience, satisfy stakeholders and improve institutional effectiveness. (Narrative - page 8)	Mason will continue efforts related to efficiency and effectiveness.		
4	Strategy 11: Elevate Research. Serve as an engine for innovation and growth in the region, Commonwealth and the nation.	4	\$0	\$0	\$0	\$0	\$0	\$0	Funding is required for the research infrastructure needs in order to grow our research capabilities. Funding will also come from increased indirect cost recovery. (Narrative - page 9)	Funding is required for the research infrastructure needs in order to grow our research capabilities. Funding will also come from increased indirect cost recovery.		
10	Strategy 12: Research of Consequence. Strengthen the impact of research outcomes.	4	\$0	\$0	\$0	\$0	\$0	\$0	In addition to elevating the quantity and quality of our research, scholarship, and creative activities, Mason is strengthening the impact of its research outcomes. In the last four years, we have created three new university-wide institutes to support multidisciplinary research, innovation, and economic development initiatives. (Narrative - page 10)	Mason will continue to focus on creating mechanisms that support the research impact.		
			\$0	\$0	\$0	\$0	\$0	\$0				
Total 2020-2022 Costs (Included in Financial Plan *Total Additional Funding			\$18,100,000	\$1,000,000	\$19,100,000	\$22,150,000	\$1,000,000	\$23,150,000				

3B: Six-Year Financial Plan for Educational and General Programs, Incremental Operating Budget Need 2020-2022 Biennium

Instructions for 3B: Complete the lines appropriate to your institution. As completely as possible, the items in the Academic Plan (3A) and Financial Plan (3B) should represent a

Part 3: ACADEMIC-FINANCIAL PLAN
George Mason University

Academic and Financial Plan
3A: Six-Year Plan for Academic and Support Service Strategies for Six-year Period (2020-2026)

Instructions for 3A: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2020-2026)," please provide short titles to identify institutional strategies associated with goals in the Virginia Plan. Provide a concise description of the strategy in the Description of Strategy column (column J). Within this column, provide a specific reference as to where more detailed information can be found in the Narrative document. Note the goal(s) with which the strategy is aligned with the Virginia Plan (in particular, the related priority areas) in the VP Goal column and give it a Priority Ranking in column A. Additional information for 2022-2026 should be provided in column K (Two Additional Biennia). Strategies for student financial aid, other than those that are provided through tuition revenue, should not be included on this table; they should be included in Part 4, General Fund Request, of the plan. If an institution wishes to include any information about FTEs or fringe benefit adjustments (using DPB's FY2020 start-up instructions available by the end of May), it should list them as strategies in the Academic Plan not the Financial Plan. Funding amounts in the first year should be incremental. However, if the costs continue into the second year, they should be reflected cumulatively. Additional rows for strategies must be added before the gray line. Please update total cost formulas if necessary. **ASSUME NO ADDITIONAL GENERAL FUND IN THIS WORKSHEET.**

Priority Ranking	SECTION A: ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2020-2026)								Description of Strategy	Two Additional Biennia		
	Biennium 2020-2022 (7/1/20-6/30/22)							Concise Information for Each Strategy			Information for 2022- 2026	
	Strategies (Short Title)	VP Goal	2020-2021			2021-2022						
			Total Amount	Reallocation	Amount From Tuition Revenue	Total Amount	Reallocation					Amount From Tuition Revenue

complete picture of the institution's anticipated use of projected tuition revenues. For every strategy in 3A and every item in 3B of the plan, the total amount and the sum of the reallocation and tuition revenue should equal one another. Two additional rows, "Anticipated Nongeneral Fund Carryover" and "Nongeneral Fund Revenue for Current Operations" are available for an institution's use, if an institution cannot allocated all of its tuition revenue to specific strategies in the plan. Also, given the long standing practice that agencies should not assume general fund support for operation and maintenance (O&M) of new facilities, O&M strategies should not be included in an institution's plan, unless they are completely supported by tuition revenue. **Please do not add additional rows to 3B without first contacting Jean Huskey.**

Assuming No Additional General Fund		2020-2021			2021-2022		
Items	Total Amount	Reallocation	Amount From Tuition Revenue	Total Amount	Reallocation	Amount From Tuition Revenue	
Total Incremental Cost from Academic Plan¹	\$18,100,000	\$1,000,000	\$19,100,000	\$22,150,000	\$1,000,000	\$23,150,000	
Increase T&R Faculty Salaries (\$)	\$4,050,000	\$0	\$4,050,000	\$4,350,000	\$0	\$4,350,000	
T&R Faculty Salary Increase Rate(%) ²	4.00%		4.00%	4.00%		4.00%	
Increase Admin. Faculty Salaries (\$)	\$1,700,000	\$0	\$1,700,000	\$1,720,000	\$0	\$1,720,000	
Admin. Faculty Salary Increase Rate (%) ²	4.00%		4.00%	4.00%		4.00%	
Increase Classified Staff Salaries (\$)	\$2,750,000	\$0	\$2,750,000	\$2,830,000	\$0	\$2,830,000	
Classified Salary Increase Rate (%) ²	4.00%		4.00%	4.00%		4.00%	
Increase University Staff Salaries (\$)	\$0	\$0	\$0	\$0	\$0	\$0	
University Staff Salary Increase Rate (%) ²	0.00%		0.00%	0.00%		0.00%	
O&M for New Facilities	\$2,500,000	\$0	\$2,500,000	\$3,500,000	\$0	\$3,500,000	
Add'l In-State Student Financial Aid from Tuition Rev	\$1,075,928	\$0	\$1,075,928	\$1,483,176	\$0	\$1,483,176	
Add'l Out-of-State Student Financial Aid from Tuition Rev	\$3,924,072	\$0	\$3,924,072	\$5,016,824	\$0	\$5,016,824	
Anticipated Nongeneral Fund Carryover	\$0	\$0	\$0	\$0	\$0	\$0	
Nongeneral Fund for Current Operations	\$10,777,940	\$0	\$10,777,940	\$9,819,209	\$0	\$9,819,209	
Library Enhancement	\$400,000	\$0	\$400,000	\$500,000	\$0	\$500,000	
Utility Cost Increase	\$600,000	\$0	\$600,000	\$900,000	\$0	\$900,000	
Total Additional Funding Need	\$45,877,940	\$1,000,000	\$46,877,940	\$52,269,209	\$1,000,000	\$53,269,209	

Notes:
(1) Please ensure that these items are not double counted if they are already included in the incremental cost of the academic plan.
(2) If planned, enter the cost of any institution-wide increase.

**Part 4: General Fund (GF) Request
George Mason University**

Requesting General Fund Support

Instructions: Indicate items for which you anticipate making a request for state general fund in the 2020-22 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, then 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.

Priority Ranking	Initiatives Requiring General Fund Support						Notes
			Biennium 2020-2022 (7/1/20-6/30/22)				
	Strategies (Match Academic-Financial Worksheet Short Title)	VP Goal	2020-2021		2021-2022		
			Total Amount	GF Support	Total Amount	GF Support	
1	Strategy 1: Provide Affordable Access for All	1	\$10,000,000	\$5,000,000	\$13,000,000	\$6,500,000	GF portion for financial aid (Narrative - page 2)
2	Strategy 8: Support Salary Compensation	3,4	\$17,000,000	\$8,500,000	\$17,800,000	\$8,900,000	GF portion for salary compensation plan (Narrative - page 7)
3	Strategy 2: Enrollment Growth	1,2,4	\$20,000,000	\$10,000,000	\$24,000,000	\$12,000,000	GF support for enrollment growth (Narrative - page 3)
4	Strategy 11: Elevate Research.	4	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	Full GF support for Elevating Research (Narrative - page 9)
5	Strategy 7: Support new Faculty Hires	3,4	\$10,000,000	\$5,000,000	\$12,500,000	\$6,250,000	GF share for support of new faculty hires (Narrative - page 7)
6	Strategy 9: Support Emergency Retention Funding	3,4	\$2,000,000	\$1,000,000	\$3,000,000	\$1,500,000	GF share for emergency retention funding (Narrative - page 8)
7	Strategy 3: Student Success Initiatives	2	\$1,000,000	\$500,000	\$1,200,000	\$600,000	GF share for student success initiatives (Narrative - page 4)
8	Strategy 6: Accessible Pathways	1,2	\$1,200,000	\$600,000	\$1,200,000	\$600,000	GF share for accessible pathways (Narrative - page 6)
9	Strategy 4: New and Enhanced Programs	1,2,4	\$2,000,000	\$1,000,000	\$2,400,000	\$1,200,000	GF share for new and enhanced programs (Narrative - page 5)
10	Strategy 12: Research of Consequence.	4	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	Full GF support for Research of Consequence (Narrative - page 10)
11	Strategy 5: Online Degrees	3	\$500,000	\$500,000	\$750,000	\$750,000	Full GF support for OVN (Narrative - page 5)
			\$70,200,000	\$38,600,000	\$82,350,000	\$44,800,000	

**Part 5: Financial Aid Plan
George Mason University**

FINANCIAL AID PLAN

Instructions: Provide a breakdown of the projected source and distribution of tuition and fee revenue redirected to financial aid. To ensure compliance with the state prohibition that in-state students not subsidize out-of-state students and to provide the review group with a scope of the strategy, projections must be made for each of the indicated categories. Please be aware that this data will be compared with similar data provided by other institutional offices in order to ensure overall consistency. (Please do not alter shaded cells that contain formulas.)

Note: If you do not have actual amounts for *Tuition Revenue for Financial Aid* by student category, please provide an estimate. If values are not distributed for *Tuition Revenue for Financial Aid*, a distribution may be calculated for your institution.

Allocation of Tuition Revenue Used for Student Financial Aid

*2018-19 (Estimated) Please see footnote below.

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$195,008,730	\$0	%	\$1,845,439
Undergraduate, Out-of-State	\$114,018,080	\$13,096,000	11.5%	\$11,250,561
Graduate, In-State	\$44,564,585	\$0	%	\$0
Graduate, Out-of-State	\$33,882,555	\$0	%	\$0
First Professional, In-State	\$4,757,854	\$0	%	\$0
First Professional, Out-of-State	\$10,766,739	\$0	%	\$0
Total	\$402,998,543	\$13,096,000	3.2%	\$13,096,000
Total from Tuition & Other NGF Revenue worksheet	\$448,798,543	\$13,096,000	2.9%	
In-State Sub-Total	\$244,331,169	\$0	%	\$1,845,439

2019-20 (Planned)

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$206,353,346	\$0	%	\$700,000
Undergraduate, Out-of-State	\$162,594,994	\$14,096,000	8.7%	\$13,396,000
Graduate, In-State	\$48,293,406	\$0	%	\$0
Graduate, Out-of-State	\$56,715,759	\$0	%	\$0
First Professional, In-State	\$4,245,709	\$0	%	\$0
First Professional, Out-of-State	\$9,734,938	\$0	%	\$0
Total	\$487,938,152	\$14,096,000	2.9%	\$14,096,000
Total from Tuition & Other NGF Revenue worksheet	\$534,438,152	\$14,096,000	2.6%	
In-State Sub-Total	\$258,892,461	\$0	%	\$700,000
Additional In-State	\$14,561,292	\$0	%	-\$1,145,439

2020-21 (Planned)

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$219,987,728	\$0	%	\$1,775,928
Undergraduate, Out-of-State	\$182,758,255	\$19,096,000	10.4%	\$17,320,072
Graduate, In-State	\$52,216,070	\$0	%	\$0
Graduate, Out-of-State	\$64,478,392	\$0	%	\$0
First Professional, In-State	\$4,245,709	\$0	%	\$0
First Professional, Out-of-State	\$9,734,938	\$0	%	\$0
Total	\$533,421,092	\$19,096,000	3.6%	\$19,096,000
Total from Tuition & Other NGF Revenue worksheet	\$581,316,092	\$19,096,000	3.3%	
In-State Sub-Total	\$276,449,507	\$0	%	\$1,775,928
Additional In-State	\$17,557,046	\$0	%	\$1,075,928
Additional In-State from Financial Plan			%	

2021-22 (Planned)

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$234,809,089	\$0	%	\$2,183,176
Undergraduate, Out-of-State	\$205,346,905	\$20,596,000	10.0%	\$18,412,824
Graduate, In-State	\$57,310,637	\$0	%	\$0
Graduate, Out-of-State	\$73,806,173	\$0	%	\$0
First Professional, In-State	\$4,245,709	\$0	%	\$0
First Professional, Out-of-State	\$9,734,938	\$0	%	\$0
Total	\$585,253,451	\$20,596,000	3.5%	\$20,596,000
Total from Tuition & Other NGF Revenue worksheet	\$634,585,301	\$20,596,000	3.2%	
In-State Sub-Total	\$296,365,435	\$0	%	\$2,183,176
Additional In-State	\$19,915,928	\$0	%	\$407,248
Additional In-State from Financial Plan		\$0	0.0%	

* Please note that the totals reported here will be compared with those reported by the financial aid office on the institution's annual S1/S2 report. Since the six-year plan is estimated and the S1/S2 is "actual," the numbers do not have to match perfectly but these totals should reconcile to within a reasonable tolerance level. Please be sure that all institutional offices reporting tuition/fee revenue used for aid have the same understanding of what is to be reported for this category of aid.

Part 6: Economic Development Annual Report for 2018-19
George Mason University

ECONOMIC DEVELOPMENT: CONTRIBUTIONS (HB515; which was enacted as Chapter 149, Virginia Acts of Assembly, 2016 Session)

Requirement: As per § 23.1-306 (A) of the Code of Virginia each such plan and amendment to or affirmation of such plan shall include a report of the institution's active contributions to efforts to stimulate the economic development of the Commonwealth, the area in which the institution is located, and, for those institutions subject to a management agreement set forth in Article 4 (§ 23.1-1004 et seq.) of Chapter 10, the areas that lag behind the Commonwealth in terms of income, employment, and other factors.

Instructions: The reporting period is FY19. **THE REPORT IS NOT DUE UNTIL OCTOBER 1.** The metrics serve as a menu of items that institutions should respond to as applicable and when information is available to them. Leave fields blank, if information is unavailable. (Please do not alter shaded cells that contain formulas.) Please note the narrative question at the bottom of the page. The response should be provided in the separate Narrative document, Section J.

6A: Provide information for research and development (R&D) expenditures through June 30, 2019 by source of fund with a breakdown by Science and Engineering (S&E) specific and non-S&E. (Definition: The response is an unaudited version of the data to be submitted to the NSF Higher Education R&D [HERD] Survey in early 2020.)

VA PLAN Strategy Reference	6A: Research and Development (R&D) Expenditures by Source of Fund	*S&E	Non S&E	Total
	Source of Funds			
4.3	Federal Government	\$91,363,006	\$5,119,299	\$96,482,305
	State and Local Government	\$1,336,893	\$2,228	\$1,339,121
	Institution Funds	\$28,797,796	\$9,931,904	\$38,729,700
	Business	\$4,053,937	\$1,968,139	\$6,022,076
	Nonprofit Organizations	\$24,643,442	\$7,717,795	\$32,361,237
	All Other Sources	\$707,014	\$151,237	\$858,251
	Total	\$150,902,088	\$24,890,602	\$175,792,690
	* S&E - Science and Engineering			

6B: For the following items, provide responses in appropriate fields. Insert an X for yes/no responses. Use Number/Amount field for other information. A Comments field has been provided for any special information your institution may want to provide.

VA PLAN Strategy Reference	6B: General Questions	Yes	No	Number/Amount	Comments
4.1	1. Does your institution offer an innovation- or entrepreneurship-themed student living-learning community (student housing)?	Yes			Business and Entrepreneurship LLC
4.1	2. Does your institution offer startup incubation/accelerator programs? If yes, please comment if people/companies external to the institution can access them and, if so, how. (Definition: Incubation or accelerator programs are structured multi-week or multi-month programs for which a cohort of start-up companies are chosen; includes mentoring and connections to investors)	Yes			While we have several programs that are limited to Mason student/faculty/staff, the Innovation Commercialization Assistance Program (ICAP) serves those external to the institution state-wide.
4.2	3. Does your institution have an entrepreneurship center? If yes, please comment if people/companies external to the institution can access it and, if so, how.	Yes			While several are limited to Mason student/faculty/staff, the Mason Enterprise Center
4.2	4. Does your institution use Entrepreneur(s)-in-Residence? (Definition: EIRS are usually experienced founders of high-growth start-up companies who partner with a university to explore active research projects and seek out opportunities to commercialize the products of research; alternatively, an EIR could be a grad student, post-doc, business major, etc., who assists to evaluate IP and provide assessments of market pull potential, business planning, etc.)	Yes			
4.1	5. Number of students paid through externally funded research grants or contracts.			~500	
4.1	6. Please answer Yes if (i) your institution's written tenure policy specifically mentions the development of intellectual property and/or the commercialization of research; or (ii) the policies of any schools or other divisions mention IP and/or commercialization as a consideration for promotion and tenure; or (iii) the instructions for compiling a P&T portfolio include providing information about patents, licenses, and other commercialization activities? If Yes, please provide a brief explanation in the comments field. If No, use the comments field to describe other ways a promotion and tenure committee might value those contributions, if any.	Yes			The tenure policies of several Mason colleges/schools encourage (but do not require) the development of IP and/or the commercialization of research as considerations for promotion and tenure.
4.2	7. Does your institution or an affiliated entity offer translational research and/or proof of concept funding? If yes, please provide the dollar amount awarded in FY19 in the number/amount field. In the comments field, please provide the number of grants awarded; additional comments can also be entered if needed.	Yes		16/\$678,757	
4.2	8. Does your institution or an affiliated entity offer a seed fund or venture capital fund that awards money to start-ups? If yes, please comment on whether it awards funding only to university-based start-ups or to the general public as well? If yes, please provide dollar amount awarded in FY19 in the number/amount field and the number of awards made in the comments field.		No		

6C: Provide information for federal research and commercialization grants by type, number, and dollar value with a breakdown by college and department. If additional rows are needed, please contact Jean Mottley (jeanmottley@schev.edu) for assistance.

VA PLAN Strategy Reference	6C: Research and Commercialization Grants	No.	\$ Value	College	Department
4.3	SBIR - Small Business Innovation Research	2	\$92,390	COS/VSE	SSB/C4I
	STTR - Small Technology Transfer Research	5	\$286,381	COS/VSE/CHSS	NCBID/BENG/CS/Psych

6D: The Intellectual Property (IP) section captures information on disclosure, patent, and licensing activities. It is divided into three tables. Tables 1 and 2 capture information regardless of source of funds or nature of entity to whom IP is transferred. Table 3 is required by § 23.1-102 subdivision 2 of the Code of Virginia. It details assignment of IP interests to persons or nongovernmental entities and the value of externally sponsored research funds received during the year from a person or nongovernmental entity by the institution, any foundation supporting the IP research performed by the institution, or any entity affiliated with the institution. Information is sought on research that yields IP regardless of the project's intent. Information is sought about IP transferred as a result of either basic or applied research. Tables 2 and 3 capture separate aggregate data on entities that have a principal place of business in Virginia and those with a principal place of business outside of Virginia.

VA PLAN Strategy Reference	6D: Table 1 - All Activity for FY 2018-19	No.
4.2	1. Number of Intellectual Property disclosures received	30
	2. Number of Provisional Patent Applications filed during the year	17
	3. Number of Patent Applications filed during the year (by type)	
	Design	1
	Plant	0
	Utility	24
	Total	25
	4. Total number of Patent Applications pending (by type)	
	Design	1
	Plant	0
	Utility	54
	Total	55
	5. Number of Patents awarded during the year (by type)	
	Design	0
	Plant	0
	Utility	7
	Total	7

VA PLAN Strategy Reference	6D: Table 2 - All Activity for FY 2018-19	Principal Place of Business in VA	Principal Place of Business Outside VA
4.2	1. Total number of intellectual property licenses executed in FY18-19	3	1
	2. Number of start-ups created through IP licensing in FY18-19	3	1
	3. Amount of licensing revenue in FY18-19 resulting from all intellectual property licenses	\$20,000	\$160,648
	4. Number of jobs created as a result of university start-ups	3	1

VA PLAN Strategy Reference	6D: Table 3 - Research Supported by Persons or Nongovernmental Entities	Principal Place of Business in VA	Principal Place of Business Outside VA

4.2	1. Value of funds received (not expended) from persons or nongovernmental entities to support research	\$26,274,635 (see note)	\$0
	2. Number of patents awarded during the year (by type) developed in whole or part from research projects funded by persons or nongovernmental entities:	This is a subset of Table 1, #5.	
	a. Design Patent	0	0
	b. Plant Patent	0	0
	c. Utility Patent	0	0
	d. Total	0	0
3. Number of assignments of intellectual property interests to persons or nongovernmental entities (definition: "assignment" is the outright conveyance, sale and transfer of the IP, in contrast to "license" of IP rights, which is the contractual permission given to another party to use the IP)	4	0	

We cannot easily determine VA versus outside VA at this time. The total value is \$26,274,635

6E: These items are VCCS specific. Please provide responses in appropriate fields. A Comments field has been provided for any special information the VCCS may want to provide.

VA PLAN Strategy Reference	6E: General Questions - VCCS Specific	Number	Comments
4.1	1. Number of training programs leading to workforce certifications and licensures.		
	2. Number of students who earned industry recognized credentials stemming from training programs.		
	3. Number of industry-recognized credentials obtained, including certifications and licenses.		
	4. Number of Career/Technical Education certificates, diplomas and degrees awarded that meet regional workforce needs.		

NARRATIVE REQUIREMENT (Section J):

Contributions to Economic Development – Describe the institution’s contributions to stimulate the economic development of the Commonwealth and/or area in which the institution is located. *If applicable*, the information should include:

- a. University-led or public-private partnerships in real estate and/or community redevelopment.
- b. State industries to which the institution’s research efforts have direct relevance.
- c. High-impact programs designed to meet the needs of local families, community partners, and businesses.
- d. Business management/consulting assistance.