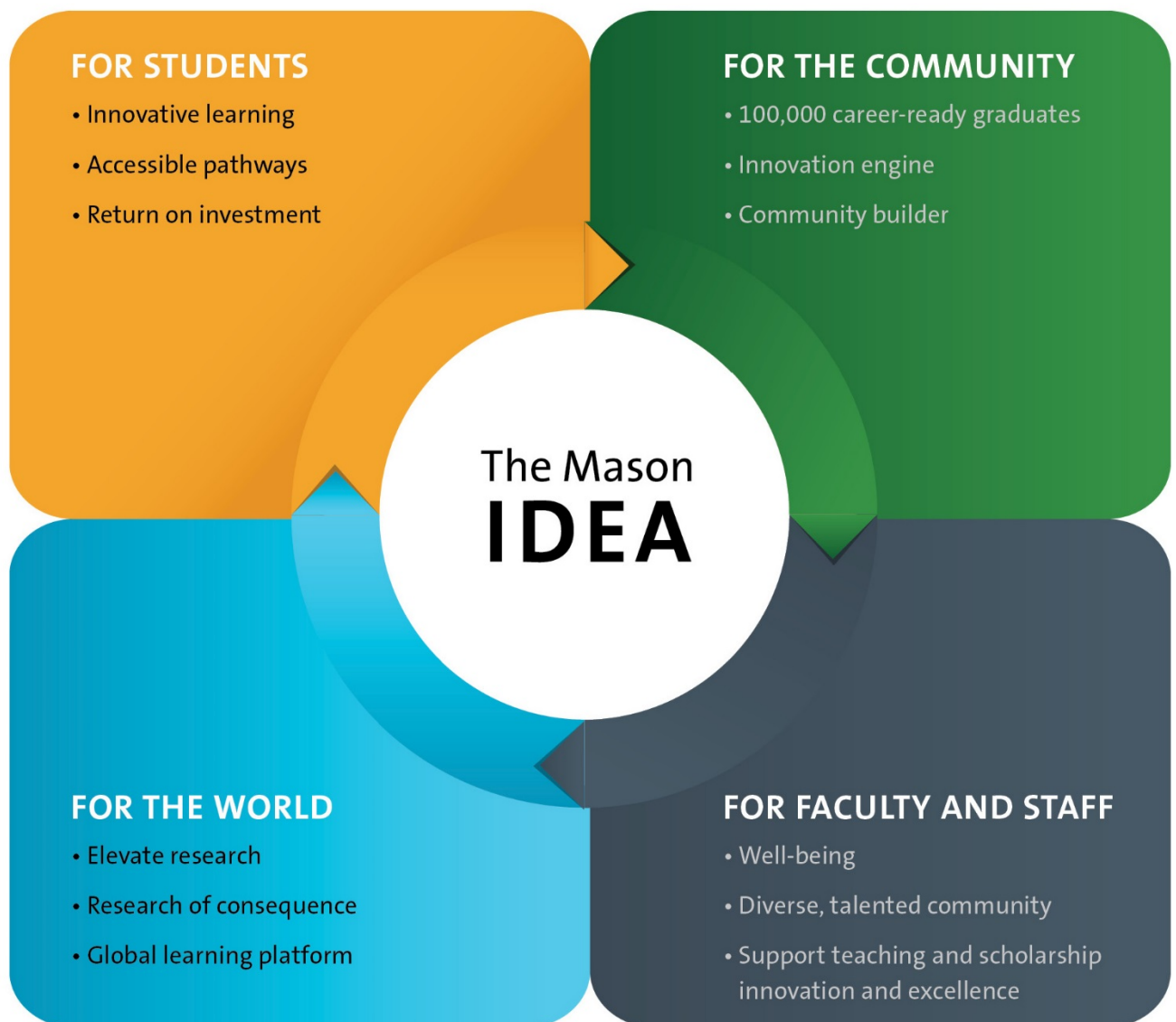




# George Mason University 2018 Six-year Plan



# George Mason University

## 2018 Six-year Plan Part II

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### Introduction

George Mason University has grown in both size and stature, not only becoming the largest public research university in the Commonwealth, but also gaining prominence in the United States and throughout the world. Mason's location near Washington, D.C. affords the University access to unique opportunities, resources, and audiences, as it strives to be the best University *for* the World. Under the leadership of President Ángel Cabrera, the university has set an ambitious course for the future through its *2014-2024 Strategic Plan*. Mason's strategic plan is structured around four constituencies – students, faculty and staff, the community, and the world. While not mutually exclusive, each embraces the Mason *IDEA* – *Innovative, Diverse, Entrepreneurial, and Accessible* and is representative of the university's commitment *to serve*.

### A. Institutional Mission

**A public, comprehensive, research university established by the Commonwealth of Virginia in the National Capital Region, we are an innovative and inclusive academic community committed to creating a more just, free, and prosperous world.**

Grounded in our unique characteristics – the Mason IDEA – we will make true on our promise to be the best university for our students, for our community, for our faculty and staff, and for the world. The common thread weaving together our mission and the strategic plan is the notion that Mason will find innovative ways to serve our stakeholders.

The basic idea is reflected in the structure of our strategic plan. Each area is supported by goals, initiatives, and metrics that are designed to direct our actions toward positively impacting our stakeholders, inspiring new ways of thinking, and moving Mason forward as we face the challenges and opportunities of an increasingly complex world.

### B. Six-Year Plan Strategies

**Strategy 1. Provide Affordable Access for All Students:** In order 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, when comparing General Fund financial assistance to the levels of the Commonwealth's other research institutions, 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 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 off-campus jobs for considerably more than the recommended 10 hours per week, some enroll only part time, and 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, it naturally follows that Mason students have high family incomes. In reality, this is not the case. Around 30% of Mason's undergraduate population are Pell eligible students, high in comparison to the majority of our peer research universities in the Commonwealth.

Commonwealth of Virginia Undergraduate Population Receiving Pell Awards	
DOCTORAL INSTITUTIONS	FALL 2016 PERCENT OF UNDERGRADUATE POPULATION RECEIVING PELL
<b>GEORGE MASON UNIVERSITY</b>	<b>30.9%</b>
Virginia Commonwealth Univ	29.3%
Virginia Tech	16.0%
University of Virginia	12.8%
College of William and Mary	11.7%

Source: [http://research.schev.edu/fair/pell\\_trend\\_rerport.asp](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. 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 12,785 six years ago (63.3% of the undergraduate population) to 17,653 in 2017-18 (65.1% of the undergraduate population). 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 growth areas such as high demand STEM fields, information technology, cybersecurity, healthcare, education and business services. Many students work part-time to complete their degrees. 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 and to contribute to the Commonwealth economy at a greater level.

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 the fall of 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 same difference.

<b>Commonwealth of Virginia Graduate In-State Projected FTE 2019</b>			
<b>DOCTORAL INSTITUTIONS</b>	<b>ESTIMATED GENERAL FUND FY 2019*</b>	<b>PROJECTED IN-STATE FTE**</b>	<b>PROJECTED AMOUNT PER STUDENT</b>
Virginia Tech	\$5,175,125	1,905	\$2,717
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
<b>Doctoral Avg. excl. Mason</b>	<b>\$3,251,341</b>	<b>1,803</b>	<b>\$1,738</b>
<b>GEORGE MASON</b>	<b>\$2,753,941</b>	<b>3,700</b>	<b>\$744</b>
<b>Mason % of Average</b>	<b>85%</b>	<b>205%</b>	<b>43%</b>

\* 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:** The fuel that drive's the Commonwealth's engine for innovation and economic growth is its diverse, college-educated workforce. It is imperative that we remain focused on providing access to higher education, especially now as economists predict a shortage of college graduates. George Mason University has excelled as one of the largest enrolling four-year 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. Over the last decade, Mason has been a major contributor to the Commonwealth's growth of in-state enrollment, with undergraduate enrollment growing an additional 32.5%, or by 5,260 new students. During this period, Mason has shown that growth is compatible with improvements in quality. Entering students show increases in average SAT scores from 1120 to 1197, and high school GPAs from 3.46 to 3.66. In addition, Mason continues to welcome the largest

transfer student body, particularly for two-year college transfers. In fact, over 3,000 community college students join Mason each year to complete their baccalaureate degrees, which represents over 25 percent of the total transfer population for the Commonwealth of Virginia.

Based on Fall 2017 SCHEV data, **Mason is the single largest in-state student-serving institution in the Commonwealth.** In Fall 2017, Mason accounted for 17.1% of all in-state enrollment – undergraduate and graduate - among the 15 public four-year institutions. In Fall 2017, Mason supported 15.2% of all undergraduate in-state enrollment, up from 13.3% in Fall 2007. Our growth in undergraduate enrollment accounted for approximately 27% 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 the Fall of 2007 Mason supported 25.2% of the Commonwealth's in-state graduate students, which had grown to 28.4% in Fall 2017.

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 74.0% of the average allocation available to the other public research universities. When you couple declining per student state allocations with Mason's commitment to provide affordable access to higher education, funding available to Mason drops to 73.0% in comparison to other research universities in the Commonwealth (see table below). 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.

<b>EDUCATIONAL AND GENERAL ESTIMATED TOTAL FUNDING PER IN-STATE STUDENT FTE, FY 2019 General Fund, Tuition and Mandatory E&amp;G Fees</b>			
<b>DOCTORAL INSTITUTIONS</b>	<b>GENERAL FUND FY 2019*</b>	<b>IN-STATE TUITION FY 2019</b>	<b>TOTAL</b>
College of William & Mary	\$8,062	\$17,570	\$25,632
University of Virginia	8,729	14,148	22,877
Virginia Commonwealth Univ	7,396	12,247	19,643
Virginia Tech	7,188	11,595	18,783
Old Dominion	7,057	7,047	14,104
<b>Doctoral Avg. excl. Mason</b>	<b>\$7,686</b>	<b>\$12,521</b>	<b>\$20,208</b>
<b>GEORGE MASON</b>	<b>\$5,687</b>	<b>\$9,060</b>	<b>\$14,747</b>
<b>Mason % of Average</b>	<b>74.0%</b>	<b>72.4%</b>	<b>73.0%</b>

\* 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 38,400 by 2023-24, a 9.1% increase over 2016-17 enrollment of 35,189. During this same period, Mason plans to grow FTE enrollment to 32,140, a 9.8% increase. Since the submission of the SCHEV FTE projections in the 2B report, Mason has experienced high demand that will likely show that we will reach our long-term enrollment growth targets on or before 2023-24. Some of this growth is attributed to the number of students already in the enrollment pipeline, and some is attributable to the number of international students we expect to enroll. In addition to growing 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 increase 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 (SER):**

Specific goals for the project include improving first-year student retention and four/six-year graduation rates, as well as creating an integrated Mason experience that promotes academic success while instilling a sense of purpose and career aspiration among our diverse student body.

In the Spring of 2016, 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. Their engagement lasted five months, included 160 hours of on-campus research, reviewed 115 existing reports/datasets on the Mason student experience, and involved interviews with more than 130 faculty, staff, and students.

Following this process, six focused working groups of Mason staff and students were created to begin the implementation of specific action items associated with improving the Mason Student Experience. These working groups focused on: developing a self-service & 24/7 student support strategy; building a comprehensive First-Year student care network; integrating and expanding campus-wide student initiation experiences; adding the student voice to key policy decision-making; improving Mason's use and access of data in the process of building relationships with students; and, building an institution-wide culture of service.

During the 2018-2019 academic year, Mason will begin the implementation of a LifeCycle Constituent Relationship Management (CRM) platform to support the efforts of these six working groups. The CRM will function as a central system of engagement for all aspects of the Mason student experience and will focus on automation, self-service, and nudge-based communications to encourage retention/graduation. We expect the roadmap to cover three years and for this new technology to complement the Banner Student Information System, Blackboard Learning Management System, and Microstrategy Business Intelligence tools. We

further expect Mason business practices to evolve, becoming more student-centered, as a result of this new technology tool.

**Strategy 4. New and Enhanced Programs: New Programs** - Mason has embarked on an inquiry-based, experiential learning paradigm called the Mason Impact. The goal of the Mason Impact is to graduate students who are Engaged Citizens and Well-rounded Scholars who are Prepared to Act. The 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.

Our goal is to expand existing and develop new Mason Impact curricular and co-curricular opportunities that emphasize the development of students through undergraduate research and creativity, civic engagement, and entrepreneurship. Under Mason Impact, student will be offered the opportunity to complete projects in these areas that will be noted on their transcripts. Faculty and staff will be developing Mason Impact experiences starting in Fall 2018. Students will also have the ability to submit independently-designed projects for approval. The program will be available to all students in Fall 2019.

Several internal grant programs are increasing 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). These Grants have gained significant attention, with over 400 faculty already participating. New minors have already been approved, and additional programs will be developed.

In 2017, the Provost Office supported eight competitively chosen Multidisciplinary Summer Impact Projects, which have 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, slavery at Gunston Hall, and the effects of Solitary Confinement. Additional teams are working full time to develop entrepreneurial projects. Projects have been featured on GMUTV and through recruitment materials. In summer 2018, we have supported an additional nine projects.

Study abroad has launched several new programs to encourage participation. The first cohort of Global Gateway first-year students will complete many of their Mason Core requirements while studying at one of five locations across the globe in their second semester, Spring 2019. The Global Education Office also offered grants to support Global Discovery Courses (regular term courses with an abroad component) and course development. Global is also working with Undergraduate Education to create global Mason Impact projects.

What has become clear is that in order to offer these enhanced opportunities to our students, we have to support our faculty. In many cases, development of the new experiences mean that faculty have to adapt to new and unfamiliar workshops support for course re-development, and buy-out time require investment but have



long-term benefits. Direct support for student projects, including money for scholarship, supplies, and travel, are also required for our student population to have access to these opportunities. This support is aligned with Strategy 6 (Accessible Pathways), Strategy 7 (Support new faculty hires), Strategy 11 (Multidisciplinary Institutes), and Strategy 12 (Enhance Research Infrastructure and Grow Research

**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 twelve 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 non-disabled peers, these students matriculate through a rigorous course of study with required benchmarks of achievement towards a certificate of completion. **No state funding has been provided for these full-time, in-state students.** Other federal, state, and local entities have begun to recognize and support the educational pursuits of these students even though they are on an alternative pathway to graduation (e.g., U.S. Department of Veteran’s 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.

With additional funding, we can provide an enhanced student experience focused on outcomes that meet evolving standards amid the pressure of rising costs and heightened compliance expectations. We can provide more well-trained academic and job coaches who can teach and reinforce specific readiness skills across a variety of situations. Our goal has long been to improve the lives, productivity, and education of persons with disabilities. Additional funding will enhance our ability to make a difference for these students who are and will continue to be contributing members of Virginia communities for years to come.

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**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. Mason has continued to progress in this effort, this year through the development of a new partnership and the strengthening of an existing one. 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.

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..

Primarily designed to address the more than one million Virginians who have some college credit, but no degree, this state-supported initiative hosts more than 37 college programs in high-demand areas, such as cybersecurity, business, computer science, engineering technology, human services, teacher preparation and nursing; with plans to add more online degree programs to the network in FY19. With this selection, OVN not only addresses the needs of adult learners, but it also offers the potential of increasing the number of Virginia's degree completers has implications for the state's economy. By 2018, 64 percent of Virginia's jobs will require some form of post-secondary education. Expanding higher education opportunities will help to ensure that Virginia has an educated workforce prepared to meet critical workforce demands.

Over the past year, we have enhanced the portal to make it easier for students to see courses available to them across the network. The Network has also grown, and we recently welcomed the Virginia Community College System (VCCS) as a participating member of OVN. In our first year since launching OVN, we have achieved 186% of our enrollment goals for FY18.

**Strategy 6. Accessible Pathways:** Mason continues to innovate in ways that seek to provide an undergraduate college experience to all students. The creation of the ADVANCE: NOVA-Mason Partnership exemplifies this commitment. The university is not only creating new pathways for educational attainment, but also exploring initiatives to strengthen pathways that already exist. Building on Mason's existing relationship with the Northern Virginia Community College (NOVA), the ADVANCE program is being created to address the challenges of the current two-to-four year transfer model. The ADVANCE program is being developed as an integrated educational experience for students transferring from NOVA to Mason, leading them through streamlined, guided pathways toward attaining a four-year degree. Mason and NOVA teams are working together to build a program that offers a single point

of admission and financial aid, a dedicated success coach from admission to NOVA through graduation from Mason, realignment of curricula to ensure students do not lose credits when they transfer, and financial incentives for the neediest students to advance to graduation. When complete, the program will eliminate current aggravations with the transfer process, enabling students to reduce the time and cost of attaining a bachelor's degree, and ultimately ensuring a supply of career-ready graduates who meet the needs of our region's workforce. The first cohort of ADVANCE students will begin Fall 2018.

Since announcing the launch of ADVANCE this past spring, we have introduced 21 high demand pathways including Business, Cyber-Security Engineering, Biology, to name a few. In addition, we hired our first of 5 student success coaches to serve as the central point of contact for ADVANCE across both institutions. After announcing that ADVANCE was accepting enrollments, we have reached 20% of our goal for Fall enrollments and are well on track to meeting or exceeding our annual goal. ADVANCE students will have affiliation with both NOVA and Mason at the onset of joining the program, benefiting from services and participating in activities at both institutions.

**Strategy 7. Support New Faculty Hires:** As we strive to be a University for the World, like other institutions Mason operates within an increasingly competitive environment that threatens our continued growth as an R1 institution. In order 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 projects increased demand and enrollment over the six years covered in this plan, especially in the first two years (the 2018-2020 biennium). Enrollment increases will impact every college and school, and are likely to disproportionately impact some. For example, impressive increases in Engineering, Science, Business and Health will continue to drive a growing number of STEM-H offerings to students who choose Mason. With the support of the Commonwealth, the university can expand its educational opportunities to resident undergraduate and graduate students, 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 the University into products and services that contribute to improved health, wealth and prosperity in the Commonwealth. 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 & 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 per line. 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 while Non-General Funds will make up the remaining portion.

**Strategy 8. Support Salary Compensation Increases:** Mason's success as a nationally-ranked Research 1 university is directly linked to the talented and dedicated faculty and staff who are committed to and strive for outstanding achievement in education, research and public service. Their outstanding contributions to the university have advanced Mason to regional, national and international recognition. However, achievement is only one factor that contributes to the ability to attract and retain the brightest and most talented individuals. Total compensation is another key element 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 high cost of living location. 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. Similar to teaching and research faculty salary concerns, staff compensation has been impacted as well and has proved to be one of the major reasons that continues to be a barrier for our retention and recruitment efforts. Without an increase, the trend for faculty and staff salaries will continue to decline, when compared to our peers, which will have a significant impact on our university. Competitive salary increases based on an annual merit and recognition process for contributions and efforts is crucial in keeping pace with increasing 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 as well as 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 as well as the likelihood of significant attrition through retirement. Mason competes with both regional institutions of higher education (e.g. GWU, Georgetown, American, and UMD) and national universities (e.g., Northeastern, Temple, UCLA) as well as private companies and federal government agencies in the Northern Virginia region. In the coming decade, Mason anticipates up to a 50% 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 are able to provide more competitive compensation packages that does not require a personal residential move. Failure to address this critical issues will result in a reduced ability of the university to provide a world-class education to its many students and would possibly jeopardize the institutions 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:** Mason has undertaken a major reengineering project that will touch many areas of the university over the next few years. Efficiencies such as centralizing operations and conducting process analyses to improve functionality and reduce costs have begun - the process analysis of the student life cycle discussed in Strategy 3 is one of these effectiveness and efficiency initiatives. An Efficiency Task Force spent the past few years identifying areas for improvement. The process analyses and implementation of new systems and processes often have upfront costs for consultants, software development, training, etc. As a result, efficiencies with many of these changes will not be immediate. Over the next several biennia, Mason will be implementing efficiencies identified by the Task Force. Resources saved through these various initiatives will be reallocated, at least in part, to supporting the Emergency Retention Fund described in Strategy 9.

**Strategy 11. Multidisciplinary Institutes:** Mason currently supports two multidisciplinary institutes – the **Institute for Biohealth Innovation (IBI)** and the **Virginia Serious Games Institute**, and our Strategic Plan indicates we will launch two more – one focused on cyber and data analytics, and the second on sustainability / resilience.

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 new 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 SQF 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.

**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. The University has identified the following three multidisciplinary discovery and innovation areas for growth in the 2018-2024 period - priorities identified in collaboration with public and private sector partners in the region.

- *Pervasive, Trusted Information & Communication Technologies:* The University 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 over \$10M in AY 2017 to just shy of \$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 bachelors, masters 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 Wellbeing: Mason's Institute for Biohealth Innovation (IBI),* including faculty, student and postdoctoral researchers, will continue to focus on driving advances in technologies and interventions developed to improve the health and wellbeing 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 6 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 wellbeing 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. This University community 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 University community is fully engaged in planning, informing 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 to be 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 advances in fields such as genetics and genomics, structural biology of disease, developmental biology, computational biology and biomedically-directed engineering. 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 in GBRI-related fields 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 wellbeing industries to the Commonwealth. Mason is also developing research innovation and workforce development initiatives aligned with other VRIF priorities, including the recently announced Commonwealth Cyber Initiative (CCI). Given Mason's considerable capacity (we have the largest number of undergraduate and graduate students enrolled in "cyber" programs of all the Virginia institutions, with commensurate numbers of world-class faculty) and growing success (we are the only Virginia university to be nationally ranked in the top 10 and we run the Commonwealth's only federally-funded national center of research excellence) in cyber, we expect to play a significant role in the CCI. Mason is also working with its academic partners on other cyber and biosciences 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.

## C. Financial Aid

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 16-17 Final Data), shows that Mason met 53.8% of need for our full-time undergraduates, and 61.9% 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 2016-17 and 2017-18 GMU was fortunate to receive an additional \$3 million in state grant funds that allowed us to award state grants to over 1,300 more in-state students than in 2015-16. We are scheduled to receive an increase for the 2018-19 year of approximately \$4 million which will allow us to award additional needy in-state students. With the majority of 2018-19 packaging complete at this point (June, 2018) 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.

Federal aid available remains stagnant and there are discussions of additional cuts to Title IV financial aid programs in current budget talks at the national level. 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.

## D. Evaluation of Previous Six-Year Plan

**Strategy 1. Increase Student Financial Aid:** Our goal is to maintain or reduce the amount of unmet need for Mason undergraduate students. Although we still lag behind others, we have made progress in this area. While Mason has increased undergraduate aid overall, thanks in part to additional resources provided by the Commonwealth, enrollment growth and a rise in the numbers of students from lower income households, continues to present challenges for us. As stated earlier, the decrease in the amount of need met for in-state students dropped from 56.2% in 2012-13 to 53.3% in 2016-17 for all full-time undergraduates, while we made some small progress in meeting need for full-time freshmen, rising from 59.1% in 2012-13 to 59.2% in 2016-17.



## **Strategy 2. 100,000 Career-Ready Graduates – Enrollment Growth and Degree**

**Awards:** At the start of FY 17, George Mason University believed that additional resources would be provided by the Commonwealth to address six year plan initiatives; regrettably however, due to revenue shortfalls, almost all growth funds were eliminated. Despite this, Mason continues to grow, increasing the number of in-state students we support, as well as showing growth in degree completion. Mason continues to provide new and innovated programs such as: Atmospheric Sciences, B.S.; Cyber Security Engineering, B.S.; Health Services Research, Ph.D.; International Security, M.A.; Mechanical Engineering, B.S.; Visual and Performing Arts, M.F.A; Athletic Training, M.S.; Bioinformatics Management, P.S.M.; Global Antitrust Law & Economics, LL.M; Rehabilitation Sciences, B.S.; United States Law, LL.M. Further, pending approval, the following programs will launch in Fall 2017: Health Policy, M.S.; Criminal Justice, M.S.; Digital Forensics and Cyber Analysis.

**Degree Awards –** In 2016, Mason graduated 8,901 students, representing a 1% increase from the prior year. Included in this figure is growth in Bachelors degrees conferred of 3%. Based on these rates and our continued efforts to improve retention, including growth initiatives like the ADVANCE program and OVN (Online Virginia Network), we are on track to achieve the goal of 100,000 degrees by 2024.

**Online -** In 2016, we had 12 programs that were completely on-line experiences. Our growth in this area continues with the addition of 5 graduate programs and 5 undergraduate programs in FY 2017.

**Strategy 3. Accessible Pathways:** The number of students admitted under Mason's test optional program has increased over time; 10% of admitted students in 2014 compared to 16% of admitted students in 2017. Mason and Northern Virginia Community College created the COMPACT, which improves accessibility to Engineering degrees for students beginning their studies at the community college. The Fall 2016 number of new transfer students grew by 2.9%, compared to Fall 2014 (72 students, from 2,525 to 2,467).

In addition to these updates, Mason announced the creation of ADVANCE; a partnership with Northern Virginia Community College to develop 3-5 new guided pathway programs each year. Further, Mason has been a founding member of the Online Virginia Network, a collaboration between SCHEV, Old Dominion University, and Mason. This network officially launched in February 2017 and is targeted towards adult learners and members of the military.

In Spring 2017, Mason's international enrollment was up by 11.7% compared to the previous year (3,394 from 3,037, +357.) GMU-Korea's student enrollment was up by 34.5% (304 from 226, +78.) As of Spring 2017, 495 students have moved out of the INTO program and have matriculated to degree-seeking status at Mason. Thirty one students have graduated.

**Strategy 4. Student Success Initiatives:** In December 2015, Mason contracted with Blackboard Student Services to conduct a self-study of the Mason student experience to provide recommendations on how to improve the experience. The report was delivered in October 2016 and the university hosted a university-wide

Student Experience Symposium in February 2017 to operationalize the findings. Mason has expanded its reporting capabilities and completed preliminary work to implement better tools to advise students and share information among colleagues invested in retention/graduation.

**Strategy 5. Experiential and Innovative Learning:** Mason has embarked on a new vision for Undergraduate Education, called the Mason Impact. The goal of the Mason Impact is to create students that are Engaged Citizens and Well-rounded Scholars who are Prepared to Act. The Mason Impact builds on our nationally recognized undergraduate research program, which was initiated in 2011 as the focus of SACS Quality Enhancement Plan, and has engaged more than 24,000 students in some aspect of undergraduate research. OSCAR (the Office of Student Scholarship, Creative Activities, and Research) home of the Students as Scholars initiative, will be expanding its focus to include promotion and development of robust curricular and co-curricular and multidisciplinary opportunities for students to engage in research, creative projects, study abroad, civic engagement, entrepreneurship, and other related activities. Our goal is to expand existing and develop a new set of Mason Impact curricular and co-curricular opportunities that emphasize the development of students as Engaged Citizens (civic engagement and global learning) and Well-Rounded Scholars (undergraduate research and creative activities) who are Prepared to Act (Entrepreneurs and Career-Ready).

Several new programs are increasing faculty and student involvement. Curriculum Impact Grants, building on successful Multidisciplinary Research Seed Grants and OSCAR's Scholarship Development Grants, are supporting teams of faculty working together from across campus to create new courses, certificates, concentrations, or majors (undergraduate and graduate programs), and have gained significant attention, with over 200 faculty participating. OSCAR is supporting seven competitively chosen Multidisciplinary Summer Team Projects, who are exploring topics as diverse as the water quality of the Chesapeake Bay, slavery at Gunston Hall, decomposition and the environment, and the effects of solitary confinement. Additional teams are working full time to develop entrepreneurial projects. Study abroad will be launching first-year specific programs where students complete many of their Mason Core requirements while at one of several locations across the globe in their second semester.

**Strategy 6. Online Completion College:** 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 our diverse and non-traditional students. This year, Mason joined forces with Old Dominion University (ODU) and launched a shared web portal to deliver a selection of Mason and ODU online programs at one location, allowing busy adult learners to find and enroll in high demand degree programs and finish their bachelor's degrees online. Mason will continue to work with OVN initiatives and help support the direction of this exciting endeavor.

**Strategy 7. Support Teaching and Scholarship Excellence – Recruit and Retain Top Talent:** Faculty and staff compensation continues to be a challenge for the university and represents one of our top areas of emphasis in the near term. At the

start of the fiscal year, George Mason University was pleased to see additional resources planned by the Commonwealth that would be allocated to address faculty and staff compensation, however, after the realization of the revenue shortfall all funds were eliminated in FY 2017. As this was one of our top priorities, Mason gathered its funds from the university's share along with funds that were identified in the effectiveness and efficiency initiative to reallocate to this top priority. Mason was able to provide a small level of retention funding for faculty and staff. The university is pleased to see that through efforts from the Administration and Legislature, salary increases will be provided in the second year of the biennium.

**Strategy 8. Effectiveness and Efficiency:** Building upon the success of the institution's effectiveness and efficiency projects, Mason continues to look for ways to streamline programs and repurpose assets for optimal use which helps the university avoid additional costs and repurpose its base expenditures to address the highest priorities. During the past few years, the university has undertaken several division reorganizations and has established a committee to continue to identify additional ways to create efficiencies. Efficiencies such as centralizing operations to reduce redundancy and conducting process analyses to improve functioning and reduce costs have begun.

Since FY 2014, Mason deauthorized approximately \$230 Million of capital projects, transformed the Mason Inn (which had lost nearly \$12 Million since inception) to sorely needed educational space (classrooms and housing), built new revenue streams via a partnership with INTO, an international partner, while streamlined programs, contracts and positions to save over \$4.0 Million. We consolidated administrative offices in Alan and Sally Merten Hall and repurposed vacated office space in Mason Hall to add an additional 25,000 square feet of academic space, thereby saving \$7-8 Million in new construction costs.

**Strategy 9. Multidisciplinary Institutes:** Mason is committed to establishing multidisciplinary institutes designed to advance the economic and cultural prosperity of the Commonwealth while making contributions to key regional sectors. The multidisciplinary research programs within each institute draws on faculty expertise across Mason's colleges and schools and fully integrates with the academic mission of the university, being especially attentive to its valuable interdisciplinary research and education programs. The first institute, the Virginia Serious Game Institute (VSGI), is well underway, thanks in part to funding received from the Commonwealth during the previous biennium. The university is now engaged in establishing the second institute, the Institute for Biomedical Innovation (IBI). The Institute will accelerate biomedical research through a unique collaboration among university faculty and students, corporate researchers, health professionals, entrepreneurs and civic leaders. Multidisciplinary teams of faculty, students, clinicians, and other healthcare and business professionals will identify translational research opportunities that promise significant advances in personalized medicine while also spawning new companies, creating jobs and enhancing the health of citizens in Virginia and beyond. Although full funding was not received, the university was able to start the institute through partial funding of its core administrative needs. Additional funding in the next biennium is sought to fully round out the institute in hopes to achieve the full benefits for the university and Commonwealth.

**Strategy 10. Enhance Research Infrastructure and Grow Research:** In 2016, Mason was recognized as a Research 1 (R1) university. The University entered the upper echelon of US research universities as a consequence of its growing contributions to research and scholarship, both nationally and internationally.

World-class research and scholarship in the R1 institution is made possible by a multidisciplinary community of graduate students, postdoctoral fellows, and research faculty. At Mason, thousands of graduate students, postdoctoral fellows, and research faculty work closely with their faculty leaders, mentors and many undergraduate students on projects designed to advance the knowledge frontier. This research of consequence is designed to contribute to the improved health, wealth and prosperity of citizens here in Virginia and other communities around the world.

The University continues to provide support for its growing graduate student and postdoctoral fellow community in a number of ways. For example, the Provost's Ph.D. Program provides graduate student support to recruit and retain students of the highest quality to Mason and is often used to strategic advantage in the support of promising new Masters and PhD programs. In addition, Mason offers competitive start-up packages for new tenure-track faculty hires. These packages often include funds to support graduate students or postdoctoral fellows who help faculty generate preliminary research results that then improve the competitiveness of proposals they submit to external sponsors. Finally, the Provost's Multidisciplinary Research competition is an example of one of several internal research competitions that Mason hosts annually, and whose winners receive graduate student or postdoctoral fellow support to build compelling new research programs that contribute to the University's success and growth as an R1 institution.

These institutional initiatives, and others like them, ensure that Mason continues to thrive as an R1 institution, generating world-class research and scholarship whose value and impact can be measured in numerous ways, including: in the number of graduates it produces; the number of research faculty and postdoctoral fellows it supports; the number and quality of its publications in the international literature; growth in relationships with corporate sector partners; increases in the number of start-ups emerging out of the university community; and increases in sponsored project expenditures, to name but a few. Mason plans to continue to contribute more to the Commonwealth's position as a national leader in the knowledge economy through growth in its research and scholarship portfolio.

## E. Tuition Rate Increases

George Mason strives to be the University for the World. 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 disparity in student outcomes. Based on the Fall 2017 SCHEV data, Mason is the single largest in-state student serving institution. Mason remains a major contributor to the Commonwealth's growth of in-state enrollment

over the last decade with undergraduate enrollment growing 32.5% or 5,260 new students. In fact, in Fall 2017, Mason accounted for 17.1% of all in-state enrollment among the 15 public four-year institutions, which is an increase from 15.8% in Fall 2007.

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 73 percent of the total resources available to the other doctoral universities.

<b>EDUCATIONAL AND GENERAL ESTIMATED TOTAL FUNDING PER IN-STATE STUDENT FTE, FY 2019 General Fund, Tuition and Mandatory E&amp;G Fees</b>			
<b>DOCTORAL INSTITUTIONS</b>	<b>GENERAL FUND FY 2019*</b>	<b>IN-STATE TUITION FY 2019</b>	<b>TOTAL</b>
College of William & Mary	\$8,062	\$17,570	\$25,632
University of Virginia	8,729	14,148	22,877
Virginia Commonwealth Univ	7,396	12,247	19,643
Virginia Tech	7,188	11,595	18,783
Old Dominion	7,057	7,047	14,104
<b>Doctoral Avg. excl. Mason</b>	<b>\$7,686</b>	<b>\$12,521</b>	<b>\$20,208</b>
<b>GEORGE MASON</b>	<b>\$5,687</b>	<b>\$9,060</b>	<b>\$14,747</b>
<b>Mason % of Average</b>	<b>74.0%</b>	<b>72.4%</b>	<b>73.0%</b>

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

Over the past six years, Mason has maintain 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 five percent each year in the current six year plan to maintain access and affordability to our students. Even with the proposed tuition increase, George Mason University will remain in the same position relative to the other doctoral institutions in the Commonwealth. Without additional General Fund resources, George Mason University will be forced to consider changes to its enrollment mix and / or the way the university charges for the education and services. This would include looking at the costs and further charging for each credit hour to ensure there is sufficient funding generated to support the cost of education.

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 and experience 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 renowned 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.

## F. Contributions to Economic Development

### University-led or Public-Private Partnerships in Real Estate and/or Community Redevelopment

George Mason University is currently developing an innovation district sector plan which will propose development of approximately 60 acres over the next 20-50 years. The University will create a campus for the future to accommodate enrollment growth of an additional 10,000 students. The preliminary building program includes private industry office and research space that will entice both the private and public sector to align with the academic core. Public/Private partnerships will drive developments for housing, retail and other auxiliary spaces.

The institution has been working to support the “One University” purpose built student and affordable housing P3 that was solicited by the Fairfax County Redevelopment and Housing Authority directly across from the main Fairfax campus and will continue to support the effort until completion. In addition, our Science and Technology Campus in Manassas is supporting the development of the “Innovation Town Center” and, over the next 5 years, the University will engage partners to support development of our Arlington campus.

The School of Business includes the Center for Real Estate Entrepreneurship which is the university’s platform for collaborating with the Northern Virginia real estate development industry through education and research. The Center develops educational programs and content to promote best practices and innovative trends for the real estate industry to contribute to the quality of life of Northern Virginia communities. The School of Business also offers a Masters in Real Estate Development degree whose graduates are trained to be strong contributors and future leaders of the real estate development industry.

In addition to generating new and growing economic opportunities, Mason’s research and scholarship programs also contribute to enhancements in the quality of life for hundreds of thousands of Virginians annually. For example, Mason and Partners (MAP) inter-professional clinics will continue to serve uninsured, immigrant and refugee communities in Prince William and Fairfax Counties. Providing increasingly effective health care, school physicals, screening, and mental health services for tens of thousands of individuals annually from low income and medically underserved areas, these community-based participatory programs lead to the identification of interventions that enhance health and wellbeing, provide hands-on-training for future generations of health professionals, and inform the development and implementation of effective policy and social change. In another example, Mason’s Center for the Arts in Fairfax and the Hylton Performing Arts Center on our Science and Technology Campus will continue to serve more than 300,000 patrons and participants annually. This community service will continue to be supported by Mason’s world-class College of Visual and Performing Arts, which currently supports more than 1,400 majors across the four founding disciplines of Art and Visual Technology, Dance, Music and Theater, as well as three newer programs in Arts Management, Film and Video Studies and Computer Game Design.

Finally, the University continues implementation of a comprehensive entrepreneurship initiative named Entrepreneurship@Mason. For example, the Mason Enterprise Center continues to support the entrepreneurial activities of thousands of Virginia small businesses annually, a new Mason-wide minor in Entrepreneurship will prepare thousands of Mason innovators for successful careers in start-ups and established businesses, and a new Lean Launchpad initiative will help faculty, graduate students and postdoctoral trainees more effectively transition University technologies out of our research labs and into private sector organizations that stimulate economic growth in the Commonwealth.

## G. Capital Outlay



George Mason University continues to align facilities plans to the university's strategic plan, taking steps to improve asset utilization at its Arlington and Science and Technology campuses and lessen pressure on overcrowded facilities at the Fairfax campus. Through long-term capital planning, the university seeks to ensure its ability to produce career-ready graduates in the future by prioritizing investments in assets as follows:

1. Underlying infrastructure
2. Existing assets
  - a. Utilize existing space to maximize efficiency to accommodate significant enrollment growth projected over the next 6 years
  - b. Renovate existing space to meet current pedagogy
  - c. Address energy improvements and deferred maintenance
  - d. Address functional obsolescence

Specific high-impact projects that support this underlying capital strategy are listed below:

1. Replacement of Robinson Hall: The University received authorization and funding for this critical project to replace this antiquated classroom and office space. Thirty percent of university classrooms are located in this building, originally constructed in 1975. There have been no significant functional or code-related improvements to it since that time. It can no longer support the pedagogy of today. The University and its design team are currently completing the Working Drawing phase and are on track for early 2021 building opening.

2. Utility Distribution Infrastructure Improvement: The University received authorization and funding for this project to replace crumbling chilled and hot water distribution pipelines throughout campus, addressing deferred maintenance, increased distribution capacity and energy improvement throughout the core of the Fairfax Campus. Additionally, this project provides utility infrastructure redundancy in some areas of campus where none exists today and provides chilled water capacity for the next ten years. Execution is currently in the permit phase and construction is scheduled to start early August 2018. Nine phases of construction will be fully complete by late 2021

3. Improve Telecommunications/Network Infrastructure: This project corrects long-standing shortcomings in the campus-wide telecommunications and data network. Mason's Wi-Fi capability is currently designed for 3,500 students and we are serving over 35,000. This project is critical for an adequate classroom learning environment and Mason is already experiencing serious interruptions in service that affect the teaching and learning experience for our students, faculty and staff. This project will increase survivability of data and telecom systems at the Fairfax, Arlington, and Science and Technology campuses by providing redundant network connections that will minimize outages – both planned and unplanned. This is the first phase of a multi-year network enhancement program that will provide a resilient network infrastructure capable of meeting the academic and research needs of the university as well as posture the university to take advantage of

mobile technologies in its teaching and learning models. The University received planning authorization in 2016, but has not received funding allocation. The University has initiated the planning phase using University resources but receipt of the planning funds and follow-on construction funding is critical to being able to meet the needs of the University.

4. Construct Bull Run Hall Addition - The University received authorization for this project which includes the construction of a 100,000 GSF addition to the existing Bull Run Hall on the George Mason University Science and Technology Campus in Prince William County, and 5,000 GSF of renovation backfill work within Bull Run Hall and other existing facilities on that campus. The program for the addition includes over 80,000 GSF of specialized instructional labs and over 10,000 GSF of classrooms with the remaining space consisting of support space and work space to serve multidisciplinary education focused on science and technology. The proposed revised program for the backfill project is comprised nearly entirely of specialized instructional lab space. The Colleges and Schools who will have a significant presence in these spaces include the Volgenau School of Engineering, the College of Science, the College of Education & Human Development (Health & Human Performance) and the College of Visual and Performing Arts (Game Design).

5. Construct Academic VIII/Research IV STEM – This project is to construct a new Instructional and Research facility for the Volgenau School of Engineering and the College of Science. This program is for a 200,000 GSF building which represents Phase I of the total new building requirement for a 513,000 GSF Science and Engineering complex. This building will include new administrative offices, University and Departmental Classrooms, research & teaching laboratories, and outdoor design/staging/construction areas for the University's expanded academic and research programs. New administration areas will also be located here in order to serve the new and expanded programs and to provide faculty/staff offices adjacent to their program areas. Mason's recent R-1 Research status will also require investment in specialized space and infrastructure to support what is expected to be significant research growth in the Engineering disciplines and research with collaborative partners. Research and teaching laboratories will include: wet, computational, mechanical engineering (including robotics), materials testing, vehicular teardown and modification, wind tunnels and potentially a water channel. In addition, an outdoor design, construction and staging area will be required for large projects and testing. The University classrooms will reflect Mason's ongoing evolution of teaching pedagogy as well as address the portfolio of dramatically under-sized and aging classrooms on the campus.

6. Renovate Planetary (S&T 1) Hall: This project includes the phased renovation of 100,000 GSF of the Planetary Hall/Science and Technology I building. The building supports science education and student/faculty collaborative research for the Chemistry/BioChemistry department, and the Physics & Astronomy department and was originally constructed in 1987. Due to the age of the building, the existing science instructional and research labs need extensive infrastructure updates, as well as health and safety code updates. The building does not meet technology and infrastructure standards for today's STEM education, so

renovations are necessary to improve instructional and research environments for students and faculty. In addition to providing modern science instructional and research labs, this project will allow Mason to meet its goals for energy use and sustainability by providing a more energy efficient facility. Sustainability is a key cross-disciplinary component of the curriculum of the science-based programs that will be located in this building, so this project will allow us to have a facility that better reflects that principle in practice. This project will complete the renovation and upgrade of Mason's Fairfax science complex after completion of renovation of the adjoining Science and Technology II/Exploratory Hall.

7. Renovate and Addition David King Hall - This project includes the construction of a new 60,000 GSF addition to David King Hall, and a phased renovation of the existing 86,000 GSF building. The addition to the building (Phase I) will provide updated facilities for the Psychology department (CHSS) to handle growth in both instruction and research. The completion of the addition is required to continue with the phased renovation of the existing David King Hall (Phase II). We will relocate much of the Psychology department instructional and research labs and support from the existing building to the addition which will facilitate the phased renovation of the existing building. The renovation of the existing building will provide updated instructional and research facilities for the Environmental Science and Public Policy program (COS), and will provide additional growth space for Psychology and other CHSS academic departments. This project will provide modern instructional and research facilities to support collaborative learning, undergraduate and graduate student research, and faculty sponsored research. This project will also provide additional university classroom space that will include the latest teaching technology to support faculty pedagogical needs. In addition, this project will allow Mason to meet its goals for energy use and sustainability by providing a more energy efficient facility which is an important part of the curriculum of the science based programs that will be located in David King Hall.

8. Renovate Fenwick Learning Commons Phase 2 - The project consists of the renovation of the existing Fenwick Towers B and C (90,000 GSF), the partial demolition of the A-wing, and construction of a 5-story addition (35,000 GSF) to the north side of the towers. This would be followed by the full demolition of the A-wing of the Fenwick Library. The EYP portion of this study focuses on the 5-story addition and first floor renovations as an update to the July 2013 Pre-planning Study by Shepley Bulfinch Richardson & Abbott. The Phase II project will have a dedicated entrance on the quad, scaled appropriately to serve the classroom addition. The ground floor program spaces include a 90-seat lecture hall, a 60-seat case study room, and a number of small group study rooms. Floors two through four will provide both collaborative and traditional classrooms interspersed with enclosed group study rooms. The fifth floor will be predominantly enclosed group study rooms and open reading areas. The addition will interconnect with the new 24 hour community spaces as well as the stack areas to facilitate easy access at each level. Several of the new classrooms will be provided in renovated space within the existing library towers. Gathering areas for students, faculty and community are distributed among the five floors. This project contributes to the following Mason Strategic Plan Goals:

Goal 1: Innovative Learning  
Goal 9: Support Teaching & Scholarship Excellence

University classrooms shared by all disciplines will form an integral part of Fenwick Library. Classrooms will support the latest teaching and learning pedagogies and will be designed to provide flexible options to support a variety of teaching/learning styles. In support of growing distance education (D.E.) and hybrid options, classrooms will be equipped with technology that not only supports innovative in-class learning, but also helps connect our classrooms to others here and around the world via video conference, Skype, and other current and future technologies.

9. Renovate Enterprise Hall - This project continues the investment in aging existing facilities on the Fairfax Campus. Built in 1995 as a generic classroom and office building, it has housed a mixed collection of academic units. When the new Robinson Hall replacement project completes in 2021, nearly half of the space of Enterprise will be vacant allowing prime timing to renovate the building, while minimizing the need for temporary facilities. This will accomplish conversion of the space to provide classroom and technology improvements to meet the demands of current pedagogy, make energy enhancements and replace systems which have reached the end of their useful life.

10. Construct New Business School Building – This project is to construct a new building for the Business School and will be funded with donor funding exclusively. The proposed facility will provide specialized spaces which are aligned with the Business School's education pedagogy. The open concept design will support collaboration and research through the intentional creation of collision spaces which promote engagement and dialogue among students, faculty, researchers and the community. The new building will support the University's Strategic Plan Goals including: Innovative Learning, Innovation Engine, Community Builder, Elevate Research, and Research of Consequence. In addition to these Strategic Plan Goals the new building will support the Business School's principles of Inclusion and Enabling through the linking of Counseling and Career Services functions as well as the principles of Community Engagement, Closest to Practice and Lifelong Learning through spaces for Executive Education programs and symposia. The new Business School Building will also provide specialized spaces not available in the existing facility in support of the School's dual constituency: Students and the Business Community which partners with Mason in Research and Employee Recruitment. These include:

- Flexible, flat floor configured, technologically enabled forty (40) person classrooms which are paired with six (6) breakout rooms for groups of six – seven students to provide space for discussions in small groups following case study conversations that are initiated in the classroom.
- A one hundred (100) person lecture hall which can support both for credit instruction as well as hosting professional symposia to engage the business community and celebrate the Schools research activities.
- A Bloomberg Suite which will feature terminals that will allow students and faculty to access real time financial market data and an electronic trading platform in support of programs such as the student managed investment fund.
- Faculty offices which through physical transparency promote an atmosphere of

openness and accessibility to support connectivity within the School of Business.

- A Career Services Area which is inviting to businesses and employers within the community.

11. Renovate Center for the Arts Concert Hall - The existing Center for the Arts Concert Hall, which opened in 1990, serves as a venue for numerous programs at George Mason University at the Fairfax Campus including Great Performances at Mason, which features artists from around the world appearing in dance, music, and theater performances as well as the Family Series which introduces children to the arts through programs in song, dance and story. It is also a key hub of student and campus activity including dance, music, and theater productions, orientations, research showcases, and ceremonial events. The Center is deficient in many respects including acoustics, lighting, and patron access. The acoustics provided by the existing clouds in the theater are less than optimal such that the human voice in opera performances is not sufficiently audible for patrons in the rear of the theater and reverberation times are poor. The theater lacks light and sound locks from the public lobby spaces such that the opening of a door to the theater is extremely disruptive to a performance. For this reason the theater management cannot allow patrons to enter or exit the theater during a performance except in the case of an emergency. Also theater lighting is not optimal and improved controls and lighting are required to provide a state of the art venue. The theater lacks center aisles and as a result patrons sitting at the center of the theater must walk in front of numerous patrons to exit the aisle which diminishes the patron experience. Additional aspects of the Center for the Arts Concert Hall which are not optimal with regard to the patron experience are the lobby space, restrooms, and front entry. To address the deficiencies of the existing Concert Hall the following modifications are proposed and will be funded with donor funding exclusively: Modify theater to provide light locks at each entry; Install new acoustical clouds; Replace seating to provide center aisles; Replace lighting and controls; Expand lobby space and provide new entry; and Add patron lounge and amenities.

George Mason University will also continue to explore opportunities at all of its campuses that would include: 1) Fairfax (including West campus); 2) Science and Technology campus (Prince William County); and 3) Arlington campus. This will allow the university to continue to meet the student and research demands that are projected which will ultimately benefit the Commonwealth as a whole.

## H. Restructuring

The Restructuring Act has provided significant benefits to institutions of Higher Education in Virginia. With additional operating authority, institutions have been able to operate more nimbly and flexibly in an ever-changing environment. The changes from the Restructuring Act better positioned George Mason University and supported the university's growing teaching, research, and outreach mission. Further, the change in authority has helped the university stimulate economic activities to improve the local region and the Commonwealth as a whole.

Under current statute for Level II institutions, boards of visitors and governing bodies

are limited to exercising authority in two of the three functional areas of information technology, procurement, and capital projects. Enhanced restructuring would permit the boards of visitors or governing body of any Virginia public institution of higher education with additional authority in the functional areas mentioned above and provide financial operating authority for institutions that have entered into management agreements.

As we all know, Higher Education has and continues to experience one of the most prolonged periods of relatively unpredictable economic conditions. Now, more than ever, public institutions of higher education need to be responsive to its constituents – lawmakers, students, alumni, Board of Visitors, faculty, staff, and the larger community. In times of rapid change, we need to remain accountable for the limited state tax dollars we receive. However, we need to be responsive and flexible to meet the needs of our unique institution. As we move forward, the need to explore additional areas of operating and financial authority to further enhance restructuring and provide the flexibility to compete in competitive national and international markets, are essential. Enhancements to the Restructuring Act will enable higher education institutions that have a demonstrated track record of success to have additional flexibility and reduced regulations, which will ultimately benefit the Commonwealth.

The five year pilot program has provided additional financial and administrative authority to George Mason University which has allowed our university to take steps forward in an ever changing environment. Changes and growth in authority in information technology, procurement, and capital projects has 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 help the university align efforts and position the university for continued success. As we are starting the third year of the pilot program, George Mason University looks forward to engaging in further dialogues with the Administration and Legislature as we seek permanent authority similar to those provided under the pilot program as well as additional opportunities. Some examples of additional opportunities we are interested in discussing include items like Equipment Trust Funds pre-approval process changes, further financial and administrative authority, and more direct involvement with non-general fund balance oversight and investment.