Standard VI: Planning, Resources, and Institutional Improvement

*The institution’s planning processes, resources, and structures are aligned with each other and are sufficient to fulfill its mission and goals, to continuously assess and improve its programs and services, and to respond effectively to opportunities and challenges.*

This standard addresses the degree to which institutional planning and resource allocation are linked to the goals of the university and to continuing improvement. It looks for evidence of accountability, financial planning, evaluation of resources, alignment with the goals of the institution, and deployment of human resources to support those goals. While this criterion has been met, three of the eleven internal recommendations of this Self Study Report have emerged from the analysis of this standard.

The evidence presented within all nine criteria in this standard addresses items 10 and 11 of the Requirements of Affiliation.

UMD faces many of the national trends in higher education in general but, as a public flagship university, is specifically challenged by increasing mandatory and regulatory costs coupled with a decrease in the fraction of the university’s finances coming as base funding from the state. As a public university, the state allocation portion of the University of Maryland’s budget is determined annually by the Governor and the Maryland General Assembly, upon the recommendation of the Board of Regents. Tuition and fee levels are proposed by the institution and require the Regents’ approval. Capital expenditures normally may be funded through annual direct state appropriation or through debt issued by the USM, which then requires repayment from institutional resources. An overview of institutional revenues and expenditures is in the table below, prior history is also *publicly available.*

<table>
<thead>
<tr>
<th>REVENUE (in $000's)</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNRESTRICTED REVENUE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Appropriation</td>
<td>413,391</td>
<td>415,678</td>
<td>452,597</td>
<td>481,965</td>
<td>480,926</td>
</tr>
<tr>
<td>Tuition &amp; Fees</td>
<td>452,877</td>
<td>473,762</td>
<td>488,481</td>
<td>501,035</td>
<td>545,829</td>
</tr>
<tr>
<td>Auxiliary Enterprises</td>
<td>236,629</td>
<td>237,092</td>
<td>243,019</td>
<td>263,330</td>
<td>277,686</td>
</tr>
<tr>
<td>Other</td>
<td>171,084</td>
<td>181,276</td>
<td>193,098</td>
<td>185,967</td>
<td>190,458</td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td>1,273,981</td>
<td>1,307,808</td>
<td>1,377,195</td>
<td>1,432,297</td>
<td>1,494,898</td>
</tr>
<tr>
<td><strong>RESTRICTED REVENUE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Grants &amp; Contracts</td>
<td>300,117</td>
<td>316,583</td>
<td>321,135</td>
<td>310,131</td>
<td>306,480</td>
</tr>
<tr>
<td>Private Gifts, Grants &amp; Contracts</td>
<td>54,321</td>
<td>56,196</td>
<td>60,696</td>
<td>58,063</td>
<td>54,639</td>
</tr>
<tr>
<td>State &amp; Local Grants &amp; Contracts</td>
<td>59,540</td>
<td>55,276</td>
<td>53,309</td>
<td>60,889</td>
<td>55,734</td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td>413,978</td>
<td>428,056</td>
<td>435,141</td>
<td>429,083</td>
<td>416,853</td>
</tr>
</tbody>
</table>
The University of Maryland Extension (UME), authorized as the Cooperative Extension Service by federal and State laws in 1914, is supported by a combination of federal, state and county funds (Chapter 247, Acts of 1914). Since 1993, UME has been administered by UMD’s College of Agriculture and Natural Resources, operating as a partnership between the state’s two land-grant universities, UMD and the University of Maryland Eastern Shore.

**Criterion 1: institutional objectives, both institution-wide and for individual units, that are clearly stated, assessed appropriately, linked to mission and goal achievement, reflect conclusions drawn from assessment results, and are used for planning and resource allocation:**

As noted in Standard I and throughout the document, the 2008 Strategic Plan has served as the primary roadmap for the university during this last decade. After its completion, major divisions and colleges were also directed to develop their own strategic plans consistent with the overarching goals and values laid out in the 2008 Plan, using longstanding principles of participatory shared governance. For example, the Division of Information Technology produced “Promoting Innovation” in January 2013. The Division of Student Affairs developed a mission and values statement and instituted an annual reporting and review process to ensure congruent connection between overarching strategies and annual goals. The Office of the Vice President for Research has instituted a campus-wide mechanism for innovation called the Faculty Incentive Program, which provides for three increasing tiers of funding for new research initiatives that meet institutional priorities.

The development of the 2008 Plan was informed by numerous sources of data that are collected on an annual basis. These include enrollments, student outcomes, research and scholarship productivity, employment information, and diversity goals, all compiled centrally by the Office of Institutional Research, Planning, and Assessment (IRPA). IRPA provides various documents of assessment outcomes its Web site.

The 2008 Plan was followed by the development of a detailed implementation strategy, and progress was tracked for the first three years following its adoption. From FY 2009 through FY 2011, the Provost led a reallocation process that enabled the institution to shift resources to reflect its strategic goals, shoring up programs that had been under-resourced and investing in new initiatives. Results were posted on the Provost’s web site, as evidenced in two examples for reallocation and implementation progress from the second year of implementation. The university also successfully secured new resources from the state, and, in combination with reallocated funds, has been able to implement a number of strategic initiatives. Examples include the Academy for Innovation and Entrepreneurship, a grade 6-12 Charter School in College Park, the Teaching and Learning Transformation Center, and the Maryland Language Science Center.
The economic downturn, leadership changes, and the shifting landscape of higher education have all resulted in a suspension of detailed tracking of progress, but the action principles established in 2008 continue to serve as a guide for institutional planning. New opportunities unforeseen in 2008 have emerged, and existing weakness and threats have led to an intensified focus on fiscal and administrative modernization, now underway following the work of the Flagship 2020 Commission. The Commission consisted of five working groups and an advisory council, and was charged with charting a five-year course “to better align financial resources with institutional priorities; to recommend improved ways to learn and teach, conduct research, and translate ideas into social and/or economic ventures; to explore how our administrative services might be improved and streamlined to better support our core academic missions; and to propose ways to increase our revenue streams.” In September 2016, a summary report from the Flagship 2020 Commission was released, and an Administration Modernization Program (AMP) team is now tasked with operationalizing actionable recommendations.

The university adheres to an annual Personnel Review and Development (PRD) process that begins with the annual assessment of the President’s performance, and continues with the vice presidents and deans, and ultimately includes all personnel. This provides for a written evaluation of the executive’s achievements, planning, and progress toward his or her own and the institution’s goals. When feasible, these reviews include data related to budgetary and fiscal stewardship; recruitment and retention of faculty and staff; the delivery of instruction for graduate and undergraduate students; research and scholarship activity; progress toward diversity goals; provision of service to students, staff and faculty; fundraising; maintenance of facilities; and responsiveness to external constituents including the USM office, the state and local government, and the citizens of Maryland.

In making decisions for allocating resources to academic units, the Provost makes use of the periodic reviews of academic units as well as the mandated five-year reviews of chairs and deans to make decisions on resource planning. Unit reviews include an opportunity for a department chair and a dean to respond to an external review report and often result in an opportunity for identifying specific resource needs. Representative unit reviews are included as links in Appendix VI.4(n).

Criterion 2: clearly documented and communicated planning and improvement processes that provide for constituent participation and incorporate the use of assessment results:

Institutional planning is a continuous and ongoing effort, informed through processes in each of the university’s major divisions, with guidance from the 2008 Plan, the 2016 Update, and the other planning documents described above. All are informed by relevant institutional data.

The Office of Institutional Research, Planning, and Assessment (IRPA) provides essential information about the university for the purposes of decision-making, policy analysis, strategic planning, mandated reporting, and academic program review. The staff captures data on faculty, staff, students, and finances and uses it to characterize the institution in quantitative ways using nationally accepted definitions. They draw on a variety of data collection procedures, information processing methods, analytical tools, and reporting strategies in our efforts to present information with clarity, validity, reliability, and value. IRPA also uses data from the Association of American Universities Data Exchange (AAUDE) and comparisons with various sets of peer institutions as benchmarks.
In addition, IRPA manages and provides the learning outcome assessment process for undergraduates; operates the course evaluation system that provides critical data that informs assessment of the delivery of instruction; coordinates an annual activity reporting process for faculty and staff that impacts promotions and salary decisions; and leads the Campus Assessment Work Group, which is charged with creating a “culture of evidence,” in which data and assessment are central to campus decision making. IRPA engages with students, staff and faculty from across the campus, routinely including individuals in their projects, and proactively reports their findings in forums across the campus.

In Year 2 and Year 3 of the 2008 Strategic Plan implementation, various working groups were established to lay the groundwork for new initiatives and systematic review of existing structures. A few examples of recent efforts in planning and improvements follow.

As noted in Standard III, nearly half of admitted freshmen participate in one of 23 living-learning programs during their first two years at the university, with the majority in College Park Scholars and the Honors College. Since 2010, the Dean for Undergraduate Studies has been leading an annual assessment process of our living-learning programs, using a common evaluation framework that considers student interest and success and provides feedback for program improvement. The initial year of review led to the creation of the Honors College, with the addition of two new interdisciplinary living-learning programs, as well as to the discontinuation of a few programs that were not thriving. As of 2016, the review process is undergoing a substantive redesign to provide a mechanism for more in-depth feedback over longer time intervals.

The Graduate School developed a right-sizing initiative for doctoral programs, as mandated in the 2008 Strategic Plan. This involved a careful analysis and review of all the doctoral programs in consultation with deans, chairs and faculty, and resulted in recommended enrollment targets that would allow programs to provide better support for their students and improve completion and time to degree. Several years after its implementation, the right sizing initiative is generally considered a success, one that helps academic programs manage their doctoral programs more efficiently and improve the student experience. The Graduate School also manages a biannual learning outcomes assessment process for all graduate degree programs providing feedback. This process is overseen by a standing committee of the Graduate Council.

In 2012, a “University District 2020 Vision” was created—through the College Park City-University Partnership (CPCUP)—to establish a shared set of ideas and values for the campus and local residents to improve the quality of life for all who live and work in the community. The collaboration has rapidly begun to revitalize downtown College Park, and the goal of creating a vibrant, walkable, mixed-use hub of activity with new retail, office, and housing options is clearly within reach. These changes promise significant benefits for UMD, including better faculty and student recruitment and new research partnerships.

In the wake of a data breach in 2013, an Information Technology Security Task Force, with representation from across the campus, was formed to analyze the circumstances that led to the breach. This group produced a report that provided recommendations with respect to the steps necessary to avoid a future breach and to secure the University’s IT systems and data.

In 2014, the Provost and the President began a process of external and internal analysis to improve how the campus leverages its resources and how efficiencies might be achieved. An outside consultant with a strong national reputation in higher education was engaged to review
budgeting, administrative functions, and resource alignment relative to national best practices. Concurrently, President Loh established the Flagship 2020 Commission, engaging administrators, faculty, and staff to consider ways to enhance revenues, identify efficiencies, and review allocation strategies. This two pronged approach has resulted in a list of 25 ideas that are under analysis with the goal of implementation beginning in January, 2017. The Administration Modernization Program (AMP) team will be responsible for leading that effort [contributes to recommendations #9 and #10].

Criterion 3: a financial planning and budgeting process that is aligned with the institution’s mission and goals, evidence-based, and clearly linked to the institution’s and units’ strategic plans/objectives:

The university’s financial planning process is defined by an initial central dimension led by the President and his senior leadership team. It connects annual financial planning to the university’s long term goals, as identified in the 2008 Strategic Plan and the 2016 Strategic Plan Update. In turn, budgets are delegated to the vice presidents who oversee financial planning within their respective areas. Significant authority is enacted by the deans to manage their financial processes to achieve identified strategic objectives. There are ongoing, evidence-based, annual assessments of whether objectives are being accomplished at the college and major unit level, which are reported up to the vice presidents. A set of committees, work groups, and policies are in place that enable ongoing communication about the status of the institution’s fiscal environment and enable key decision points during the year.

The Provost has authority over the budget and decisions related to revenues and expenditures. She works closely with the vice presidents, the assistant president, the deans, and senior staff to oversee fiscal activity, identifying challenges and opportunities, and to communicate the state of affairs to the campus. She meets regularly with an assembly of academic department chairs and provides regular budget briefings, permitting them to use that information to influence local budget decisions.

The Vice President for Administration and Finance (VPAF), along with the Chief Financial Officer, leads the Finance Committee, which consists of vice presidents, relevant division budget officers, and a rotating dean. This group reviews the budget, financial reports and information on a monthly basis and makes financial decisions that are approved by the President and Provost. The VPAF also heads the Committee for the Review of Student Fees, a widely representative body with majority student representation, which recommends approval of more than $200 million in institutional fees to the President annually.

A portion of the indirect cost revenue (F&A) from sponsored research is allocated to the Provost, Vice President for Research, the Graduate School, colleges, and academic units, for the purpose of supporting and investing in research. These funds (DRIF) have effectively leveraged the substantial growth in campus sponsored research and will permit strategic investment in new initiatives moving forward.

An enrollment management team meets throughout the year to address concerns related to maintaining undergraduate enrollment, addressing roadblocks to student completion, and considering new programs that are responsive to student interest and demand. This is done with careful consideration of the institution’s mission and goals and with takes into account capacity at the unit level.
The Provost, working in consultation with deans, provides an annual allocation to assure that an adequate number of seats are offered to permit undergraduates to make satisfactory progress. While effective in providing the needed instruction, this process is complex and cumbersome and is being evaluated and revised. The university has been working towards a more transparent budget model that will allow strategic, data based decisions based upon mission, goals, emerging opportunities and financial reality [contributes to recommendation #11].

The university provides reports and analyses to the University System of Maryland Office at regular intervals throughout the year, which allows for an external evaluation of our budgeting and its alignment with our mission and objectives. For example, the Managing for Results (MFR) annual report addresses key measures of the university’s progress in reaching institutional goals that reflect priorities of the 2013 Maryland State Plan for Postsecondary Education.

Criterion 4: fiscal and human resources as well as the physical and technical infrastructure are adequate to support the institution’s operations wherever and however programs are delivered:

Our resources – human, fiscal, physical and technical – are indeed adequate, and are leveraged to meet our institutional goals and mission. Modest increases in state funding have helped abate, but not kept full pace with, the growing cost of mandatory expenses for energy, health care, and retirements. New buildings support an increasing demand for physical space for research and instruction. Student outcomes are strong. Graduation rates exceed the national averages for 4-year public institutions with an admissions rate similar to the University of Michigan. The average time to degree for doctoral students is 5.3 years, with a 10-year completion rate of 65.1%. Despite the national downturn in sponsored research funding, the university’s sponsored awards have reached an all-time high at $550 million in FY 15, a 15% increase, particularly notable for a campus without a medical school.

The diversity of our student body overall, and most specifically UMD’s production of underrepresented minority Ph.D. degrees is well ahead of peer institutions. The university ranks sixth in doctoral degree production for minorities in Mathematics and Statistics and tenth in Computer and Information Sciences. At the undergraduate level, the university ranks third in degree production for African-Americans in Biological and Biomedical Sciences.

Two regional higher education centers are part of the University System of Maryland. One, the Universities at Shady Grove (USG), is managed by the University of Maryland, College Park. Educational programs at USG are delivered (and degrees awarded) by nine of USM’s institutions, at both undergraduate and graduate levels. By design, undergraduate instruction is only in the third and fourth years. UMD students are approximately half of the total undergraduate enrollment at USG. The majority of students (70%) transfer from nearby Montgomery College, thus requiring close collaboration in the development of new programs. There are no residential facilities at USG so, unlike the College Park campus, the student population consists entirely of commuters.

USM’s 2020 Strategic Plan calls for substantial growth in enrollments and degree production throughout the system institutions, most specifically in Science, Technology, Engineering, and Math (STEM) disciplines. USG has an approved construction project for a new Biomedical Science and Engineering Education building to house new programs in information science, engineering, and health-related graduate programs from the University of Maryland, Baltimore. Planning, both academic and financial, for new programs is currently underway.
Despite the substantial progress made towards achieving the goals laid out in the 2008 Strategic Plan, many challenges remain and some are clearly linked to financial planning and budgeting. In-state tuition rates lag those of our peers, which limits our ability to invest in our instructional infrastructure or to address the growing demand in STEM disciplines. State restrictions on personnel compensation and procurement further limit our flexibility and control. Deferred maintenance of our buildings remains a serious concern and unfunded liability, as it does on many campuses. Our information technology infrastructure and enterprise software systems are currently adequate but in need of a major financial investment if we are to maintain a competitive administrative and research environment in the years ahead. As one strategy for increasing revenue, the university has invested in fundraising, alumni relations, and development. We remain optimistic that our relatively modest endowment will expand significantly during the upcoming campaign [contributes to recommendation #10].

Criterion 5: well defined decision making processes and there is clear assignment of responsibility and accountability:

The university has in place an array of administrative bodies that participate in the decision making processes. Short summaries of the highest level advisory bodies can be found in Appendix VI.2. The Cabinet, consisting of the vice presidents and other senior executives, meets routinely to consider high level issues and to advise the President. The Finance Committee, which includes the Chief Financial Officer, the vice presidents, and several associate vice presidents, monitors the university’s budget and related financial matters, and makes decisions to assure fiscal stability and good stewardship of the university’s resources. The Provost leads the Deans’ Forum (deans only) and the Deans’ Council (which includes senior administrative staff in Academic Affairs) to discuss and advise the Provost on decisions relevant to the academic mission. The Facilities Council is convened with representation from across the campus to review requests for resources for facilities and space and to authorize those requests. The Sustainability Council advises the President, the Office of Sustainability, and the campus community about issues related to the integration of sustainability into campus operations. Campus operations include the physical campus as well as the university’s core missions of teaching, research, and service.

The Vice President for Research, the Provost, and the Vice President for Administration and Finance commissioned a Research Support Oversight Committee that consists of the chairs of all research regulatory and financial committees (Institutional Review Board, Institutional Animal Care and Use Committee, Conflict of Interest Committee, Institutional Biosafety Committee, Export Controls Committee, Laboratory Safety Oversight Committee, Radiation Safety Committee, and Financial Oversight Committee) and provides a forum for all research related committees to meet and discuss areas of potential risk and subsequent means to mitigate, manage and reduce risk associated with the research enterprise. The committee serves as an information vehicle to the Provost, the Vice President for Research and the Vice President for Administration and Finance on resource needs and potential realignments to meet a compliant environment that is safe and secure for our researchers and students.

The Graduate Council, representative of the graduate faculty, provides advice to the Dean of the Graduate School and the Provost on policies and procedures governing graduate programs.

The University Senate, which includes faculty, staff and students, embodies the principals of shared governance and is advisory to the President. The senate has a number of standing
committees that review and address issues and concerns brought to its attention and propose solutions; it requires all units to create and maintain plans of organization that meet specific criterion; and it holds regular meetings that provide forums for executives to respond to questions. The senate provides an avenue for faculty, staff, and students to have a voice in decisions and the development of policies. The senate also convenes three councils to provide advice on issues of information technology, research, and the libraries.

These committees and councils work harmoniously and provide broad participation from the campus in decision making processes. Numerous other ad-hoc advisory groups also contribute at multiple levels. Although the university is a highly decentralized organization with considerable autonomy granted to vice presidents and deans, institutional-wide decisions are vetted through these and similar governance bodies and the instruction is well served by a culture of shared governance and transparency.

Criterion 6: comprehensive planning for facilities, infrastructure, and technology that includes consideration of sustainability and deferred maintenance and is linked to the institution’s strategic and financial planning processes:

The university has a comprehensive Facilities Master Plan, which undergoes a minor update every five years and a major update every ten years. The major update process includes broad campus-wide participation, with leadership provided by the senior administration. The plan is built on four strategic priorities: excellence, connectivity, sustainability and stewardship. The commitment to excellence is the basis for planning at the university over the past two decades and remains the impetus behind the current document. Connectivity within the campus among its districts and communities, with the regional ecology, and to the neighboring communities is a priority. Stewardship—the valuing and nourishment of the architectural, cultural, and environmental heritage that has determined the special character and sense of place of the university—is an underlying theme. Leadership in sustainability, both as a laboratory and model for best practices, is a campus-wide goal and a significant component of every section of the plan. Strategies, recommended actions to meet the goals, and proposed development projects are guided by twelve physical planning principles connected to these four strategic priorities.

Three committees—the Facilities Improvement Committee (FIC), the Facilities Advisory Committee (FAC), and the Facilities Council (FC)—ensure wide participation in investment priorities and decisions, a rigorous process to allocate construction and renovation funding, alignment with the Facilities Master Plan and the University Strategic Plan, and checks and balances to ensure facilities investment is within the university’s budget.

Projects requests of less than $125K are reviewed by the FIC. Members (all within Facilities Management) include the Executive Director of Design and Construction, Executive Director of Operations and Maintenance, and the Director of Facilities Planning. Mid-scale (up to $1M) and capital projects are reviewed by the FAC who then provide advice to the Facilities Council. The FC has responsibility for oversight of campus facilities expenditures and on requests to be made to the state. Recommendations are developed on the State Capital Improvement Program (CIP), the institutional System Funded Construction Program (SFCP), the Access Maryland Program (AMP), the Access UMD Program, and the Occupational Safety and Health (OSH) Program. The FAC is chaired by the Associate Vice President, Facilities Management, and includes a representative from all divisions and from all divisions and each college.
The Facilities Council also oversees the campus Facilities Master Plan and approves program statements and design concept plans for all university facilities. The FC is chaired by the Provost and includes the Vice Presidents, Chair Elect of the College Park Senate, the Dean of the School of Architecture, and several UMD and City of College Park staff. The Associate Vice President for Facilities Management sits on the University Finance Committee, providing additional linkage between facilities and utilities spending and the university’s budget process.

The USM Chancellor approves institutional cash funded projects between $1M and $5M. The Board of Regents must authorize all projects in the CIP (state-funded) request and SFCP (institutionally funded) projects over $5M.

Facilities Renewal funding is managed by the Executive Director for Operations and Maintenance and is separate from construction and renovation funding. This program is used for infrastructure repairs and replacement, which includes utility systems, building systems, and exterior infrastructure. The key measurement of the Facilities Renewal requirement is the deferred maintenance backlog, which is updated every ten years. A validation was completed in 2014, using in-house expertise and a consultant’s assessment of facilities conditions (the Facilities Condition Index). The UMD backlog is $907M, up from $750M at the time of our 2012 Periodic Review submission, mirroring the trend across higher education of ever-increasing deferred maintenance and increasingly aged infrastructure. In order to address these in a rigorous, logical, and prioritized manner, the Executive Director for Operations & Maintenance created a ten-year investment plan, which is the process of being validated by an outside consultant.

Not included in our deferred maintenance backlog, yet recognized as a growing challenge, are our underground utility systems (steam, water, and electrical). Renewal requirements for these systems are estimated at $320M. Recapitalization of these systems is anticipated through private investment opportunities generated during the next phase of the Public Private Partnership to operate and maintain our combined heat and power plant and its associated utility systems.

In a separate effort to recognize and address the university’s growing infrastructure renewal requirements (coined the “Invisible Crisis”), UMD secured an additional $10M/year in facilities renewal funding from the state, starting in FY12 and lasting for ten years. For FY17 and FY18, this $10M was redirected to capital projects.

The University of Maryland is committed to achieving carbon neutrality by 2050. Since the release of the Climate Action Plan in 2009, we have invested $23M into energy-saving technologies, resulting in annual savings of $3.7M in energy costs and a reduction of over 11,000 metric tons of CO2. The university has also invested in supporting and encouraging behavior change by faculty, staff and students to conserve energy.

The university has an aggressive renewable energy procurement strategy, which commits us to source 100% of purchased electricity from renewable sources by 2020. To date, 50% of our purchased electricity comes from renewable sources, both on and off campus. A 2-megawatt rooftop solar photovoltaics installation is scheduled for completion in 2016.

During the first several years of implementation of the Climate Action Plan, the university has chosen to focus on renewable sources for purchased power because it has higher carbon intensity than power purchased from the grid or generated by our combined heat and power plant. It is one of the best conventional technologies available to the university to reduce carbon emissions from
the production of our heat and power. Despite that, it is the university’s largest single source of greenhouse gas emissions. A study is underway to assess the condition and efficiency of the existing plant, and the steam, electric and chilled water distribution systems and to determine the most efficient utility supply model that fits with both the growth predicted in the Facilities Master Plan and the carbon reduction goals laid out in the Climate Action Plan.

The ambitious goals laid out in the Climate Action Plan require us to continue to look for ways to maintain progress toward carbon neutrality. Increased energy efficiency through technological improvements, behavior change, investment in renewable energy sources where feasible, and careful analysis of opportunities related to the combined heat and power plant and its steam, electricity and chilled water distribution systems are the pillars of our current approach to reducing greenhouse gas emissions from power and operations.

Sustainability principles are now applied across campus through the use of Leadership in Energy and Environmental Design (LEED) principles. The state of Maryland requires that University System buildings, both new facilities and major renovations, be LEED Silver certified. Many of our buildings on campus are LEED Silver certified and we have seven LEED Gold certified buildings.

Sustainability initiatives also extend to the campus dining services, through a commitment to use local and sustainable food sources when possible, including produce grown by local farms operated by the College of Agriculture and Natural Resources.

**Criterion 7: an annual independent audit confirming financial viability with evidence of follow-up on any concerns cited in the audit’s accompanying management letter:**

The University System of Maryland has a long standing policy (284.0 - VIII-7.00) that stipulates that an external audit of the university must be conducted annually. The University Finance Committee is charged with addressing any findings from the external audit. The audit report is submitted to the Chancellor and Regents for review and the resolution of any findings. The university is in full compliance with this policy.

**Criterion 8: strategies to measure and assess the adequacy and efficient utilization of institutional resources required to support the institution’s mission and goals:**

The university is engaged in several activities that enable us to assess the effectiveness of our resource allocation with respect to our core mission and strategic goals. Several of them have been described above under Criterion 2.

Our participation in the Big Ten Academic Alliance (BTAA) has created a number of professional relationships between faculty and administrators at College Park and other Big Ten institutions, which encourages sharing of data and strategies, policies and practices. Academic and administrative personnel meet throughout the year to discuss issues of mutual concern, and this leads to an ongoing assessment of our own effectiveness with respect to resource utilization.

Throughout 2015, the university engaged an external consultant to identify how we can operate more efficiently and identify new resources that will allow us to pursue our strategic goals. Their research, along with the efforts of the Flagship 2020 work groups, are currently under analysis by the Administrative Modernization Program team charged with implementing a number of these ideas to move the institution to a more desirable future state.
A primary goal of the Administrative Modernization Program is to create a new budget model for the campus that will establish a transparent structure and establish an environment that will allow more consistent and meaningful analysis of resource allocation and permit data-driven decision with regard to allocations to support the mission and strategic goals. One outcome of this analysis exposed the fact that many of the university staff, particularly those responsible for fiscal oversight and management, are not adequately trained and are not consistently prepared to function effectively or efficiently. A group of senior budget officers is now tasked with developing a training protocol for our financial system, along with strategies to provide professional development and competency training for relevant staff. (See Standard VII, Criterion 4 for additional efficiency measures resulting from administrative reviews.)

**Criterion 9: periodic assessment of the effectiveness of planning, resource allocation, institutional renewal processes, and availability of resources;**

The annual reallocation processes that were carried out during FY10, FY11, and FY12, described under Criterion 1, are examples of continuous institutional renewal and resource allocation. Most major administrative units also produce annual reports that document accomplishments and identify future directions. Examples include those from the Office of Undergraduate Studies, the Division of Student Affairs, the Division of Research, and the University Libraries.

The preparation of budget requests to be submitted to the state, through our System Office, also requires a regular assessment of our effectiveness and progress toward stated goals and holds the institution accountable for resource allocations and related accomplishments.

The university carefully tracks progress with respect to sponsored research funding and subsequent expenditures. Despite national downturns, the University of Maryland has continued to grow our portfolio of externally supported research and has increased its diversity of sponsorship. This success can be attributed to several assets, notably the caliber of our faculty and graduate students and our location in proximity to the nation’s capital. Nonetheless, we also attribute our success to the intentional investment of resources in the research enterprise. A significant portion of our F&A revenue is returned to academic units to support existing research and invest in new opportunities and is used to fund start-up packages for newly-hired faculty and internal seed and tier programs that support pilot data collection and enhance proposal success rates. These programs are competitive in nature and success rates are assessed annually by the Division of Research and resources realigned accordingly. The university faces significant challenges, however, in identifying the resources needed to establish a competitive critical mass in several new research areas, including big data, neuroscience, quantum computing, and cybersecurity.

The Division of Information Technology has undertaken an assessment of the IT infrastructure and identified deficiencies and goals and is creating plans to advance the campus to a future state. The university as a whole recognizes that improvement is necessary with respect to the management of our data and the tools needed to evaluate and analyze that data. Throughout 2015, a small team worked to realign the data to prepare for the acquisition of a business intelligence tool, for which first implementation is planned during 2016. We believe this will provide us with the information needed to move to a more effective planning and resource allocation [contributes to recommendation #7].
Conclusions:
The university meets the criteria for this standard, as the university’s objectives are linked to its mission and the planning process is linked to the objective articulated in strategic plans for the university as a whole and for campus divisions and academic units.

However, challenges remain that contribute to several recommendations. The university should continue its analysis of how best to leverage its resources and achieve efficiencies, using as a guide the 25 recommendations resulting from the outside consultant and Flagship 2020 Commission [contributes to recommendations #9 and #10].

The university should also continue its development of a more transparent budget model, led by the budget workgroup of the Flagship 2020 Commission and the ongoing Administrative Modernization Program. It will be important for the university to have a budget model that facilitates strategic decisions based upon the university’s mission, goals, emerging opportunities and financial reality [contributes to recommendation #11]. A business intelligence tool is also recommended for more effective planning and resource allocation [contributes to recommendation #7].
Appendix VI.1 – Document List

a) Budget and Tuition Information [http://otcads.umd.edu/bfa/budgetinfo3.htm]
b) Promoting Innovation: The University of Maryland IT Strategic Plan [http://it.umd.edu/ITStrategy/index.html]
c) Division of Student Affairs: About Us [http://www.studentaffairs.umd.edu/about-us]
d) Faculty Incentive Program [http://research.umd.edu/development/faculty-incentive]
f) Strategic Plan Implementation: Second Year (FY 2010) [http://provost.umd.edu/SP07/Implement2/index.cfm]
g) Flagship 2020 Commission [http://www.umd.edu/Flagship2020/]
j) Learning Outcomes Assessment [https://www.irpa.umd.edu/Assessment/LOA.html]
l) Task Force Report on Cybersecurity ([private document])

o) USM Policy on Financial Management [http://www.usmh.usmd.edu/regents/bylaws/SectionVIII/VIII700.html]
Appendix VI.2 Campus-level Advisory Bodies

Essential to the vitality of academe is shared responsibility for governance. All legal authority is vested in and flows from the governing board. It delegates specified authority to the President of UMD who, in turn, delegates specified authority to other administrators. University and unit administrators share governance responsibility with faculty, staff, and student representatives. There is a delicate and complex balance between broad institutional participation and ultimate institutional accountability. No governance group exercises total control over the entire governance process. Different groups have primary responsibility for different spheres of governance. It is a process of collaborative and complementary responsibility for the governance of the institution by multiple stakeholders.

The University of Maryland leadership team consists of the members of the Cabinet and the Deans Council. These leaders serve UMD with exceptional competence, insight, and dedication.

The Cabinet includes 15 direct and co-reports to the President: the Senior Vice President and Provost; Vice President- Research; Vice President- University Relations; Vice President- Administration; Vice President- Student Affairs; Chief Financial Officer; Vice President- Information Technology and Chief Information Officer; Vice President- General Counsel; Associate Vice President- Communications; Director- State Relations; Director- Federal Relations; Chief Diversity Officer; Athletic Director; Chief Strategist- Business and Economic Development; and Assistant President and Chief of Staff.

The Deans Council includes the 14 deans who report to the Provost, the deans for: Agriculture; Architecture, Planning and Preservation; Arts and Humanities; Business; Behavioral and Social Sciences; Computer, Mathematical, and Natural Sciences; Education; Engineering; Graduate School; i-School; Journalism; Libraries; Public Health; Public Policy; and Undergraduate Education.

A key tenet of the University of Maryland’s shared governance model is the robust University Senate, which is composed of faculty, staff, students, and administrators that are peer-elected, volunteer, or appointed. The primary function of the senate is to advise the university president on virtually all campus policy matters and concerns, including but not limited to: education, budget, personnel, campus-community, long range plans, facilities, and faculty, staff and student affairs (subject to the limitations imposed by laws or mandates from the University of Maryland System Board of Regents or the Chancellor).

A number of councils are aligned with the Senate, including:

Councils:

- Athletic Council
- Campus Transportation Advisory Committee (CTAC)
- Council of University System Faculty (CUSF)
- Council of University System Staff (CUSS)
- IT Council
• Library Council
• Research Council

To provide some detail about one of these councils, the **Athletic Council** exists to help the University develop and maintain the best possible intercollegiate athletic program consistent with the academic integrity of the institution and the academic and social development of student athletes. The Athletic Council is the primary body which advises the president on all matters relating to intercollegiate athletics. It is responsible for formulation and recommendation of policy matters affecting intercollegiate athletics and for monitoring the implementation of such policy by the intercollegiate athletics program. The council, on behalf of the president, provides the necessary faculty input and participation in intercollegiate athletics as required by the Big Ten Conference, National Collegiate Athletic Association and the University of Maryland at College Park. The council does not execute policy but serves to influence policy development and administration.

Other key bodies that provide critical input, include the following:

• The **Finance Committee** oversees the management of the annual Campus Operating and Capital Budgets and reviews resource issues of campus-level significance that arise within the fiscal year. The Finance Committee is advisory to the President. The specific roles of the Finance Committee are as follows: (1) Define and oversee the administration of the annual operating budget; (2) Define and oversee the administration of state, system and institutional funded capital programs; (3) Develop and oversee the administration of programs to assign and control use of non-financial resources; (4) Assess the manner in which financing can best be arranged to support capital and operating program needs in response to priorities defined by the cabinet; (5) Provide policy guidance for campus level treasurer-type activities and programs to protect campus assets; and (6) Evaluate overall functioning of campus financial systems and initiate corrective actions as required.

• The **Facilities Council** supports the University of Maryland in its mission of achieving excellence as the State’s primary center of research and graduate education and the institution of choice for undergraduate students of exceptional ability and promise. The Facilities Council provides strategic guidance to Facilities Management, which is responsible for the physical campus – its academic, research and administrative spaces, the infrastructure that supports the buildings, and the landscape that surrounds them.

• The **University Sustainability Council** exists to advise the President, the Office of Sustainability, and the campus community about issues related to the integration of sustainability into campus operations. Campus operations include the physical campus as well as the university’s core missions of teaching, research, and service. To assist the university in implementing its **Climate Action Plan**, the Council considers the costs and benefit of various carbon reducing expenditures as well as policy activities that support carbon neutrality and sustainability.
• The **Research Support Operations Committee (RSOC)** is responsible for conducting strategic, hazard and/or compliance risk evaluations. Research excellence, safety and compliance, are inextricably intertwined. Safety and compliance are core values of our institution and integral parts of the responsible conduct of research. The university expects all members of our research community to integrate safety into their research activities, to strive for excellence and to go beyond minimum compliance. The RSOC is asked to determine how the risk affects the achievement of the university’s strategic goals of being a magnet for exceptional students that functions as an international center housed in a vibrant surrounding community which serves as a catalyst for economic development and a healthier society. RSOC oversight includes managing the following: safe use of humans/animals; conflict of interest; laboratory safety; facilities/maintenance; loss/lack of facilities; major equipment damage; administrative service; inability to meet desired level of service quality; reputational damage; loss of federal funding; federal investigations; etc.
Appendix VI.3 – Referenced Campus Offices, Committees, and Groups

a) Office of Institutional Research, Planning, & Assessment https://www.irpa.umd.edu/
b) Academy for Innovation & Entrepreneurship http://innovation.umd.edu/
c) Teaching and Learning Transformation Center http://tltc.umd.edu/

Appendix VI.4 – Other References

a) College Park Academy http://www.collegeparkacademy.com/
b) Maryland Language Science Center http://languagescience.umd.edu/
c) Institutional Research, Planning & Assessment: Course Evaluations https://www.irpa.umd.edu/Assessment/CourseEval/CourseEval.html
d) Institutional Research, Planning & Assessment: Faculty & Staff Reporting https://www.irpa.umd.edu/Assessment/FacStaffReporting.html
f) Strategic Plan Implementation: Second Year (FY 2010); Task Forces, Councils and Committees http://provost.umd.edu/SP07/Implement2/TaskGroupsYear2.cfm
g) Strategic Plan Implementation: Year Three Task Forces, Councils, and Committees http://www.provost.umd.edu/SP07/Implement3/TaskGroupsYear3.cfm
h) College Park Scholars http://scholars.umd.edu/
i) Honors College http://www.honors.umd.edu/
k) Division of Research: Facts and Figures http://www.research.umd.edu/about/facts-figures
l) Universities at Shady Grove http://shadygrove.umd.edu/
m) Dining Services: Sustainable Food Commitment http://dining.umd.edu/sustainability/sustainable-food-commitment/

n) Representative academic unit review documents (private folder)
o) “Managing for Results” 2015 report to the Maryland Higher Education Commission (submitted annually, private document)

Appendix VI.5 – Other Sources Evaluated by Review Team

a) Office of Institutional Research, Planning & Assessment: Assessment Activities at the University of Maryland https://www.irpa.umd.edu/Assessment/index.html