Maryland Higher Education Commission

State Aid to Independent Institutions

Utilization-Of-Funds Report - Post-Expenditure Affidavit FY 2019

STATE OF MARYLAND  ) ss:
COUNTY OF  )

On behalf of: The Johns Hopkins University

I make oath or affirm that none of the State aid accounted for in this Utilization-of-Funds Report was used for sectarian purposes.

Authorized Signature

Senior VP of Finance & Administration
Title

The Johns Hopkins University
Institution Name

I HEREBY CERTIFY that on this 5th day of September 2019, personally appeared before me, a Notary Public in and for the State and County aforesaid, Daniel G. Ennis and made oath in due form of law that the matters set forth in the above affidavit are true

Notary Public

My Commission Expires: October 17, 2022

NOTE: Guidance as to what would constitute sectarian usage of funds if provided by the Maryland Higher Education Commission Regulations - Joseph A. Sellinger - Aid to Nonpublic Institutions of Higher Education, Regulation, Section 6., paragraphs A-C.
Maryland Higher Education Commission

State Aid To Independent Institutions

FY 2019 Utilization-Of-Funds-Report

(To be filled out so as to describe and itemize in reasonably sufficient detail the purposes for which State funds have been expended during the fiscal year in question. Please review Maryland Higher Education Commission Regulations - *Joseph A. Sellinger Program - Aid to Nonpublic Institutions of Higher Education* - Section 5, paragraphs D through I before filling out this form.)

Name of Institution:  

Aid to be accounted for in this Report:

<table>
<thead>
<tr>
<th>The Johns Hopkins University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexpended Funds</td>
</tr>
<tr>
<td>$0</td>
</tr>
</tbody>
</table>

Total Funds

| $27,238,056                 |
This report covers expenditures between JULY 1, 2018 and JUNE 30, 2019.

I. Operating Expenditures (by category)
   Itemize & describe in detail, giving expense account number(s)

   Subtotal $ 27,238,056

II. Capital Expenditures (by project)
   Itemize & describe in detail, giving expense account number(s)

   Subtotal $ 0

III. Other Expenditures (by category)
   Itemize & describe in detail, giving expense account number(s)

   Subtotal $ 0

IV. Funds not Expended - prior to July 1:

   Subtotal $ 0

V. Total
   (Must equal total amount from page 1)

   $ 27,238,056

Certified as to Correctness: [Signature]
Authorized Signature

Senior VP of Finance & Administration
Title

09/05/2019
Date
Maryland Higher Education Commission
State Aid To Independent Institutions
Pre-Expenditure Affidavit FY 2020

STATE OF MARYLAND  )
                   ) ss:
COUNTY OF         )

On behalf of: The Johns Hopkins University
(Name of Institution)

I make oath or affirm that none of the State aid received under the State's Program of Aid to Nonpublic Institutions of Higher Education (Education Article, Sec. 17-101 et. seq.) will be used for sectarian purposes and that the Institution has adopted and maintained the internal accounting procedures which are defined in The Code of Maryland Regulations, Title 13B, Joseph A. Sellinger Program - Aid to Nonpublic Higher Education Institutions, until all State funds applied for have been expended and accounted for to the Maryland Higher Education Commission.

[Signature]
Authorized Signature

Senior VP of Finance & Administration
Title

The Johns Hopkins University
Institution

I HEREBY CERTIFY that on this 5th day of September 2019, personally appeared before me, a Notary Public in and for the State and County aforesaid, Daniel G. Ennis and made oath in due form of law that the matters set forth in the above affidavit are true.

[Signature]
Notary Public

My Commission Expires: October 17, 2022
Maryland Higher Education Commission

State Aid to Independent Institutions

Annual Report of Institutional Student Financial Aid
Awarded to Maryland Residents - FY 2019

The Johns Hopkins University

Please report the following information for the Fiscal Year ending June 30, 2019:

1. Total number of Maryland residents awarded institutional student financial aid. 2,586

2. Total amount ($) of institutional student financial aid awarded to Maryland residents. $85,732,402

3. Total amount ($) of State aid used for student financial aid for Maryland residents. $25,770,138

Authorized Signature

09/05/2019

Date

The Johns Hopkins University
Institution Name
Maryland Higher Education Commission
State Aid to Independent Institutions
FY 2020 Statement of Intended Use Report

(To be filled out so as to describe and itemize in reasonably sufficient detail the purposes for which State funds will be expended during the fiscal year in question. Please review The Code of Maryland Regulations, Title 13B - Joseph A. Sellinger - for Aid to Nonpublic Institutions of Higher Education - Section 5, paragraphs A through I before filling out this form).

Name of Institution: Johns Hopkins University

Estimated Amount of Award: $29,225,767 $29,019,525 ¹

THIS REPORT COVERS EXPENDITURES FOR THE FISCAL YEAR 2020 GRANT

I. Operating Expenditures (by category) - itemize below or on a separate sheet

Estimated Amount to be Expended: $29,019,525

Categories:

II. Capital Expenditures (by project) - itemize below or on a separate sheet

Estimated Amount to be Expended: $0

Projects:

¹ MHEC award amount was edited to agree with the revised final award distributed as of 4/4/19.
III. Other Expenditures (by category) - itemize below or on a separate sheet

Estimated Amount to be Expended: $0

Categories:

IV. Funds Not Expended

Estimated Amount Not Expended: $0

V. Estimated Total

$29,019,525

(Must equal total estimate from Page 1)

Certified as to Correctness:

[Signature]

Chief Executive Officer or Chief Financial Officer Signature

Senior VP of Finance & Administration

Title

Date 09/05/2019

Paragraph B of Section 5 of the Joseph A. Sellinger - Aid to Nonpublic Institutions of Higher Education requires that each institution give prior written notice specifying any other proposed use of State funds that are not identified in this Statement of Intended Use Report.
### Summary of Projects/Initiatives:

1. **Financial Aid for Maryland Students** $25,770,138
2. **Science, Technology, Engineering & Mathematics (STEM) Initiatives** 24,624
3. **Tuition Free Educational Opportunities for Maryland STEM Teachers** 68,000
4. **Graduate Degrees for Minorities in Engineering and Science** 14,661
5. **Center for Teaching and Learning** 173,703
6. **SOURCE (Student Outreach Resource Center)** 28,233
7. **Early Childhood Special Education** 172,400
8. **Support Academic Programs in Public Health** 299,464
9. **Public Safety Leadership Management Program** 248,330
10. **Interdisciplinary Studies in Education** 22,730
11. **Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs** 11,278
12. **School Counseling** 376,904
13. **Intelligence Analysis Program** 27,591

**Total** $27,238,056
Institution: Johns Hopkins University

**Project 1: Financial Aid for Maryland Students**

Aligns with MHEC Strategy 4: Continue to ensure equal educational opportunities for all Marylanders by supporting all postsecondary institutions.

**Project Budget:** $25,770,138

**Detailed description of project/initiative:**

The majority of Sellinger Aid funds which Johns Hopkins receives are used to fund need-based financial aid to Maryland students attending our undergraduate or graduate programs throughout all of our academic disciplines. These funds are vital to our Institution’s ability to provide access to as many students as possible who are academically qualified but lack the financial means to attend.

**Describe how Maryland was served by this project/initiative:**

Access to a quality higher education was provided to 2,586 Maryland students who received financial assistance in FY2019. Total institutional aid in FY2019 to MD students was $85,732,402 of which 30.1% was supported by Sellinger funds. Current appropriations for FY2020 Sellinger aid is $29,019,525, 93% of which will be used to fund aid for Maryland students.

**Describe process of project evaluation/assessment:**

Through a budget process involving our assistant vice provost for financial aid, deans and central leadership and ratified by the Board of Trustees, the divisions of the University set annual goals for the distribution of financial aid, a significant amount of which goes to benefit Maryland residents. Success in meeting these goals is evaluated at budget meetings throughout the year.

**Project 2: Science, Technology, Engineering & Mathematics (STEM) Initiatives**

Aligns with MHEC Strategy 1: Continue to improve college readiness among K-12 students, particularly high school students.

**Proposed Project Budget:** $24,624
Detailed description of project/initiative:

In support of the School of Education’s (SOE) STEM initiatives, SOE faculty is collaborating with Whiting School of Engineering faculty and staff and Baltimore City Public Schools (BCPS) on a National Science Foundation (NSF) Math Science Partnership grant proposal that brings innovative STEM programming to elementary school students in several low-performing Baltimore schools.

The Community Enterprise for STEM Learning partnership brings together two core partners, Johns Hopkins University, as the lead, and BCPS in the STEM Achievement in Baltimore Elementary Schools (SABES) endeavor. Supporting partners include the Strong City Baltimore, Park Heights Renaissance, Southeast Community Development Corporation, Child First Authority, Education Based Latino Outreach, Smart Steps, and Village Learning Place. SABES is a unique approach to STEM education that builds expertise and excitement for STEM learning within target communities by engaging BCPS teachers and students in grades 3-5, caregivers, community-based organizations, afterschool program operators, faculty and students from JHU, members of Baltimore's high-tech businesses, and local museums in collaborative work around STEM. With additional funding awarded to BCPS by the Maryland State Department of Education, SABES expanded to offer a full suite of K-5 science/STEM curriculum that was made accessible to all elementary schools in the district. SABES extends beyond the school day far into the wider community, drawing on the expertise of higher-education faculty, students and postdocs at JHU and STEM professionals who serve as mentors in the afterschool program. The program culminates each year with the SABES STEM Showcase, an event in which students, families, teachers, and other community members engage in STEM interactive demonstrations.

A fundamental premise that undergirds SABES’ work is the integration of science into the learner’s world, as opposed to bringing students into the world of scientists, which has the potential to enable deep learning, self-efficacy, and student agency. Grounded in this perspective, SABES established Mutually Beneficial Partnerships (MBPs) in low-income, majority-minority communities and employs three main strategies to obtain its goals of broad participation in science, increased student achievement in STEM, and increased teacher proficiency. These strategies are: (1) sustained/collaborative professional development, (2) creating scaffolds that bridge school learning with applications of STEM in the community, including the annual community STEM Showcase featuring students’ STEM projects (i.e. student-driven projects), and (3) STEM visiting experts from JHU and high-tech industries.

SABES’ research agenda pursued the following questions: (1) if the impact evaluation shows that some intended outcomes are affected in desired directions by SABES, but others not, what theory-building or holistic understandings of educational improvement efforts and mechanisms can emerge from these findings? (2) What aspects of the proposed intervention are most effective for creating a sustainable STEM community where previously there exists little expertise or organized activity outside the school? (3) How does effectiveness vary between neighborhoods or schools that differ in student composition (e.g., race/ethnicity, English language proficiency), neighborhood resources and infrastructure, and other aspects of school organization (e.g., other high-priority initiatives in a school that might compete with SABES for staff attention, stability of principal or teacher incumbency)? The research design employs the application of a multi-
level, ecological perspective which will result in important findings related to developing science literacy in a community, engagement of formal and informal settings and structures as assets for developing teaching and learning in science, and examining the impacts on achievement, particularly related to closing the achievement gap among students of different ethnicities, language proficiencies, and income levels.

**Describe how Maryland will be served by this project/initiative:**

The report Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future points out several disturbing facts about the state of mathematics and science education in the United States:

Less than one-third of U.S. 4th-grade and 8th-grade students performed at or above a level called “proficient” in mathematics; “proficiency” was considered the ability to exhibit competence with challenging subject matter. Alarmingly, about one-third of the 4th graders and one-fifth of the 8th graders lacked the competence to perform even basic mathematical computations. U.S. 15-year-olds ranked 24th out of 40 countries that participated in a 2003 administration of the Program for International Student Assessment (PISA) examination, which assessed students’ ability to apply mathematical concepts to real-world problems.

To help address the content knowledge gap, the NSF Math Science Partnership will bring innovative STEM programming to students within BCPS who have traditionally had low test scores in science. We expect that this initiative will encourage greater interest in STEM subjects, as well as increased student achievement in math and science.

The original STEM initiative was a 5-year grant designed to both improve the content knowledge for existing teachers and help increase the pipeline of students interested in STEM careers, thereby helping in particular to address Strategy #1 (Continue to improve college readiness among K-12 students, particularly high school students) in the 2017-21 Maryland State Plan for Higher Education. A no-cost extension was granted by NSF, with a focus on gathering and analyzing the data from the students who participated in 2016-17. This extension, and therefore the grant, was completed in FY2019.

To support the district’s efforts to scale and sustain the school day portion of SABES initiative (district-wide implementation of SABES curriculum and professional development), the district launched a pilot cohort of current SABES teachers to serve as SABES instructional coaches for other teachers in the district. The 10 coaches in the pilot are the SABES STEM master teachers, who have grown with our program. As part of the cohort, they received ongoing training on best practices of instructional coaching which supported the implementation of the SABES curriculum units (grades 3-5 and K-2) that are available on the BCPS’ internal curriculum website. At the beginning of FY18, the SABES curriculum was introduced as the district’s curriculum for elementary science.

The Whiting School of Engineering committed funds in FY19 to hire a curriculum developer to update the curriculum in the hope of producing a marketable product that will generate future revenue for both STEM outreach at Whiting as well as additional revenue for BCPS. There was
also a plan to continue offering SABES OST (out of school time) with some of the existing providers.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Additionally, our external evaluator, MNA Associates, provides written evaluation reports to the SABES Project Leadership Team for review and consideration for program revisions and/or enhancements.

**Project 3: Tuition Free Educational Opportunities for Maryland STEM Teachers**

Aligns with MHEC Strategy 4: Continue to ensure equal educational opportunities for all Marylanders by supporting all postsecondary institutions; Strategy 8: Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness; and Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

**Project Budget: $ 68,000 (Fall only)**

**Detailed description of project/initiative:**

The Whiting School of Engineering is responding to an increased emphasis on quality Science, Technology, Engineering, and Mathematics (STEM) education that can only be met with available and affordable professional development for STEM teachers. To help Maryland become a leader in STEM education, Engineering for Professionals (EP) offers Maryland high school STEM teachers the opportunity to enroll in one course per semester—with a tuition waiver—in any of EP’s 20 graduate programs.

Describe how Maryland will be served by this project/initiative:

This program enables Maryland High School teachers under the STEM program to attend graduate level courses at no cost. Their attendance in the graduate courses improves the skill and knowledge of teachers throughout the State. The Whiting School of Engineering enrolled 16 students in the Fall of FY18-19 academic year.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that minority enrollment and continued progression is achieved.
**Project 4: Graduate Degrees for Minorities in Engineering and Science**

Aligns with MHEC Strategy 5: Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students; Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning.

**Project Budget: $ 14,661**

**Detailed description of project/initiative:**

This provides fellowships, community building initiatives, and professional development programming in support of engineering and science minority graduate students enrolled in the G.W.C. Whiting School of Engineering.

**Describe how Maryland will be served by this project/initiative:**

This initiative increases the access and affordability for minorities to engineering and science related degrees. In the last few years, more than 30% of Engineering/Science graduate students were female and 5% were minorities. These two groups have been historically underrepresented in the field of engineering and science, two fields which are vital to establishing Maryland as a leader in the life sciences and technology research industry. By increasing access to minorities in these fields, we are not only addressing the historical disparities, but also the needs of two of the State’s biggest economic sectors. Six minority students graduated in FY19, with projections for 5 graduates in FY20.

**Project 5: Center for Teaching and Learning**

Aligns with MHEC Strategy 6: Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements; Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

**Proposed Project Budget: $ 173,703**

**Detailed description of project/initiative:**

The Center for Teaching and Learning supports the mission of the Bloomberg School of Public Health, "Protecting Health, Saving Lives, Millions at a Time" by developing, designing, and delivering online courses for various degree, certificate, and non–degree programs at the School. The Center employs professionals in instructional design, web development, technical writing, graphical illustration, and audio production. Center staff, media specialists, and the Information Systems group work together with the School's world-renowned faculty to produce and deliver public health content to students via the Internet. Students can access courses whenever it is convenient for them. Currently, we offer more than 239 full web courses that students can take for credit and enroll more than 2,542 students each year through this public
health education program. Students come from the part-time and full-time degree programs, certificate programs, professional training groups, alumni, self-learners, and interested health practitioners worldwide. In addition, we also offer what are called “massive open online courses” (MOOCs) on the Coursera platform (http://www.coursera.org/jhu) as well as FutureLearn and LeanPub. These courses are free to anyone in the world and students can earn statements of accomplishment after successful completion.

As of July 2019, 67 public health courses are listed on the Coursera website, 1 is listed on FutureLearn and 13 are listed on LeanPub. More than 6.9 million students have signed up for our MOOCs. Additionally, we also publish content from more than 121 academic courses on the School’s OpenCourseWare website (http://ocw.jhsphs.edu). The content serves as a learning resource for students, educators, and self-learners.

Describe how Maryland will be served by this project/initiative:

This program supports State goals for Maryland colleges and universities to provide high quality education and workforce training in areas such as health and the environment. The State further encourages institutions to educate professionals in these high-demand, State workforce shortage areas and to work collaboratively to address these critical health issues. This program is an illustration of how the School of Public Health is addressing this vital workforce shortage, by providing a more user-friendly and accessible program to educate these much needed health professionals. The Center for Teaching and Learning supports faculty and staff across the Bloomberg School of Public Health.

Describe process of project evaluation/assessment:

Programs are regularly assessed by student and faculty evaluations, enrollments and feedback forms. In addition, each department is asked to evaluate and update the current courses available online and to provide additional courses as they become available. This program continues to be very successful and will remain a vital resource for Maryland students.

Project 6: SOURCE (Student Outreach Resource Center), the community engagement and service-learning center for the Johns Hopkins University Schools of Public Health, Nursing, and Medicine.

Aligns with MHEC Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

Proposed Project Budget: $ 28,233

Detailed description of project/initiative:

This program promotes a relationship and teaching tool between the local public school, its faculty, staff and students to community outreach centers, non-profit organizations, and Baltimore City Schools, administered through the Bloomberg School of Public Health.
Describe how Maryland will be served by this project/initiative:

This program improves communication skills of school administrative and teaching staff with their students and parents in the community. The program has also helped to build and sustain links with the East Baltimore community, while serving as a clearinghouse to engage students, faculty, and staff interested in community engagement to volunteer their time, efforts and expertise in the local public schools. SOURCE responds to community-identified needs of over 100 community-based organizations in Baltimore City.

Describe process of project evaluation/assessment:

This program has a governing board that reviews the progress and needs of the program. The number of participating organizations has grown each year as have the number of students and faculty participating in the program. This outreach program extends to three divisions, Bloomberg School of Public Health, School of Medicine and School of Nursing. SOURCE offers a wide range of engagement opportunities, including for-credit academic courses, to individuals from the JHU health professional schools. Each opportunity includes evaluation components from both the Hopkins and community partners participating in a particular project.

Project 7: Early Childhood Special Education

Aligns with MHEC Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

Proposed Project Budget: $172,400

Detailed description of project/initiative:

This 39-credit Master of Science in Special Education with a concentration in Early Childhood Special Education degree program prepares teachers and related services professionals to work with young children, birth through age eight, who are receiving early intervention or special education services. The program is grounded in developmentally appropriate and culturally embedded practices, the science of learning, and the principles of universal design for learning. Students are prepared to be “specialized educators” with skills and dispositions aligned to the changing cultural, social, and economic needs of the children and families they service. A major initiative of the program is to use reflective coaching strategies, challenging field-based experiences, action research, and critical analysis to develop teachers who are highly-skilled practitioners as well as resilient agents of change. Students who successfully complete the program are eligible for generic special education certification from the Maryland State Department of Education.

Describe how Maryland will be served by this project/initiative:

Through a combination of coursework and applied experiences, the program prepares “specialized educators” across the entire state. Graduates integrate evidence-based practices and
individualized instructional strategies to ensure effective and efficient teaching and to foster student success. Graduates are committed to Maryland’s initiative to increase the inclusion of children with disabilities in all early childhood settings and to narrow the school readiness gap. Candidates follow guiding coaching techniques to lead others in collaborative interdisciplinary and transdisciplinary service delivery. Candidates are prepared to use the Implementation Science Framework to guide and support programs to implement the Common Core for all learners. The Early Childhood Special Education master’s program supports Strategy #9 (Strengthen and sustain development and collaboration in addressing teaching and learning challenges) of the 2017-21 Maryland State Plan for Higher Education by producing educators of excellence who are able to adapt, accommodate, and enhance learning experiences to meet the needs of children with disabilities, and to provide support for their families and/or caregivers. In FY20, the program will be discontinued as it undergoes a comprehensive review. There are three remaining students who were admitted in Fall 2017 and should complete their Master of Science degree by 2020.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys, and, in the case of licensure programs, internship mentor and supervisor evaluations as well. In addition, the School’s academic programs that lead to licensure, such as the Master of Science in Special Education, are also evaluated regularly for accreditation purposes. This accreditation provides recognition that the content and quality of the degree program has been evaluated and meets rigorous educational standards set by the profession.

Project 8: Support Academic Programs in Public Health

Aligns with MHEC Strategy 10: Expand support for research and research partnerships.

Proposed Project Budget: $ 299,464

Detailed description of project/initiative:

To provide faculty and student support, work study programs, and internship programs in the areas of Mental Health, Epidemiology, Molecular Microbiology and Immunization, International Health, and Population and Family Health Sciences for the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This operational support is vital to maintaining our world class research departments and in continuing our stature as the preeminent research institution in public health. This program supports the State goal for Maryland colleges and universities to provide high quality education and workforce training in areas, including health and the environment. The State further encourages institutions to educate professionals in these high-demand, state workforce shortage areas and to work
collaboratively to address these critical health issues. Our School of Public Health continues to work to address the State’s workforce needs in this ever growing discipline.

Describe process of project evaluation/assessment:

Through a process involving our Dean and Divisional Leadership within the School of Public Health, they assess their past performance in and set annual goals for maintaining their leading academic programs. They then develop and prioritize these goals to best use the funds available.

**Project 9: Public Safety Leadership Management Program**

**Detailed description of project/initiative:**

The School of Education’s Division of Public Safety Leadership prepares public safety and public sector professionals to make a difference in the organizations and communities they serve. The Division's leadership programs, which include the Bachelor of Science in Organizational Leadership and the Master of Science in Organizational Leadership, develop public safety and public sector leaders through teaching, scholarship, and community outreach. The Division’s undergraduate and graduate programs seek to develop and enhance leadership skills, while also focusing on the latest, most relevant public safety and public sector issues facing Maryland, the nation, and the world. As of 2013, the Master of Science in Organizational Leadership program is now available online as well as face-to-face, thus expanding the reach of the program beyond Maryland to a national public safety and public sector leadership audience.

**Describe how Maryland will be served by this project/initiative:**

In partnership with nearly 40 Maryland public safety organizations, the Division’s leadership programs help create a new generation of leaders and improve cooperation and collaboration among public safety and public sector agencies. In doing so, the program supports Strategy #8 (Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness) of the 2017-21 Maryland State Plan for Higher Education. Since 1994, over 1,000 talented professionals—many of whom are locally based in Maryland—have graduated from the School of Education’s leadership programs. Research shows that after completing their course of study, over 66 percent of alumni have been promoted. Of those who have graduated, more than 75 have achieved the rank of chief of police and two have served as fire chiefs. Other program alumni have gone on to hold leadership positions in federal law enforcement agencies, the private sector, public safety research organizations, and the military. The Division suspended recruitment for its leadership programs for the 2018-19 academic year. During that “off” year the Division graduated 45 students across its bachelor’s and master’s leadership programs.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.
**Project 10: Interdisciplinary Studies in Education**

Aligns with MHEC Strategy 10: Expand support for research and research partnerships.

**Proposed Project Budget: $ 22,730**

**Detailed description of project/initiative:**

The School of Education draws upon interdisciplinary research and academic programs to address needs in preK-12 education, with a particular emphasis on urban schools. Initiatives include both those that enhance the content knowledge of educators and those that apply current research and development activities to the improvement of student achievement and enhanced school performance. Interdisciplinary graduate programs, research projects, and professional development activities are being developed in partnership with other Johns Hopkins University academic units and with public schools.

**The Neuro-Education Initiative (NEI)**

The Neuro-Education Initiative seeks to bridge the gap between the science of learning and education by bringing together an interdisciplinary group of researchers, educators, and other key stakeholders to explore the intersection, knowledge, and current application of brain research in education, and to identify and conduct translational research. Through the learning sciences collaboration between the JHU’s schools of Education, Public Health, Medicine, and Nursing, and the Kennedy Krieger Institute, the NEI endeavors to improve teaching and learning by bringing to educators the latest research and best practices on the science of learning. Since 2008, the NEI has fostered an interdisciplinary dialogue in this emerging field that has the potential to revolutionize educational practice and policy on a regional and national level. With its rich array of world-renowned brain researchers and education experts, Johns Hopkins is uniquely positioned to become a leader in this work.

The NEI has established a strong collaborative network across JHU and other universities to work toward achieving its core goals, which include: (1) bringing to educators relevant research from the neuro- and cognitive sciences to enhance teaching and learning through academic programs such as the School of Education’s Mind, Brain and Teaching post-baccalaureate certificate, as well as regional conferences, national summits, and a professional development series, (2) exploring translational research opportunities and conducting rigorous research studies in authentic educational as well as clinical settings, and (3) bringing educational best practices to schools nationally and internationally derived from research through publications, multiple media outlets, partnerships with state and local districts, and partnerships with national and international institutions.

**NEI Academic Programs and Professional Development**

The School of Education’s Mind, Brain and Teaching (MBT) post-baccalaureate certificate is delivered in online, face-to-face, and blended formats, allowing it to reach an international audience as well as domestic one. Such was the interest in the program last year that SOE decided to launch additional cohorts. Currently, some of the MBT courses are also taught in the MAT, International Teaching and Global Leadership, and TFA programs.
As well as offering a standalone certificate program, SOE now also offers a specialization in Mind, Brain, and Teaching as part of its new online Doctor of Education (Ed.D.) program. This Ed.D. specialization is designed for educators interested in exploring research from cognitive theories and neurosciences and its potential to inform the field of education. Students who pursue this specialization will gain the knowledge and skills to interpret basic and applied research and apply relevant findings to educational practices and policies. As of 2019, five cohorts of students who have pursued the MBT specialization within the Ed.D. have successfully defended their dissertations and have graduated from the program. These graduates have already been accepted to present their research in the form of research poster presentations at conferences such as National Association for Multicultural Education (NAME), Learning and the Brain conferences, and the International Mind, Brain, and Education Society.

In addition to academic programs, the NEI offers a professional development series based on the translational framework Brain-Targeted Teaching® (BTT) Model. The model provides educators with a pedagogical framework informed by a rich body of research from the neuro- and cognitive sciences. The Maryland State Department of Education (MSDE) has approved the BTT professional development series for MSDE-approved Continuing Professional Development (CPD) credits. Dr. Mariale Hardiman, JHU’s Director of the Neuro-Education Initiative, has delivered professional development training on an annual basis to Baltimore City Public School teachers since 2012. Ongoing professional development cohorts are offered through a series of summer institutes and through online professional development modules through EduPlanet21.

**NEI Research**

Research projects include studying the effects of arts integrated instruction on long-term retention of content and creative thinking. Funded in part with a donation from the Drown Foundation in Los Angeles, a pilot study was conducted at Northwood Elementary during 2011-12. This randomized trial found that arts-integrated instruction produced better retention than conventional teaching. Based on this preliminary study, the NEI team has received further funding from the Institute for Educational Sciences (IES) at the U.S. Department of Education to expand the study to additional schools to develop and test additional curricular units. This research took place during FY13 and FY14 in 16 classrooms in Baltimore City and the findings from this research confirmed the pilot study findings. Arts-integrated instruction can produce the same or better results for memory of science content as traditional science instruction. The results also indicate that arts-integrated instruction may be facilitating the development of creativity, which may be transferred to other domains of learning. Papers for presentation of these findings were presented at the 2017 annual meeting of the American Education Research Association in San Antonio, Texas. The research study was published in *Trends in Neuroscience and Education* in 2019.

**NEI Research Presentations, Conferences and Workshops**

Members of the NEI team have been invited to present at local, national, and international conferences to share the findings on the neuro-education professional development research and on the arts-integration research. Conference presentations and workshops have included the following venues: American Education Research Association, Learning and the Brain, Arts
Describe how Maryland will be served by this project/initiative:

School of Education faculty members are collaborating with researchers in other units at Johns Hopkins University to develop innovative academic and research programs to benefit preK-12 schools, children, and communities in Maryland. The NEI’s collaborative work with other JHU units and state and local agencies supports Strategy #10 (Expand support for research and research partnerships) of the 2017-21 Maryland State Plan for Higher Education by bringing together educators, researchers, policy-makers, and other key stakeholders—for example, at conferences and summits—to discuss challenging educational and health-related problems facing society, analyze data, disseminate research, and inform decision-making. Furthermore, Maryland educators will continue to benefit from the School of Education’s specialized interdisciplinary post-baccalaureate certificate program Mind, Brain, and Teaching. The MBT certificate graduated 21 students in the 2018-19 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 11: Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs

Aligns with MHEC Strategy 1: Continue to improve college readiness among K-12 students, particularly high school students; Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

Proposed Project Budget: $11,278

Detailed description of project/initiative:

The School of Education’s two post-baccalaureate certificates in mathematics and STEM (Science, Technology, Engineering & Mathematics) instructional leadership were developed in response to the Maryland State Department of Education (MSDE) endorsement for instructional leaders at the PreK-6 level. These certificates were designed to prepare an exceptional cadre of mathematics and science teacher leaders to serve teachers of PreK-6 grade students and in direct and indirect ways their students. Instructional leaders are specially trained to lead educational contexts to develop powerful learning contexts that support the development of beginning and veteran teachers of mathematics and STEM. Participants in this certificate program will explore research-informed methods for effective mathematics teaching and effective leadership including policy, practice, emerging research, theory, culturally responsive education, and legislation/advocacy.
Using national and State mathematics, science, and STEM standards as frameworks, the programs are structured to provide deep conceptual understanding for preK-6 instructional leaders so that they are better able to help their students develop skills and knowledge in these critical areas. With content-application and research-practice approaches, teachers who complete these post-baccalaureate certificate programs are able to serve as mathematics or STEM instructional leaders. They are equipped with standards-based conceptual knowledge and practical skills; a foundation in equitable practices to support all students’ learning through problem-based, project-based approaches; and knowledge of research to support effective teacher learning and instructional change. Teachers who participate in these certificates will be prepared to organize, implement, and evaluate a school-wide approach to raising student achievement and providing professional learning opportunities to support teacher learning.

The certificate programs are aligned with the School of Education’s mission to prepare leaders in the field of education and to improve the quality and availability of leaders in the STEM disciplines.

In 2016 SOE received approval from the Maryland Higher Education Commission (MHEC) to 1) redesign the curricula for these two certificate programs to align with the new endorsements in STEM and mathematics instructional leadership introduced by the Maryland State Department of Education, and 2) change the delivery mode from a traditional face-to-face to fully online format. The program was launched in January 2019 with the goal of attracting a national as well as local audience. SOE’s initial recruitment goal was to admit 10 students into each certificate this year, 6 students were admitted for the 2018-19 academic year.

**Describe how Maryland will be served by this project/initiative:**

Graduates of the programs are qualified to fill positions as lead-teachers, content coaches, and Instructional Support Teacher (IST) in mathematics and STEM education. These positions are in high demand as school systems seek to raise student achievement in these fields.

These certificate programs are among a handful of graduate level programs in the nation designed to address the needs of a large and growing field of math and STEM education. While there are certainly other programs that prepare elementary teachers to teach mathematics and science, the School of Education’s preK-6 math and STEM certificate programs are unique because they focus on strengthening preK-6 teachers’ knowledge in all the mathematics and STEM domains covered in the national and state standards. This experience will also give candidates the requisite content knowledge, pedagogic skills, and leadership strategies to develop and implement high quality mathematics and STEM teacher learning opportunities for their colleagues.

These certificate programs address MHEC Strategy #1 (Continue to improve college readiness among K-12 students, particularly high school students) and Strategy #9 (Strengthen and sustain development and collaboration in addressing teaching and learning challenges), since they help teachers better interest and prepare students for careers in the STEM disciplines. This, in turn, helps fuel the state’s initiatives in key areas such as biotechnology and neuroscience.
Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 12: School Counseling

Aligns with MHEC Strategy 5: Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students; Strategy 6: Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements; Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning.

Proposed Project Budget: $376,904

Detailed description of project/initiative:

The Master of Science in Counseling with a concentration in School Counseling program provides professional educators and non-educators with the opportunity to develop and broaden their background in counseling. School counselors promote the academic, career, and personal-social development of students by designing, implementing, evaluating, and enhancing a comprehensive school counseling program. Graduates of the program are prepared for Maryland state certification as a school counselor. Within the School Counseling program, the School of Education offers both a flexible part-time program that students can complete in 2-5 years and an accelerated, 15-month full-time option (the School Counseling Fellows Program) that specializes in preparing future school counselors to work in urban school contexts. A ninth cohort of the Fellows Program launched in summer 2018 with six new students, SOE anticipates recruiting approximately 20 new students to its School Counseling program during the 2018-19 academic year.

Describe how Maryland will be served by this project/initiative:

The School Counseling program prepares candidates to complete the Maryland state certification process to become a school counselor, who are vitally needed to address the ever growing and changing needs of students for not only career and higher education counseling, but also emotional and family issues, which often affect the student’s academic performance. Furthermore, the program, particularly the Fellows Program option, is one of the few school counselor training programs in the U.S. that is designed to specifically train school counselors to work within the context of urban school reform. Graduates of the School Counseling program are equipped to work effectively in the most challenging urban and metropolitan schools. Participants will have the skills to decrease dropout rates, increase attendance, increase college and career readiness, and enhance the mental health and wellness of all students.
The Master of Science in Counseling with a concentration in School Counseling aligns with Strategy #5 (Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students); Strategy #6 (Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements); and Strategy #7 (Enhance career advising and planning services and integrate them explicitly into academic advising and planning) of the 2017-21 Maryland State Plan for Higher Education—as evidenced by the program’s recent endorsement for accreditation by the national Council for the Accreditation of Counseling and Related Educational Programs (CACREP). Furthermore, given the increasing dropout rates, suspension/expulsion rates, and decreasing graduation rates throughout the state of Maryland, one of the goals of the School Counseling program is to produce highly trained school counselors who are equipped to assist school systems and conduct outreach to families, thereby helping to reduce dropout rates and increase the academic achievement and college/career readiness of all students. SOE graduated 40 students in the 2018-19 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys, and, in the case of licensure programs, internship mentor and supervisor evaluations as well. In addition, the School’s academic programs that lead to licensure, such as the Master of Science in School Counseling, are also evaluated regularly for accreditation purposes. This accreditation provides recognition that the content and quality of the degree program has been evaluated and meets rigorous educational standards set by the profession.

Project 13: Intelligence Analysis Program

Aligns with MHEC Strategy 8: Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness.

Proposed Project Budget: $ 27,591

Detailed description of project/initiative:

The School of Education’s Division of Public Safety Leadership offers the Master of Science in Intelligence Analysis to enhance the nation’s capabilities in the analysis of strategic and tactical information collected from open and closed sources. Homeland security and the continued threat of terror have imposed new demands on the military and federal, state, and local public safety agencies. Attacks on the United States are no longer cause for conjecture. The nation’s military and public safety leaders, and the businesses and nonprofit communities that support them, face new challenges, a barrage of circumstances never before experienced, unparalleled demand for prevention, and heightened expectation that all Americans can and should be protected from
harm. This program trains the leaders and the practitioners who will lead this response in Maryland.

Describe how Maryland will be served by this project/initiative:

This master’s cohort program draws on potential leaders, primarily from agencies located in Maryland, and strong efforts are made to link the program with the state and local law enforcement agencies and public safety agencies within Maryland. In working with state and local agencies in focusing on data analysis, the program supports Strategy #8 (Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness) of the Maryland State Plan for Higher Education. The Division suspended recruitment for its intelligence analysis program for the 2018-19 academic year. During that “off” year the Division graduated 18 students.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.
MICUA Supplement  
Fiscal 2020 Intended Use of Funds Report  

Institution:  Johns Hopkins University  

Summary of Projects/Initiatives:  

1. Financial Aid for Maryland Students $26,883,820  
2. Tuition Free Educational Opportunities for Maryland STEM Teachers 72,874  
3. Graduate Degrees for Minorities in Engineering and Science 31,673  
4. Center for Teaching and Learning 373,936  
5. SOURCE (Student Outreach Resource Center) 45,737  
6. Support Academic Programs in Public Health 357,562  
7. Public Safety Leadership Management Program 301,582  
8. Interdisciplinary Studies in Education 50,557  
9. Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs 17,788  
10. School Counseling 718,358  
11. Intelligence Analysis Program 33,508  
12. MAT Program Enhancement Initiative 132,130  

Total $29,019,525
Institution: Johns Hopkins University

Project 1: Financial Aid for Maryland Students

Aligns with MHEC Strategy 4: Continue to ensure equal educational opportunities for all Marylanders by supporting all postsecondary institutions.

Proposed Project Budget: $ 26,883,820

Detailed description of project/initiative:

The majority of Sellinger Aid funds which Johns Hopkins receives are used to fund need-based financial aid to Maryland students attending our undergraduate or graduate programs throughout all of our academic disciplines. These funds are vital to our Institution’s ability to provide access to as many students as possible who are academically qualified but lack the financial means to attend.

Describe how Maryland was served by this project/initiative:

Access to a quality higher education was provided to 2,586 Maryland students who received financial assistance in FY2019. Total institutional aid in FY2019 to MD students was $85,732,402 of which 30.1% was supported by Sellinger funds. Current appropriations for FY2020 Sellinger aid is $29,019,525, 93% of which will be used to fund aid for Maryland students.

Describe process of project evaluation/assessment:

Through a budget process involving our assistant vice provost for financial aid, deans and central leadership and ratified by the Board of Trustees, the divisions of the University set annual goals for the distribution of financial aid, a significant amount of which goes to benefit Maryland residents. Success in meeting these goals is evaluated at budget meetings throughout the year.

Project 2: Tuition Free Educational Opportunities for Maryland STEM Teachers

Aligns with MHEC Strategy 4: Continue to ensure equal educational opportunities for all Marylanders by supporting all postsecondary institutions; Strategy 8: Develop new partnerships between colleges and businesses to support workforce development and improve workforce
readiness; and Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

**Proposed Project Budget: $ 72,874**

**Detailed description of project/initiative:**

The Whiting School of Engineering is responding to an increased emphasis on quality Science, Technology, Engineering, and Mathematics (STEM) education that can only be met with available and affordable professional development for STEM teachers. To help Maryland become a leader in STEM education, Engineering for Professionals (EP) offers Maryland high school STEM teachers the opportunity to enroll in one course per semester—with a tuition waiver—in any of EP's 21 graduate programs.

**Describe how Maryland will be served by this project/initiative:**

This program enables Maryland High School teachers under the STEM program to attend graduate level courses at no cost. Their attendance in the graduate courses improves the skill and knowledge of teachers throughout the State. The Whiting School of Engineering projects enrollments of 18 students in the fall of FY19-20 academic year.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Through an annual evaluation process developed by the leadership of the Whiting School of Engineering, we are continuing to adapt and modify the program to ensure that minority enrollment and continued progression is achieved.

**Project 3: Graduate Degrees for Minorities in Engineering and Science**

Aligns with MHEC Strategy 5: Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students; Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning.

**Proposed Project Budget: $ 31,673**

**Detailed description of project/initiative:**

This provides fellowships, community building initiatives, and professional development programming in support of engineering and science minority graduate students enrolled in the G.W.C. Whiting School of Engineering.
Describe how Maryland will be served by this project/initiative:

This initiative increases the access and affordability for minorities to engineering and science related degrees. In the last few years, more than 30% of Engineering/Science graduate students were female and 5% were minorities. These two groups have been historically underrepresented in the field of engineering and science, two fields which are vital to establishing Maryland as a leader in the life sciences and technology research industry. By increasing access to minorities in these fields, we are not only addressing the historical disparities, but also the needs of two of the State’s biggest economic sectors. Six minority students graduated in FY19, with projections for 5 graduates in FY20.

Project 4: Center for Teaching and Learning

Aligns with MHEC Strategy 6: Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements; Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

Proposed Project Budget: $373,936

Detailed description of project/initiative:

The Center for Teaching and Learning supports the mission of the Bloomberg School of Public Health, "Protecting Health, Saving Lives, Millions at a Time" by developing, designing, and delivering online courses for various degree, certificate, and non-degree programs at the School. The Center employs professionals in instructional design, web development, technical writing, graphical illustration, and audio production. Center staff, media specialists, and the Information Systems group work together with the School's world-renowned faculty to produce and deliver public health content to students via the Internet. Students can access courses whenever it is convenient for them. Currently, we offer more than 239 full web courses that students can take for credit and enroll more than 2,542 students each year through this public health education program. Students come from the part-time and full-time degree programs, certificate programs, professional training groups, alumni, self-learners, and interested health practitioners worldwide. In addition, we also offer what are called “massive open online courses” (MOOCs) on the Coursera platform (http://www.coursera.org/jhu) as well as FutureLearn and LeanPub. These courses are free to anyone in the world and students can earn statements of accomplishment after successful completion.

As of July 2019, 67 public health courses are listed on the Coursera website, 1 is listed on FutureLearn and 13 are listed on LeanPub. More than 6.9 million students have signed up for our MOOCs. Additionally, we also publish content from more than 121 academic courses on the School’s OpenCourseWare website (http://ocw.jhsph.edu). The content serves as a learning resource for students, educators, and self-learners.
Describe how Maryland will be served by this project/initiative:

This program supports State goals for Maryland colleges and universities to provide high quality education and workforce training in areas such as health and the environment. The State further encourages institutions to educate professionals in these high-demand, State workforce shortage areas and to work collaboratively to address these critical health issues. This program is an illustration of how the School of Public Health is addressing this vital workforce shortage, by providing a more user-friendly and accessible program to educate these much needed health professionals. The Center for Teaching and Learning supports faculty and staff across the Bloomberg School of Public Health.

Describe process of project evaluation/assessment:

Programs are regularly assessed by student and faculty evaluations, enrollments and feedback forms. In addition, each department is asked to evaluate and update the current courses available online and to provide additional courses as they become available. This program continues to be very successful and will remain a vital resource for Maryland students.

Project 5: SOURCE (Student Outreach Resource Center), the community engagement and service-learning center for the Johns Hopkins University Schools of Public Health, Nursing, and Medicine.

Aligns with MHEC Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

Proposed Project Budget: $ 45,737

Detailed description of project/initiative:

This program promotes a relationship and teaching tool between the local public school, its faculty, staff and students to community outreach centers, non-profit organizations, and Baltimore City Schools, administered through the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This program improves communication skills of school administrative and teaching staff with their students and parents in the community. The program has also helped to build and sustain links with the East Baltimore community, while serving as a clearinghouse to engage students, faculty, and staff interested in community engagement to volunteer their time, efforts and expertise in the local public schools. SOURCE responds to community-identified needs of over 100 community-based organizations in Baltimore City.
Describe process of project evaluation/assessment:

This program has a governing board that reviews the progress and needs of the program. The number of participating organizations has grown each year as have the number of students and faculty participating in the program. This outreach program extends to three divisions, Bloomberg School of Public Health, School of Medicine and School of Nursing. SOURCE offers a wide range of engagement opportunities, including for-credit academic courses, to individuals from the JHU health professional schools. Each opportunity includes evaluation components from both the Hopkins and community partners participating in a particular project.

Project 6: Support Academic Programs in Public Health

Aligns with MHEC Strategy 10: Expand support for research and research partnerships.

Proposed Project Budget: $ 357,562

Detailed description of project/initiative:

To provide faculty and student support, work study programs, and internship programs in the areas of Mental Health, Epidemiology, Molecular Microbiology and Immunization, International Health, and Population and Family Health Sciences for the Bloomberg School of Public Health.

Describe how Maryland will be served by this project/initiative:

This operational support is vital to maintaining our world class research departments and in continuing our stature as the preeminent research institution in public health. This program supports the State goal for Maryland colleges and universities to provide high quality education and workforce training in areas, including health and the environment. The State further encourages institutions to educate professionals in these high-demand, state workforce shortage areas and to work collaboratively to address these critical health issues. Our School of Public Health continues to work to address the State’s workforce needs in this ever growing discipline.

Describe process of project evaluation/assessment:

Through a process involving our Dean and Divisional Leadership within the School of Public Health, they assess their past performance in and set annual goals for maintaining their leading academic programs. They then develop and prioritize these goals to best use the funds available.

Project 7: Public Safety Leadership Management Program

Aligns with MHEC Strategy 8: Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness.

Proposed Project Budget: $ 301,582
Detailed description of project/initiative:

The School of Education’s Division of Public Safety Leadership prepares public safety and public sector professionals to make a difference in the organizations and communities they serve. The Division's leadership programs, which include the Bachelor of Science in Organizational Leadership and the Master of Science in Organizational Leadership, develop public safety and public sector leaders through teaching, scholarship, and community outreach. The Division’s undergraduate and graduate programs seek to develop and enhance leadership skills, while also focusing on the latest, most relevant public safety and public sector issues facing Maryland, the nation, and the world. As of 2013, the Master of Science in Organizational Leadership program is now available online as well as face-to-face, thus expanding the reach of the program beyond Maryland to a national public safety and public sector leadership audience.

Describe how Maryland will be served by this project/initiative:

In partnership with nearly 40 Maryland public safety organizations, the Division’s leadership programs help create a new generation of leaders and improve cooperation and collaboration among public safety and public sector agencies. In doing so, the program supports Strategy #8 (Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness) of the 2017-21 Maryland State Plan for Higher Education. Since 1994, over 1,000 talented professionals—many of whom are locally based in Maryland—have graduated from the School of Education’s leadership programs. Research shows that after completing their course of study, over 66 percent of alumni have been promoted. Of those who have graduated, more than 75 have achieved the rank of chief of police and two have served as fire chiefs. Other program alumni have gone on to hold leadership positions in federal law enforcement agencies, the private sector, public safety research organizations, and the military. The Division has suspended recruitment for its leadership programs during the 2018-19 academic year, continuing into the 2019-2020 academic year. During this “off” year the Division anticipates graduating approximately 40-50 students across its bachelor’s and master’s leadership programs.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

Project 8: Interdisciplinary Studies in Education

Aligns with MHEC Strategy 10: Expand support for research and research partnerships.

Proposed Project Budget: $ 50,557

Detailed description of project/initiative:
The School of Education draws upon interdisciplinary research and academic programs to address needs in preK-12 education, with a particular emphasis on urban schools. Initiatives include both those that enhance the content knowledge of educators and those that apply current research and development activities to the improvement of student achievement and enhanced school performance. Interdisciplinary graduate programs, research projects, and professional development activities are being developed in partnership with other Johns Hopkins University academic units and with public schools.

**The Neuro-Education Initiative (NEI)**

The Neuro-Education Initiative seeks to bridge the gap between the science of learning and education by bringing together an interdisciplinary group of researchers, educators, and other key stakeholders to explore the intersection, knowledge, and current application of brain research in education, and to identify and conduct translational research. Through the learning sciences collaboration between the JHU’s schools of Education, Public Health, Medicine, and Nursing, and the Kennedy Krieger Institute, the NEI endeavors to improve teaching and learning by bringing to educators the latest research and best practices on the science of learning. Since 2008, the NEI has fostered an interdisciplinary dialogue in this emerging field that has the potential to revolutionize educational practice and policy on a regional and national level. With its rich array of world-renowned brain researchers and education experts, Johns Hopkins is uniquely positioned to become a leader in this work.

The NEI has established a strong collaborative network across JHU and other universities to work toward achieving its core goals, which include: (1) bringing to educators relevant research from the neuro- and cognitive sciences to enhance teaching and learning through academic programs such as the School of Education’s Mind, Brain and Teaching post-baccalaureate certificate, as well as regional conferences, national summits, and a professional development series, (2) exploring translational research opportunities and conducting rigorous research studies in authentic educational as well as clinical settings, and (3) bringing educational best practices to schools nationally and internationally derived from research through publications, multiple media outlets, partnerships with state and local districts, and partnerships with national and international institutions.

**NEI Academic Programs and Professional Development**

The School of Education’s Mind, Brain and Teaching (MBT) post-baccalaureate certificate is delivered in an online, face-to-face, and blended formats, allowing it to reach an international audience as well as domestic one. Such was the interest in the program last year that SOE decided to launch additional cohorts. Currently, some of the MBT courses are also taught in the MAT, International Teaching and Global Leadership, and TFA programs.

As well as offering a standalone certificate program, SOE now also offers a specialization in Mind, Brain, and Teaching as part of its new online Doctor of Education (Ed.D.) program. This Ed.D. specialization is designed for educators interested in exploring research from cognitive theories and neurosciences, and its potential to inform the field of education. Students who pursue this specialization will gain the knowledge and skills to interpret basic and applied research and apply relevant findings to educational practices and policies. As of 2019, five
cohorts of students who have pursued the MBT specialization within the Ed.D. have successfully defended their dissertations and have graduated from the program. These graduates have already been accepted to present their research in the form of research poster presentations at conferences such as National Association for Multicultural Education (NAME), Learning and the Brain conferences, and the International Mind, Brain, and Education Society.

In addition to academic programs, the NEI offers a professional development series based on the translational framework Brain-Targeted Teaching® (BTT) Model. The model provides educators with a pedagogical framework informed by a rich body of research from the neuro- and cognitive sciences. The Maryland State Department of Education (MSDE) has approved the BTT professional development series for MSDE-approved Continuing Professional Development (CPD) credits. Dr. Mariale Hardiman, JHU’s Director of the Neuro-Education Initiative, has delivered professional development training on an annual basis to Baltimore City Public School teachers since 2012. Ongoing professional development cohorts are offered through a series of summer institutes and through online professional development modules through EduPlanet21.

NEI Research
Research projects include studying the effects of arts integrated instruction on long-term retention of content and creative thinking. Funded in part with a donation from the Drown Foundation in Los Angeles, a pilot study was conducted at Northwood Elementary during 2011-12. This randomized trial found that arts-integrated instruction produced better retention than conventional teaching. Based on this preliminary study, the NEI team has received further funding from the Institute for Educational Sciences (IES) at the U.S. Department of Education to expand the study to additional schools to develop and test additional curricular units. This research took place during FY13 and FY14 in 16 classrooms in Baltimore City and the findings from this research confirmed the pilot study findings. Arts-integrated instruction can produce the same or better results for memory of science content as traditional science instruction. The results also indicate that arts-integrated instruction may be facilitating the development of creativity, which may be transferred to other domains of learning. Papers for presentation of these findings were presented at the 2017 annual meeting of the American Education Research Association in San Antonio, Texas. The research study was published in Trends in Neuroscience and Education in 2019.

NEI Research Presentations, Conferences and Workshops
Members of the NEI team have been invited to present at local, national, and international conferences to share the findings on the neuro-education professional development research and on the arts-integration research. Conference presentations and workshops have included the following venues: American Education Research Association, Learning and the Brain, Arts Education Partnership Conference, National Art Education Conference, and NEF Inclusive Education Conference and Accessibility Expo.

Describe how Maryland will be served by this project/initiative:

School of Education faculty members are collaborating with researchers in other units at Johns Hopkins University to develop innovative academic and research programs to benefit preK-12 schools, children, and communities in Maryland. The NEI’s collaborative work with other JHU
units and state and local agencies supports Strategy #10 (Expand support for research and research partnerships) of the 2017-21 Maryland State Plan for Higher Education by bringing together educators, researchers, policy-makers, and other key stakeholders—for example, at conferences and summits—to discuss challenging educational and health-related problems facing society, analyze data, disseminate research, and inform decision-making. Furthermore, Maryland educators will continue to benefit from the School of Education’s specialized interdisciplinary post-baccalaureate certificate program Mind, Brain, and Teaching. The MBT certificate anticipates graduating approximately 30-40 students in the 2019-20 academic year.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

**Project 9: Mathematics and STEM Instructional Leader (PreK-6) Certificate Programs**

Aligns with MHEC Strategy 1: Continue to improve college readiness among K-12 students, particularly high school students; Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

**Proposed Project Budget: $ 17,788**

**Detailed description of project/initiative:**

The School of Education’s two post-baccalaureate certificates in mathematics and STEM (Science, Technology, Engineering & Mathematics) instructional leadership were developed in response to the Maryland State Department of Education (MSDE) endorsement for instructional leaders at the PreK-6 level. These certificates were designed to prepare an exceptional cadre of mathematics and science teacher leaders to serve teachers of PreK-6 grade students and in direct and indirect ways their students. Instructional leaders are specially trained to lead educational contexts to develop powerful learning contexts that support the development of beginning and veteran teachers of mathematics and STEM. Participants in this certificate program will explore research-informed methods for effective mathematics teaching and effective leadership including policy, practice, emerging research, theory, culturally responsive education, and legislation/advocacy.

Using national and State mathematics, science, and STEM standards as frameworks, the programs are structured to provide deep conceptual understanding for preK-6 instructional leaders so that they are better able to help their students develop skills and knowledge in these critical areas. With content-application and research-practice approaches, teachers who complete these post-baccalaureate certificate programs are able to serve as mathematics or STEM instructional leaders. They are equipped with standards-based conceptual knowledge and practical skills; a foundation in equitable practices to support all students’ learning through problem-based, project-based approaches; and knowledge of research to support effective
teacher learning and instructional change. Teachers who participate in these certificates will be prepared to organize, implement, and evaluate a school-wide approach to raising student achievement and providing professional learning opportunities to support teacher learning.

The certificate programs are aligned with the School of Education’s mission to prepare leaders in the field of education and to improve the quality and availability of leaders in the STEM disciplines.

In 2016 SOE received approval from the Maryland Higher Education Commission (MHEC) to 1) redesign the curricula for these two certificate program to align with the new endorsements in STEM and mathematics instructional leadership introduced by the Maryland State Department of Education, and 2) change the delivery mode from a traditional face-to-face to fully online format. The program was launched in January 2019 with the goal of attracting a national as well as local audience. SOE’s initial recruitment goal is to admit 10 students into each certificate this year.

**Describe how Maryland will be served by this project/initiative:**

Graduates of the programs are qualified to fill positions as lead-teachers, content coaches, and Instructional Support Teacher (IST) in mathematics and STEM education. These positions are in high demand as school systems seek to raise student achievement in these fields.

These certificate programs are among a handful of graduate level programs in the nation designed to address the needs of a large and growing field of mathematics and STEM education. While there are certainly other programs that prepare elementary teachers to teach mathematics and science, the School of Education’s preK-6 mathematics and STEM certificate programs are unique because they focus on strengthening preK-6 teachers’ knowledge in all the mathematics and STEM domains covered in the national and state standards. This experience will also give candidates the requisite content knowledge, pedagogic skills, and leadership strategies to develop and implement high quality mathematics and STEM teacher learning opportunities for their colleagues.

These certificate programs address MHEC Strategy #1 (Continue to improve college readiness among K-12 students, particularly high school students) and Strategy #9 (Strengthen and sustain development and collaboration in addressing teaching and learning challenges), since they help teachers better interest and prepare students for careers in the STEM disciplines. This, in turn, helps fuel the state’s initiatives in key areas such as biotechnology and neuroscience.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.
Project 10: School Counseling

Aligns with MHEC Strategy 5: Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students; Strategy 6: Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements; Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning.

Proposed Project Budget: $ 718,358

Detailed description of project/initiative:

The Master of Science in Counseling with a concentration in School Counseling program provides professional educators and non-educators with the opportunity to develop and broaden their background in counseling. School counselors promote the academic, career, and personal-social development of students by designing, implementing, evaluating, and enhancing a comprehensive school counseling program. Graduates of the program are prepared for Maryland state certification as a school counselor. Within the School Counseling program, the School of Education offers a program that students can complete in 2-5 years and an accelerated, 15-month full-time option (the School Counseling Fellows Program) that specializes in preparing future school counselors to work in urban school contexts. A tenth cohort of the Fellows Program launched in summer 2019 with six new students and SOE anticipates recruiting approximately 20 new students to its School Counseling program during the 2019-20 academic year.

Describe how Maryland will be served by this project/initiative:

The School Counseling program prepares candidates to complete the Maryland state certification process to become a school counselor, who are vitally needed to address the ever growing and changing needs of students for not only career and higher education counseling, but also emotional and family issues, which often affect the student’s academic performance. Furthermore, the program, particularly the Fellows Program option, is one of the few school counselor training programs in the U.S. that is designed to specifically train school counselors to work within the context of urban school reform. Graduates of the School Counseling program are equipped to work effectively in the most challenging urban and metropolitan schools. Participants will have the skills to decrease dropout rates, increase attendance, increase college and career readiness, and enhance the mental health and wellness of all students.

The Master of Science in Counseling with a concentration in School Counseling aligns with Strategy #5 (Ensure that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students); Strategy #6 (Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements); and Strategy #7 (Enhance career advising and planning services and integrate them explicitly into academic advising and planning) of the 2017-21 Maryland State Plan for Higher Education—as evidenced by the program’s recent endorsement for accreditation by the national Council for the
Accreditation of Counseling and Related Educational Programs (CACREP). Furthermore, given the increasing dropout rates, suspension/expulsion rates, and decreasing graduation rates throughout the state of Maryland, one of the goals of the School Counseling program is to produce highly trained school counselors who are equipped to assist school systems and conduct outreach to families, thereby helping to reduce dropout rates and increase the academic achievement and college/career readiness of all students. SOE anticipates graduating approximately 15-20 students in the 2019-20 academic year.

Describe process of project evaluation/assessment:

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys, and, in the case of licensure programs, internship mentor and supervisor evaluations as well. In addition, the School’s academic programs that lead to licensure, such as the Master of Science in School Counseling, are also evaluated regularly for accreditation purposes. This accreditation provides recognition that the content and quality of the degree program has been evaluated and meets rigorous educational standards set by the profession.

Project 11: Intelligence Analysis Program

Aligns with MHEC Strategy 8: Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness.

Proposed Project Budget: $33,508

The School of Education’s Division of Public Safety Leadership offers the Master of Science in Intelligence Analysis to enhance the nation’s capabilities in the analysis of strategic and tactical information collected from open and closed sources. Homeland security and the continued threat of terror have imposed new demands on the military and federal, state, and local public safety agencies. Attacks on the United States are no longer cause for conjecture. The nation’s military and public safety leaders, and the businesses and nonprofit communities that support them, face new challenges, a barrage of circumstances never before experienced, unparalleled demand for prevention, and heightened expectation that all Americans can and should be protected from harm. This program trains the leaders and the practitioners who will lead this response in Maryland.

Describe how Maryland will be served by this project/initiative:

This master’s cohort program draws on potential leaders, primarily from agencies located in Maryland, and strong efforts are made to link the program with the state and local law enforcement agencies and public safety agencies within Maryland. In working with state and local agencies in focusing on data analysis, the program supports Strategy #8 (Develop new partnerships between colleges and businesses to support workforce development and improve workforce readiness) of the Maryland State Plan for Higher Education. The Division suspended
recruitment for its intelligence analysis program during the 2018-19 academic year, continuing into the 2019-20 academic year. During this “off” year the Division anticipates graduating 13 students.

**Describe process of project evaluation/assessment:**

The University routinely evaluates the effectiveness of its programs and initiatives as they relate to meeting programmatic objectives. Academic programs in the School of Education are regularly assessed through the use of student and faculty evaluations and feedback surveys.

**Project 12: MAT Program Enhancement Initiative**

Aligns with Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning and Strategy 9: Strengthen and sustain development and collaboration in addressing teaching and learning challenges.

**Proposed Project Budget: $132,130**

**Detailed description of project/initiative:**

The Master of Arts in Teaching (MAT) program at the Johns Hopkins School of Education (SOE) embodies the spirit of the University in its unwavering pursuit of excellence through its commitment to a rigorous program that uniquely prepares aspiring teachers to embrace the challenges of diverse classrooms. The hallmark of this innovative program is its focus on an intellectually challenging, reform-minded program of studies in which candidates acquire teaching competencies within a supportive learning community in urban schools. Both in and outside the classroom, through multiple, coherently designed experiences, candidates come to recognize that teaching is more complex than simply conveying subject matter. Candidates learn to transform their subject matter expertise into relevant experiences for P-12 learners by applying the best of what we know from the Learning Sciences about how children and youth think and learn. A cadre of professional educators support candidate development through a continuous model of improvement with timely and targeted feedback in both face-to-face and real-time digital formats.

Recent revisions to the MAT program align with the two strategies and have focused on Maryland State Department of Education recommendations to increase teacher candidate preparedness in meeting the challenges increasingly more diverse classrooms. The MAT has implemented a multiple, intensive school-based experiences focused on special populations at nationally recognized institutions including Kennedy Krieger Institute, Center for Talented Youth, and Henderson-Hopkins K-8 School. The MAT has also revised the curriculum to emphasize the learning sciences through a focus on the latest research in the cognitive processes of attention, memory, emotions, creativity, and the neurobiology of learning differences through a highly personalized advising model focused on academic, career, and personal well-being. The MAT is a fast-paced, one-year program leading to Maryland certification.

The School of Education Office of Student Affairs has increased its support of MAT students and MAT alumni to advance their careers through a variety of professional development support
services including resume and cover letter reviews, job search-strategies, interview preparation, and an annual recruitment fair. School districts from across Maryland participate in the recruitment fair in early March, prior to the official start of the hiring season, by sending school district human resource personnel to conduct employment interviews with current MAT and MAT alumni. This event serves the school districts by providing a pool of ready-to-be-hired teacher candidates and provides MAT candidates will an opportunity to learn about Maryland school districts and teaching opportunities. This supports Strategy 6 and 7, by improving services for MAT students and enhancing career advising and planning services by explicitly integrating this event into the MAT program each year.

**Describe how Maryland will be served by this project/initiative:**

Maryland will be served by this project by having the opportunity to hire highly prepared, fully certified candidates to teach in Maryland schools. Because candidates complete all of their internship experiences in Baltimore City Public Schools, they experience some of the most complex challenges in today’s classrooms and schools. They are mentored by some of the most accomplished and committed educators in the state and are inspired to continue to work in challenging school settings. Many of the MAT graduates are hired by Baltimore City Schools and surrounding county school systems.

**Describe process of project evaluation/assessment:**

Ongoing assessment data is collected from all stakeholders. MAT program leadership collects feedback from MAT candidates, faculty, K-12 mentors, and university supervisors on the quality of the program. In addition, the SOE Assessment Office collects data on SOE student performance, including their impact on K-12 students.