FEDERAL FUNDING AND SUPPORT FOR UNDERGRADUATE MATHEMATICS EDUCATION

Undergraduate mathematics education is the foothold in STEM education. Students and our nation's rising professionals in science, technology, and engineering must acquire strong mathematical skills to advance. Federal programs that support effective teachers of mathematics and a rich undergraduate mathematics education help produce our nation's cadre of mathematicians and advanced-skilled 21st Century workers by providing support, confidence, and encouragement.

National Science Foundation

The MAA supports programs at the National Science Foundation (NSF) within the Division of Mathematical Sciences (DMS) and the Education and Human Resources Directorate (EHR), particularly those with emphasis on diversity and women. DMS' programs advance the intellectual frontiers of the mathematical sciences. DMS supports areas such as algebra, analysis, applied mathematics, combinatorics, computational mathematics, foundations, geometry, mathematical biology, number theory, probability, statistics, and topology. EHR's programs cut across disciplines which have a direct impact on undergraduate mathematics education, including teacher training, curriculum development, and advanced learning and research to allow the nation to compete successfully in the global economy.

The MAA supports the President's FY 2010 proposal for \$7 billion for the NSF, a 16-percent increase over the 2008 level, as part of the plan for Science and Innovation and doubling the NSF budget over the next 10 years. The MAA urges Congress to fully fund the proposed increase for the NSF and support programs to improve undergraduate mathematics education while aiming to recruit diverse populations and women into the field.

Suggested report language for the FY 2010 Commerce, Justice, Science and Related Agencies Appropriations Conference Report: The Committee urges the continuation of undergraduate activities that support curriculum, laboratory, and instructional improvement; increasing the pipeline of talent into STEM, particularly women and diverse populations; and attracting talented individuals into the STEM teaching field.

U.S. Department of Education

The MAA supports funding increases for programs at the U.S. Department of Education (ED) that seek to improve the teaching and learning of mathematics, while promoting a diverse and talented student pipeline into STEM fields.

The MAA supports the President's FY 2010 proposal for increased funds for ED to recruit and support teachers and other educators for a well-prepared teacher workforce, and improve assessments. The MAA urges Congress to fully fund the proposed increases for ED, and include emphasis on programs to prepare and support teachers in effective mathematics instruction, and ensure that efforts to fill the STEM pipeline, such as the Advanced Placement (AP) program, are fulfilling their intent.

Suggested report language for the FY 2010 Labor, HHS, Education Appropriations Conference Report: The Committee encourages the Department to expand programs that recruit talented individuals into the STEM teaching field, particularly women and minority populations, and to study the role AP plays in recruiting talented students into advanced learning in STEM. In addition, the Committee directs the Department to enhance opportunities to provide effective mathematics instruction at the middle and high school levels.

— 2009