

4b.10 Contributions to service learning or civic engagement by department members or students

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Examples of mathematics courses that encourage student involvement in civic affairs: We offer two freshman seminars (Math 150) each year with varying topics. From time to time (e.g., in fall 2008) the seminar topic is the mathematics of voting. Another freshman seminar topic is comparative approaches to mathematics education in the U.S., Europe, and Asia. These seminars encourage students to think about social policy questions.

Some of the required COR masters program projects mentioned in section 4b.3 of this report involve our masters students in the analysis of questions obtained from regional government agencies (e.g., traffic flow planning problems) or from federal agencies (e.g., optimal inventory policy for helicopter repair parts at a Coast Guard supply depot). Such projects involve our students in civic projects.

Examples of faculty involvement: In return for the College's increased autonomy, the state government demanded that William and Mary become more involved with pre-college teacher education. Each summer for the past few years, two or three mathematics department members have taught special summer workshop courses for middle school teachers, and department members have been co-PIs on grants to support that program. Over the last five years, the grants total in excess of \$1.5 million. We believe that these teacher-education projects fall into the "civic engagement" category. In addition to these grant-funded projects, individual faculty report giving mathematical talks in local middle and high schools.

Through his work as chair of the Mathematical Association of America's Science policy Committee, one of our department members has spent considerable time lobbying federal agencies and legislators in Washington, DC, concerning federal issues of interest to our professional society.