

1056-J5-2085 **Carla D Martin*** (martincd@jmu.edu), Department of Mathematics & Statistics, MSC 1911,
James Madison University, Harrisonburg, VA 22807. *Why companies need mathematicians even
during rough times.*

Working in the quantitative methods division for a large consulting firm gave me many opportunities to apply mathematics in unique ways. Although clients were from both the private and public sectors, most of my time was devoted to the public sector.

I will therefore describe some interesting projects that involved mathematical modeling for the U.S. Government. In particular, a project for the Department of State involved building a model to estimate the total amount of land owned throughout the world. These results were presented before Congress. Another project for the National Highway Traffic Safety Administration (NHTSA) entailed an in-depth study on how drivers respond to anti-lock brakes. Several other projects will be mentioned that included work for the Immigration and Naturalization Service (INS), U.S. Treasury Department, and the U.S. Postal Service.

The projects I will describe were completed by teams with all levels of experience from Bachelor's degree to Ph.D. Therefore, this talk should be helpful for undergraduates interested in business, graduate students considering non-academia, professors advising students on opportunities in mathematics, or other professionals with an interest in business and government. (Received September 23, 2009)