Traditional curricula seldom offer undergraduate students concrete examples of mathematical applications that are used in industry. As a result, many students ask themselves the question, “What else can I do with a mathematics degree besides teach?” The primary goal of the NSF-supported project STEM Real World Applications of Mathematics is to expose undergraduate students to real applications of mathematics. We are achieving this goal through the launch of a Careers in Mathematics Speaker Series that exposes students to a variety of occupations and companies that use mathematics on a daily basis, and through the development and publication of classroom modules designed to help instructors integrate problems from industry into their undergraduate curricula. In this talk, we provide highlights from the speaking events as well as details on the educational materials developed as part of this project. This initiative is supported by NSF-CCLI Grants #0536364 and #1019532. (Received August 27, 2012)