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William H Rybolt* (rybolt@babson.edu), M/S, 231 Forest St., Babson College, Babson Park, MA 02457, and **John D McKenzie**. *Introducing Big Data in an Introductory Applied Statistics Course*.

Mathematics, Statistics, and the Data Deluge, the theme of the 2012 Math Awareness Month, reflects that massive amounts of data are now available on the Internet. Big Data is characterized by its three Vs: volume, velocity, and variety. It is not uncommon for a dataset to have more than a terabyte of data. Even more striking is that our social networking activities, on-line searches, financial transactions, and weather satellites may generate more than a terabyte of data each day. What compounds the problem of dealing with such data is its lack of structure. For example, an Internet query is usually a combination of numbers, text, dates, times, pictures, and hyperlinks. These data by their very nature are often messy and redundant. We identify several large datasets and use software, such as Minitab and Excel, to illustrate some of the complications with analyzing Big Data. Common descriptive and inferential methods which work so well with small, clean, well-structured data often fail when used on these datasets. We introduce ways of exposing students to Big Data in a first course. As two examples, asking them to work with data that exists in a form other than a spreadsheet of numeric values with no missing data and spending more time on various visualization techniques. (Received September 25, 2012)