Grant L Innerst* (gi7584@ship.edu), 3588 Stine Hill Road, Red Lion, PA 17356, and Ben Galluzzo (bjgalluzzo@ship.edu), Shippensburg University, Department of Mathematics, Shippensburg, PA 17257. Statistical Crowd Counting.

Money, tourism, and regional visibility are just a few reasons street fairs are extremely important to the towns that host them. Many festivals tout attendance numbers to attract vendors and, in turn more attendees, but are these numbers accurate? This project requires students to collect data and then analyze it using standard statistical tools with the goal of developing a mathematical model for approximating the number of people attending non-ticketed, open-air events. In this talk, we will discuss how this experiential learning activity fits into the introductory statistics curriculum and how using real-world (occasionally "messy") data provides students with additional insight into the use of statistics outside the classroom. (Received September 16, 2013)