1125-VP-1630 **Khyam Paneru*** (paneruk@uww.edu), 800 W Main St, Whitewater, WI 53190, and **Robert N Padgett**. *Pseudo-Likelihood Estimates and Bootstrap Confidence Intervals for the Mean of Zero-Inflated Population.*

Consider an example in an insurance industry where a large number of policyholders do not file a claim (zero claim amount is recorded), and the rest of the policyholders file claims (non-zero claim amount is recorded). A high proportion of zeros in such population, causing the distribution to spike at zero, is known as zero inflation. Zero-inflated population can be viewed as a mixture of zero and non-zero components. Existing methods used to estimate zero-inflated population mean relies on assumptions for asymptotic distribution, and are computationally complex. We extend maximum pseudo-likelihood approach of Chen et al. (2010) to estimate the confidence interval of zero-inflated population mean by applying bootstrapping, a resampling technique. Applying bootstrapping avoids making assumptions for the asymptotic distribution, which makes this method applicable to any distribution type of the non-zeros, and therefore, it becomes mathematically and computationally simpler. We are conducting simulation studies under pseudo-likelihood method to estimate the bootstrap confidence interval of population. We also applied bootstrap technique to estimate the mean of real data with large proportion of zero values. (Received September 18, 2016)