In October 2015, a New York Times article highlighted a disparity between the proportion of black versus non-black drivers pulled over in traffic stops in Greensboro, NC. In response to these allegations, we examined 563 individual officers in the Greensboro Police Department (GPD) to determine if the driver’s race played a role in their traffic stops. We used propensity score weighting, which compared an officer’s particular stops to similar stops made by peers. This method was based on RAND Corporation’s study for the Cincinnati Police Department. For our purposes, two stops were similar if they occurred for the same reason at a similar time of day and at a similar location in town. After applying our propensity score weights, we conducted a false discovery rate analysis. In this analysis, 10 out of the 563 officers had z-statistics that indicated racial bias against black drivers. These results are based off of 295,228 stops that occurred between January 1, 2009 and September 30, 2015. (Received September 20, 2016)