Knowles, Persico, and Todd (2001) develop a test for racial bias in traffic stops that is predicated on the notion that it is the hit rate—the rate at which motor-vehicle searches result in the seizure of physical evidence—and not the rate of traffic stops or vehicle searches, that should be used to discern whether disparities in police treatment are due to racial bias or statistical discrimination. In particular, if (a) the police are unbiased and (b) the marginal cost to the police of searching a vehicle is independent of the race of its driver, then the hit-rate, which is a measure of the marginal benefit of conducting a search, should be the same across all racial groups. Here, I argue that ‘racial deterrence externalities’—spillovers through which efforts undertaken to deter members of one group from committing crimes also have a deterrent effect on members of other groups—may drive a wedge between the marginal costs associated with searching members of different groups. In this case, the hit-rate test for racial bias will be misleading, and may not be informative about the presence of racial bias at all. I argue that communities that are more residentially segregated are likely to experience fewer deterrence externalities, and use traffic-stop data from two US states to test for segregation-hit-rate dynamics that are consistent with the predictions of the deterrence externalities model. The results suggest that such externalities do exist, calling into question the legitimacy of the hit-rate test for racial bias.