Racial Profiling or Bad Research?
Why We Should Stop Using Census Data

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Public opinion surveys reveal that the vast majority of Americans believe that use of racial profiling by the police is widespread.[1] This is deeply disturbing for two reasons. First, it is disturbing because it undermines police legitimacy among the vast majority of our citizens. Second, it is disturbing because the vast majority of law enforcement officers I have known do not engage in bias-based policing. This begs the question, then, why do so many people perceive that racial profiling is widespread?

One major factor that has contributed to the problem is the fundamentally flawed research that has been given the public through traffic stop data reports that have gathered and reported the wrong data. Many law enforcement agencies gather data on the race and gender of the individuals their officers have stopped, and report these data to the public in a report issued by the agency or by the state attorney general. Often these reports have relied on faulty methodologies that have been rejected by academics for decades, but still continue to be used.

The most common error found in these reports is the use of Census data as the benchmark for comparing the racial makeup of the jurisdiction to the racial makeup of those drivers stopped by the police. When people get into their car they do not limit their travels to their city limits and Census data does not demonstrate who is on the road or who is committing traffic violations.

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Benchmarks

In order for any traffic stop data collection activity to be meaningful, the racial composition of drivers stopped by the police needs to be compared to something – a benchmark. A benchmark is generally defined as a point of reference from which measurements may be made; something that serves as a standard by which others may be measured or judged. In the context of traffic stop data collection, a benchmark is the percentage of a racial or gender group that one would expect to be encountered if officers were not biased.

For example, imagine that 20% of the people speeding down a particular stretch of roadway were male and Hispanic. This makes 20% our benchmark for speeding stops of male Hispanics. We would expect that unbiased stops by police for speeding in this area would show that only about 20% of those stopped for speeding were male Hispanic drivers. However, where do we get these benchmarks? Unfortunately, many law enforcement agencies, government officials, the news media, and citizen groups continue to use Census data – a fatally flawed benchmark.

Census Data

The U.S. Census Bureau collects data on the social and demographic characteristics of the individuals who live within the U.S. at a given point in time. This data is freely and easily accessible from the U.S. Census Bureau website and can be analyzed within different geographic regions, down to the zip code and Census block levels. Many have used Census data as their benchmark for police activity because of its ease of access. The problem, however, is that that the demographic characteristics of the people living at any one location at ten year intervals has nothing to do with the driving population in a given place, nor who is breaking the law in any specific area. We use our vehicles to travel to places away from our homes, as people generally do not work, shop, or recreate in their homes. Several studies illustrate this well.

Sociologists Albert Meehan and Michael Ponder, from Oakland University, examined the racial composition of drivers across one suburb in the Detroit Metropolitan Area. According to the U.S. Census, the suburb they studied had a population that was 3% African-American, but the city also contained a popular shopping district and a major auto factory. The researchers and their assistants observed cars around major intersections across the city and recorded the races of 3,840 drivers they observed. Despite the city Census population of 3% African-American, 22% of the drivers they observed were African-Americans, and the proportion of African American drivers varied from neighborhood to neighborhood across the city. In some areas of the city, 49% of the drivers were African-American. The others, 11% of the drivers were African-American.[2]

Nowhere in the city did the African-American representation among actual drivers on the roadway match that of the Census demographics of the city.

A study lead by Criminologist Robin Engel, from the University of Cincinnati, examined 315,705 traffic stops conducted by troopers of the Pennsylvania State Police. These stops occurred on interstate highways, U.S. highways, state routes, county roads, and village and city streets. These stops revealed that 96% of drivers stopped by the police were stopped outside of their home zip codes. Furthermore, 66% were stopped outside of their home county, and 27% were stopped outside of their home state. In other words, 96% of the individuals stopped by these troopers were not part of the Census population of where they were stopped.

Similarly, a DCG study conducted in Ann Arbor, Michigan in 2019 found that 44% of the drivers stopped by the Ann Arbor Police Department resided outside of Ann Arbor. The study also found that, contrary to allegations based on flawed Census data benchmarks, African-American drivers were not disproportionately the subject of traffic stops. Rather, African-Americans were 1.1% *less likely* to be stopped than expected based on traffic collision data.

Alternative Benchmark

So what should be used as a proper benchmark for these types of reports and studies? Hiring a group of researchers to go out and record the races and traffic violations of drivers across your jurisdiction is usually too time-consuming and expensive for most law enforcement agencies. A simple solution, however, is to collect race and ethnicity data on all traffic crashes in your jurisdiction and use this data as your driver benchmark. While no state currently collects race data on its state vehicle crash form, if your agency starts collecting race data in-house, your agency will eventually have a benchmark of bad drivers across the various beats of your jurisdiction.

Using traffic crash data as a traffic stop benchmark has a number of advantages. First, it identifies the drivers most likely to be stopped because crashes result from moving or equipment violations of the law. While there are some people who are blameless for their crash (such as the person waiting at a red light who is hit from behind), all crashes had at least one driver or equipment error at fault, and many had multiple drivers at fault. Second, officers investigating traffic accidents can verify the race and ethnicity of the driver when they complete their report, as opposed to a researcher trying to determine a driver's race in a passing car. Third, as traffic crashes occur almost everywhere (even off of public roadways in parking lots and driveways) they are good samples of the bad driver or poorly maintained vehicle population throughout a

district or beat. Research observers tend to focus just on certain thoroughfares. Finally, crash data come from the citizenry who report crashes to the police, so no suggestion can be made that there was bias by the police in gathering this data.[3]

Conclusion

The overwhelming majority of racial profiling studies done by academics, and biased-based policing self-examinations by police departments, have produced results that people of color, especially African-Americans, are disproportionately stopped by the police.[4] It is likely, however, that the majority of these findings are in error as most relied on methodological errors that were guaranteed to show bias even when there was none. Using Census statistics as a benchmark, that in no way resemble the driving population or the traffic violator population, is just one of these many methodological errors.

Some key take-aways to remember with regard to racial profiling studies involving traffic stops:

- **If your agency is currently using Census data as your benchmark, it is imperative that you stop immediately and find a valid benchmark like the alternative discussed here.**
- **Using Census data is unfair your officers as it almost always suggests disproportionate stops of minority group members, even when no officer bias occurred**.
- **Failure to follow vetted and accepted practices in these examinations is unfair to the honest, hard-working law enforcement officers who might be erroneously accused of racial profiling**, **and unfair to the citizens of the community who might lose faith in their police based on findings from faulty research.**
- **If some outside individual or organization proposes to analyze your officers' stops using Census data as their benchmark, oppose it vehemently, using the studies cited here to support your argument.**
- **If your state collects statewide data, as does Illinois, Missouri, and Texas, lobby your state lawmakers to stop using Census data as the benchmark comparison and begin to collect valid benchmark comparison data by modifying the state vehicle crash form to include race and ethnicity information.**
- **If your agency or local government officials are contemplating a traffic stop study, begin collecting traffic accident demographic data as soon as possible.**

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Dolan Consulting Group LLC now offers training and services that addresses these many errors and offers recommendations on how to correct them. DCG's *Traffic Stop Data Analysis Services* assist law enforcement agencies in the creation of data collection efforts and reporting in a fair, accurate and impartial manner.

References

[1] Weitzer, R., & Tuch, S. A. (2005). Racially-biased policing: determinants of citizen perceptions. *Social Forces, 83(3)*, 1009-1030.

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