Racial Disparities in Traffic Stops

In 2020, the killing of George Floyd by a Minneapolis police officer—and the deaths of other African Americans in police custody—sparked widespread protests and intensified concerns about persistent racial inequities in the criminal justice system. In a recent PPIC survey, only 18 percent of Black Californians say police treat all racial and ethnic minorities fairly “almost always” or “most of the time,” compared to 54 percent of adults overall. Efforts to reduce racial inequities in people’s experiences with police are critical to improving community engagement and trust in law enforcement.

In recent years, traffic stops have emerged as a driving factor of racial disparities in law enforcement stops and an area of potential reform. For example, the cities of Los Angeles, San Francisco, and Berkeley have proposed changes to how non-moving violations, such as lack of registration or improper display of a license plate, are enforced. Proponents of these often-controversial efforts argue that non-moving violations are used as justification for conducting a stop that is not based on reasonable suspicion of criminal activity and that these stops do not improve public safety. Critics, including some in law enforcement, state that limiting officers’ ability to make these stops would jeopardize public safety and prevent officers from removing drugs and, especially, guns from the streets.

A key question is whether certain types of traffic stops could be enforced in alternative ways without jeopardizing public safety—potentially improving officer and civilian safety, enhancing police efficiency, and reducing racial disparities.

Traffic stops vary in numerous ways

Using data on 3.4 million traffic stops made in 2019 by California’s 15 largest law enforcement agencies (California Highway Patrol, eight police departments, and six county sheriff’s departments), we find:

- Between 9 p.m. and 3 a.m., more than half of traffic stops made by local police and sheriff departments are for non-moving violations.
- In 2019, law enforcement officers, mostly local police officers, confiscated firearms in 905 traffic stops (30% of all stops in which a firearm was seized). Of these traffic stops, 421 (47%) took place in the hours between 9 p.m. and 3 a.m., and 462 (51%) were for non-moving violations.
- Racial disparities are particularly notable in stops by police departments, where Black drivers make up about a third of traffic stops in the hours around midnight, roughly twice the share of white drivers.
- During nighttime stops, local law enforcement officers are more likely to search Black and Latino drivers than white drivers; discovery rates for contraband or evidence among Black and Latino drivers are lower than those of white drivers throughout the entire day.
- Officers spent a total of 80,000 hours in 2019 on 211,000 traffic stops that did not lead to any enforcement or discovery of contraband or evidence. These stops represent 6 percent of all traffic stops and 7 percent of total officer hours spent on traffic stops.
- For local law enforcement agencies, almost one in three stops of Black drivers in the hours around midnight result in no enforcement or discovery of contraband or evidence. These stops represent 6 percent of all traffic stops and 7 percent of total officer hours spent on traffic stops.
- About three-quarters of stops with no enforcement and no discovery are limited to verbal communication, but thousands involve intrusive actions—such as being searched (37,400 stops), detained (35,700), or handcuffed (15,000). Black and Latino drivers are overrepresented in stops involving intrusive actions.
Black drivers are notably overrepresented in no-enforcement/no-discovery stops involving intrusive actions

Notes: The numbers in parentheses refer to the total number of stops in which the person experienced at least this level of intrusiveness, out of the 211,089 traffic stops with no enforcement and no discovery of contraband or evidence.

Testing for racial bias

Disparities in traffic stops could be driven by racial bias, but other factors may also play a role—including vehicle conditions and driving patterns due to work, school, and leisure that may differ across race/ethnicity at any given time of day. We use a “veil of darkness” analysis to test for racial bias in the likelihood of being stopped for a traffic violation. We find that sudden changes in light conditions that occur around Daylight Saving Time led to shifts in the likelihood of being stopped for Black and Latino drivers (by 1.4–2.8 percentage points)—indicating that the ability to identify drivers’ race/ethnicity plays a role in officers’ stopping decisions. These findings provide some evidence of racial bias as a contributing factor to disparities in being stopped for Black and Latino drivers.

Considerations for alternative enforcement methods

These findings suggest that nighttime traffic stops for non-moving violations—especially those made by local police and sheriff departments—deserve consideration for alternative enforcement strategies. However, any changes need to be balanced against the possibility of hampering efforts to confiscate dangerous contraband, especially firearms.

Potential alternative enforcement methods include mailing warnings or citations to the registered owner of the vehicle, especially if the reason for the stop is a non-moving violation and concerns about road safety may not be immediate. For moving violations, red light cameras have been found to reduce traffic violations and crashes. And while automated speed cameras are not currently legal in California, they are used elsewhere as an effective tool to reduce speeding-related crashes.

Our findings underscore the urgency of efforts that can reduce inequities in policing. While implicit bias training for officers is a frequent tool, research support of its effectiveness is not strong. Recent research does find evidence that diversifying police staff may well reduce racial inequities, and suggests reallocating officers to calls from same-race/ethnicity neighborhoods as a possible complementing approach. Officer experience and seniority is another factor that likely matters, and evenly distributing assignments of more-experienced officers across districts within a law enforcement agency jurisdiction may reduce racial inequities and improve public safety.

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