Racial Disparities in Traffic Stops

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California has taken steps to reduce racial disparities in policing

- In 2015, California passed the Racial Identity Profiling Act (RIPA)
 - Rich data source on stops and disparities in policing
- Our earlier research showed that:
 - People of color have different experiences in searches, enforcement, intrusiveness, and use of force than white residents
 - Differences in stop context and jurisdiction contribute to disparities, but inequities remain after accounting for such factors
 - Traffic stops are a key driver of these disparities

In this study, we ask whether certain traffic stops could be enforced in alternative ways

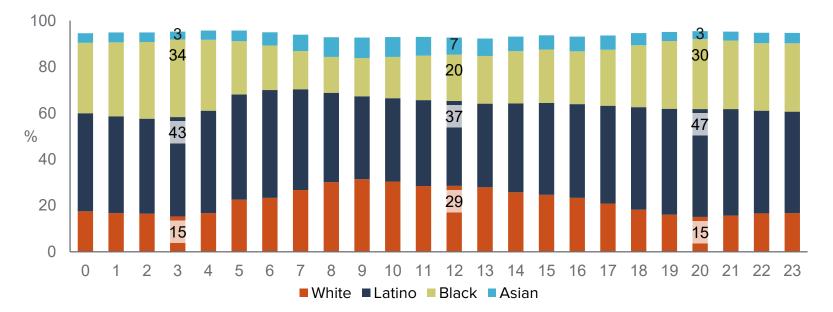
- Ideally, alternative enforcement methods:
 - Could improve officer and civilian safety, reduce racial disparities, and enhance police efficiency without jeopardizing public safety
- This study uses RIPA data on 3.4 million traffic stops made by the state's 15 largest law enforcement agencies in 2019

Nighttime stops by local law enforcement are mostly for non-moving violations

- More than half of traffic stops made by local police and sheriff departments from 9 p.m. to 3 a.m. are for non-moving violations
- Among all traffic stops, 211,000 stops (6%) resulted in no enforcement or discovery of contraband
 - About half occurred in the late p.m./early a.m.
 - Officers spent a total of 80,000 hours on these stops
- Law enforcement, mostly local police officers, confiscated firearms in 905 traffic stops
 - About half of these were in stops for non-moving violations

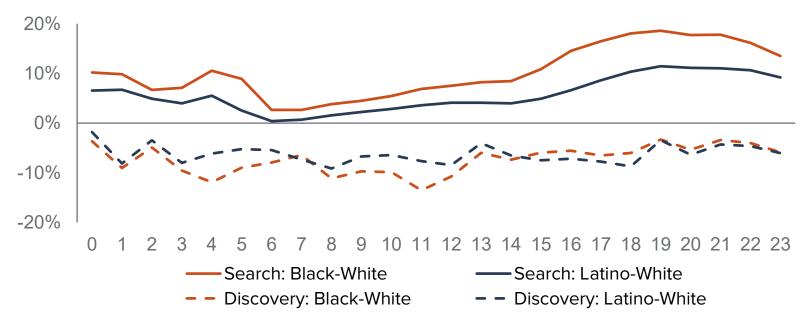
Largest racial disparities occur around midnight, especially in stops by police

Racial distribution by stop hour - Police



Search disparities are greatest in evening stops by local officers, but discovery rates are low

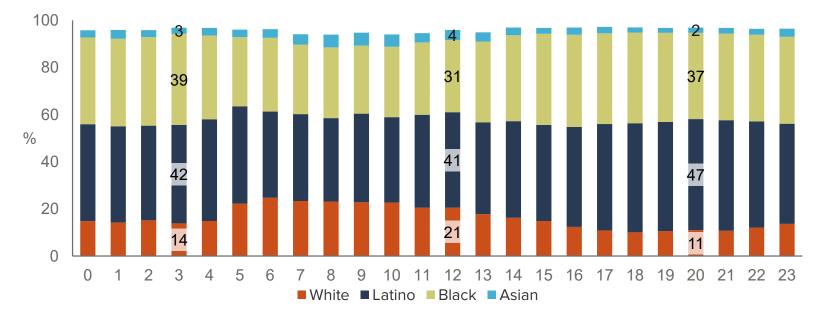
Racial disparity in search and discovery rates – Local law enforcement



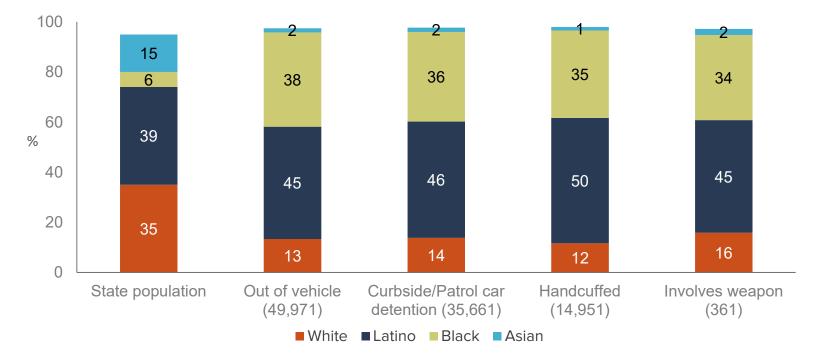


Black drivers make up notably high shares of nighttime stops with no discovery/enforcement

Racial distribution by stop hour, no discovery/no enforcement – Police



Black drivers are notably overrepresented in noenforcement/discovery stops with intrusive actions

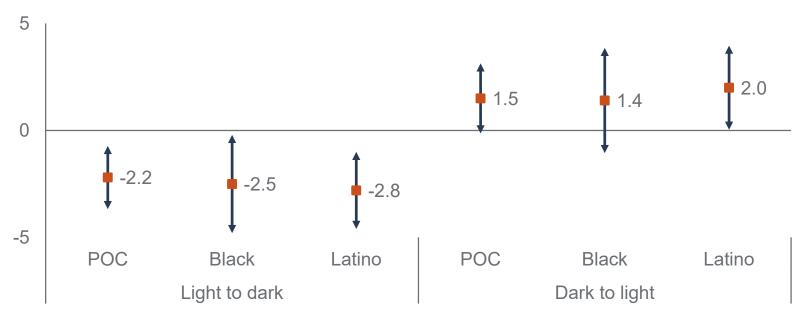


Testing for racial bias in the likelihood of being stopped

- Racial bias is one possible reason for disparities, but other factors may also contribute
 - Vehicle conditions and driving patterns due to work, school, and leisure may differ across race/ethnicity and time of day
- "Veil of darkness" theory posits that light conditions affect officers' ability to determine the race/ethnicity of a driver
- We study the effects of sudden changes in light conditions at given times in the morning and evening coinciding with Daylight Saving Time (DST) switches in March and November

Our findings show some evidence of racial bias in stop decisions among local law enforcement

Estimated % point change in share of drivers stopped by local law enforcement





Nighttime traffic stops made by local law enforcement deserve particular consideration

- These stops:
 - Are predominantly for non-moving violations
 - Involve higher search rates than daytime stops, but discovery rates are lower
 - Are more likely to lead to no enforcement/no discovery
 - Involve the greatest racial disparities
- However, firearms are confiscated in a number of these stops

Policy considerations

- Alternative enforcement methods:
 - Mailing warnings or citations for non-moving violations
 - Red light cameras and automated speed cameras (not legal in CA)
 - It's possible that these methods may also reduce the number of firearms confiscated
- Addressing racial inequities:
 - Research support for implicit bias training is not strong
 - Evidence-based practices include diversifying police staff and reallocating officers to calls from same-race/ethnicity neighborhoods

Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.