

Assessing Disparities in Traffic Stops

Presentation for the Public Safety Advisory Board

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Work Performed to Date

- Qualitative Fieldwork
 - Interviews with MVPD Command Staff
 - 8 hours of ride along with patrol officers
- Data Analysis
 - **Focus of the rest of my presentation**
 - Completed Pre-analysis Plan (PAP)
 - Completed data processing and cleaning of Department data on traffic stops

Why does the report focus on traffic stops?

- Traffic stops are almost always officer-initiated.
- Traffic stops are the primary type of police-community interaction for which:
 - Data of interest on community member's perceived race, age, and gender are consistently reported
 - Filling out data is mandatory before an officer returns to the field, even if no citation is issued.

What can we learn from this kind of data?

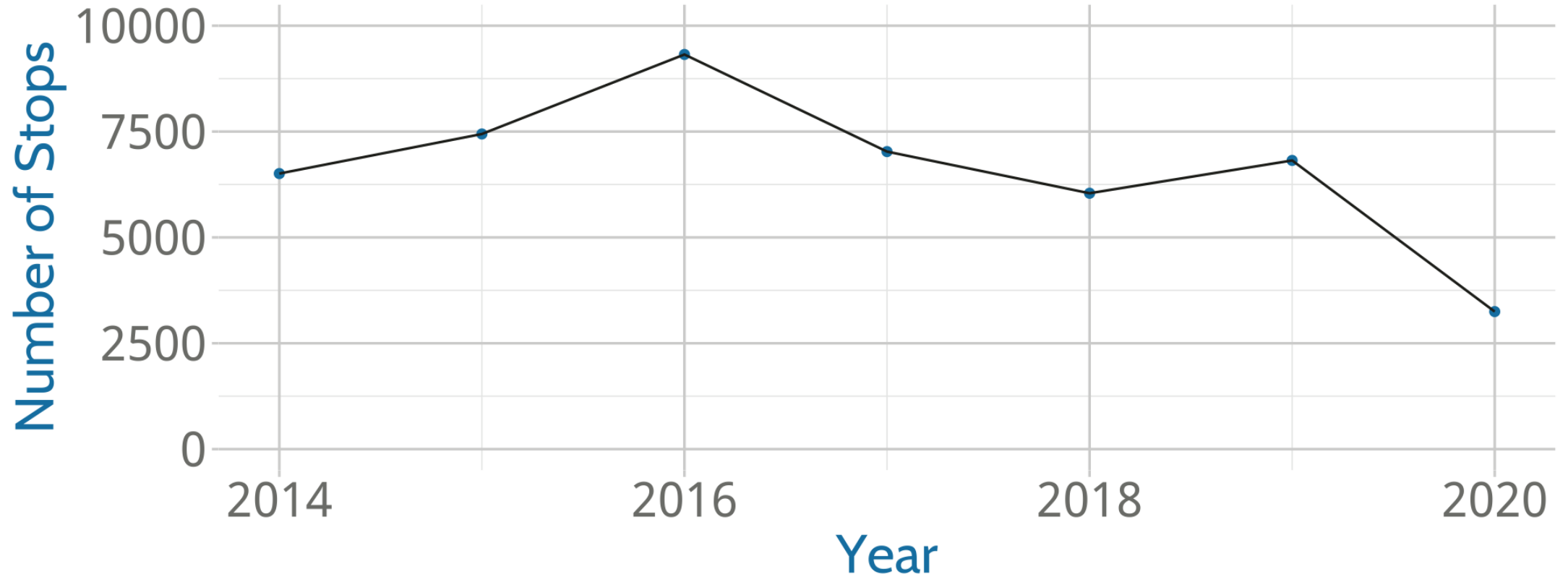
- The unit of analysis is the police-motorist encounter.
 - We can bring data to bear on whether we observe bias at this level.
 - The City and MVPD lack variation external to the processes of interest, meaning that data analysis could be biased in any direction.
- The implied experiment is whether officers make similar choices when stopping community members
- Tests for discrimination can thus reveal potential disparities and bias at the officer-motorist level.

What tests for assessing disparities are being run?

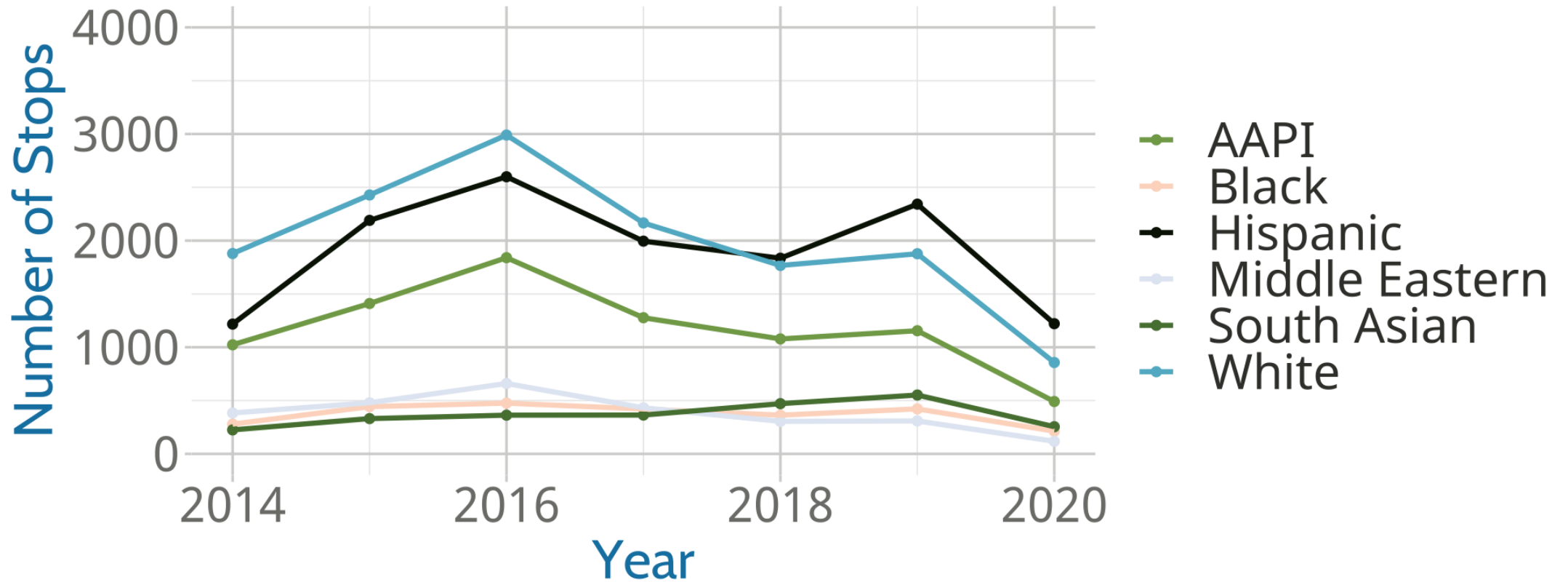
- Tests for discrimination consider questions of bias, not questions of disparities.
 - Disparities refer to outcomes that differ by race or ethnicity.
 - Bias refers to a difference in behavior attributable to another person's race or ethnicity.
- Benchmark Test (Descriptive test of disparities)
 - Motorists are compared in frequency which they experience stops, scaled for amount of contact expected
- Veil of Darkness Test (Test of bias)
 - Uses daylight savings to test whether motorists of different races are stopped more or less when police officers are less likely to identify the race of the driver.
- Outcome Test (Test of bias)
 - Motorists are compared based on the rate at which contraband is discovered conditional on a search being made
- Threshold Test (Test of bias)
 - Motorists are compared based on modeled search thresholds for initiating a search

Summarizing Traffic Stops

Total Traffic Stops Per Year conducted by MVPD

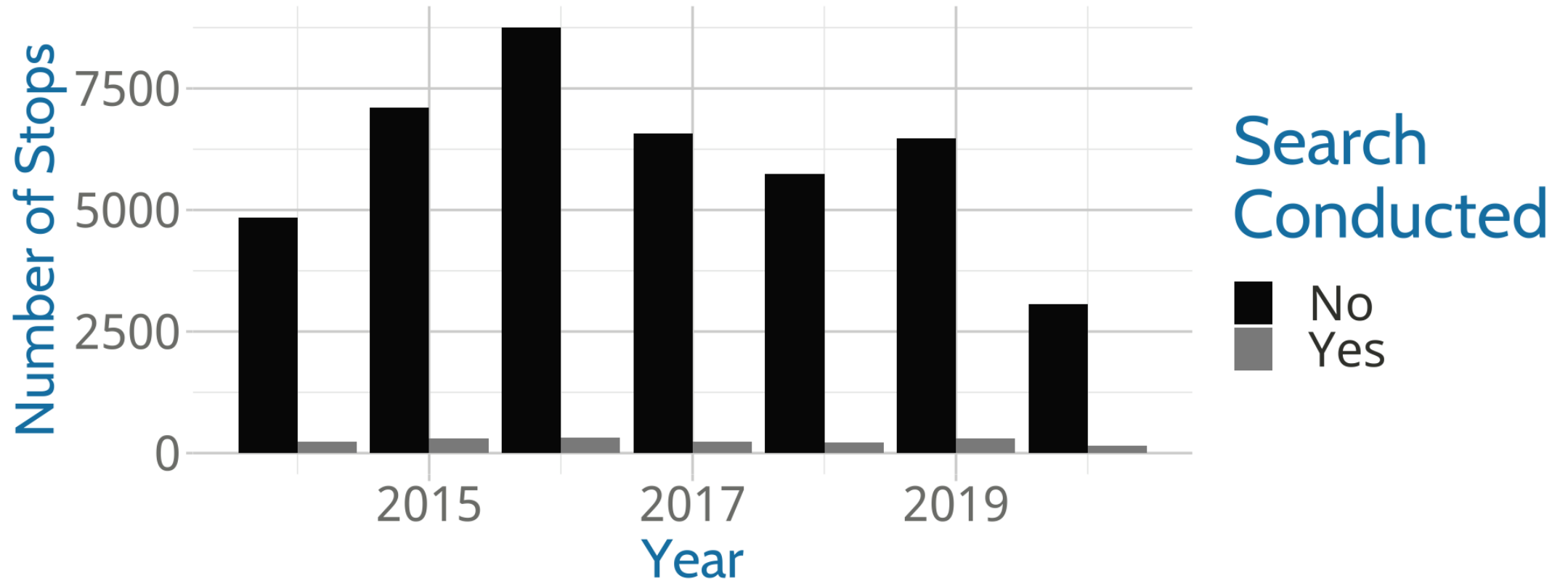


Total Traffic Stops Per Year by Perceived Race of Motorist

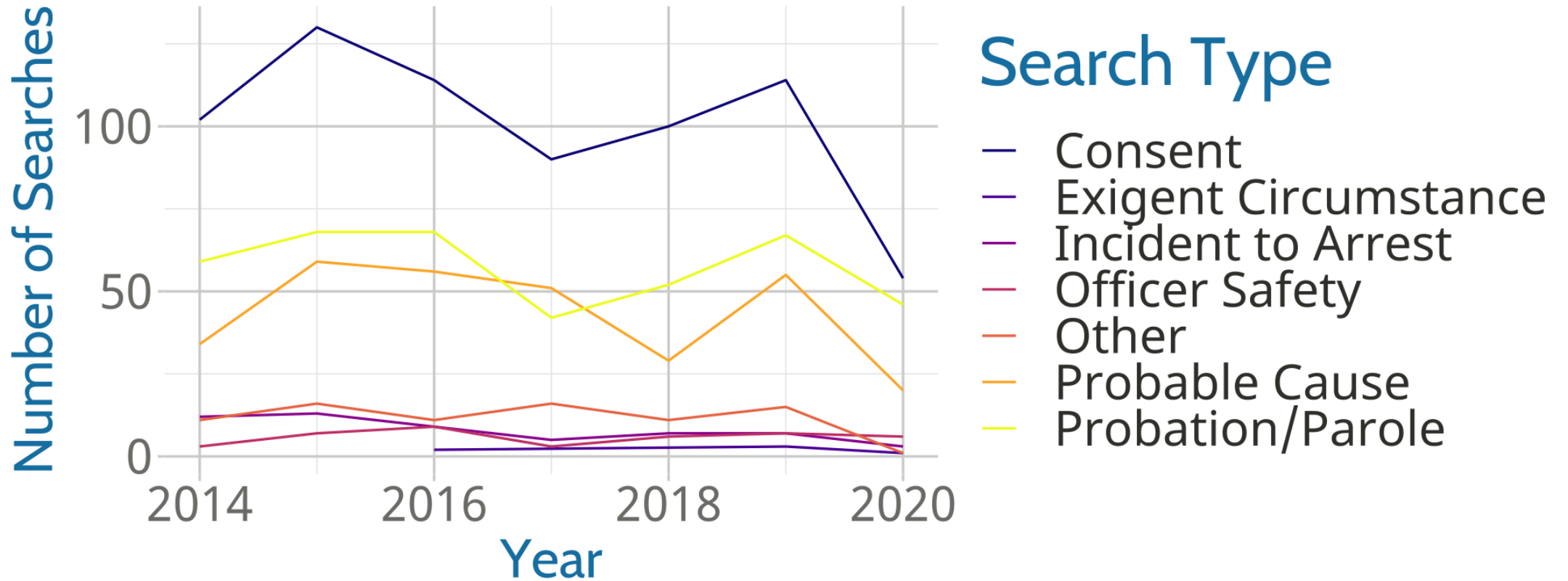


• Racial classifications follow Racial Identity and Profiling Act reporting designations

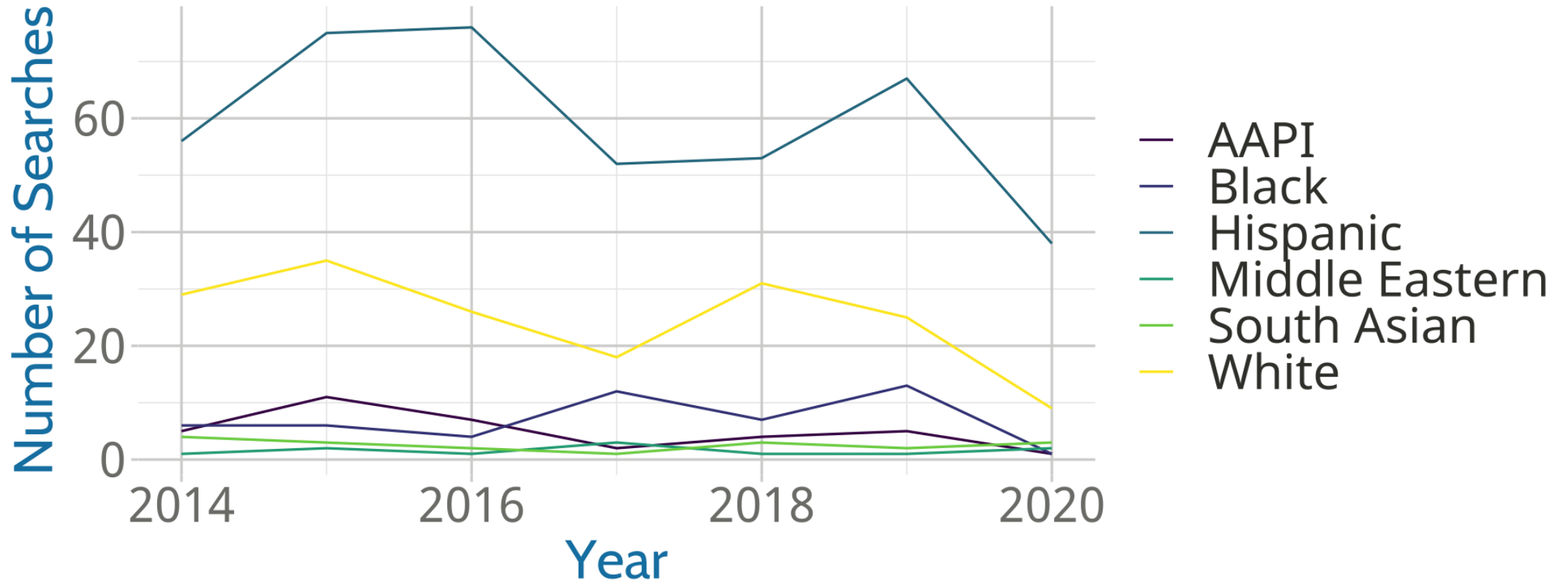
The Vast Majority of stops by MVPD do not result in a Search



Consent Searches are the most common type of Search Conducted

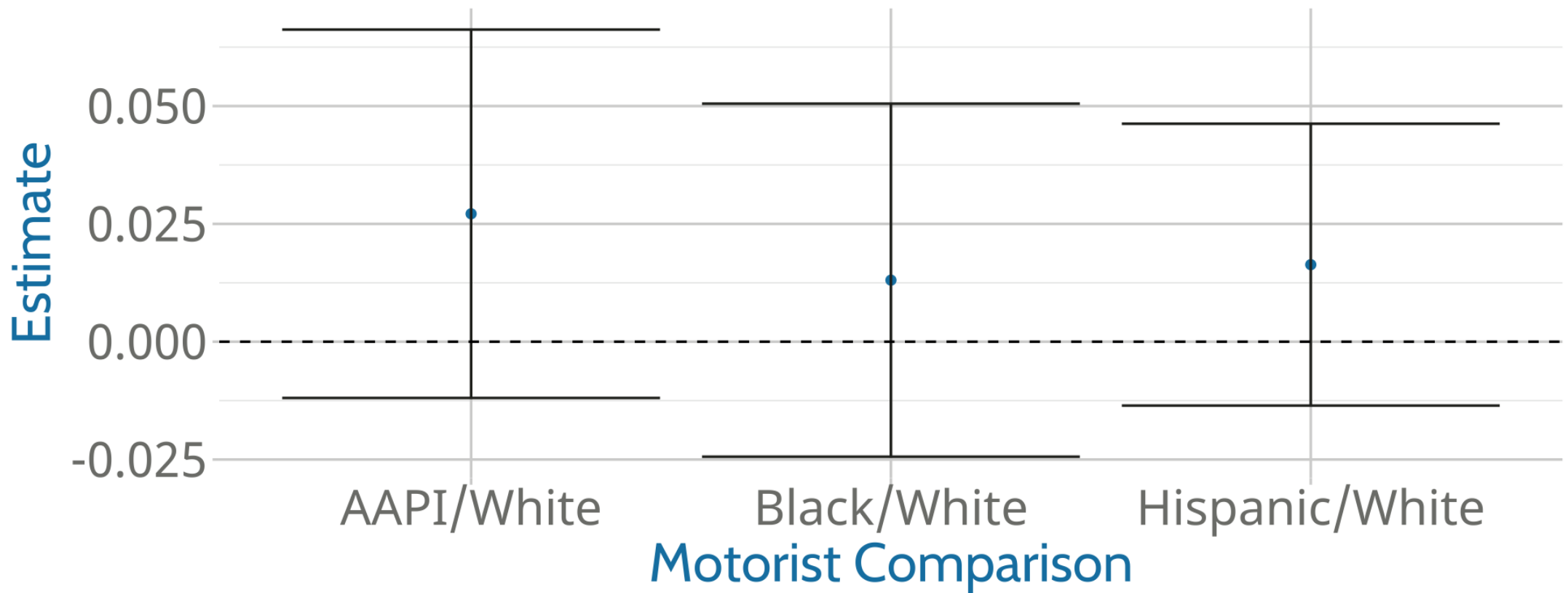


Perceived Hispanic and White Motorists make up the majority of Consent searches



- There are relatively few searches in a given year. The chart excludes categories with one or fewer searches.

Baseline Veil of Darkness Tests do not provide evidence of Bias



- For a statistically significant result, the bars would not include zero.

Next Steps

- Finish implementing the threshold test for MVPD data
- Complete inventory of data sanitization checks
- Further validate and complete robustness checks for tests of racial bias
 - These include following the academic literature on robustness tests for the Veil of Darkness test as well as the outcome test.

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