The Murder of George Floyd and the Behavior of the Minneapolis Police Department

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Abstract
The 2020 murder of George Floyd in Minneapolis, Minnesota by Minneapolis Police Department (MPD) officer Derek Chauvin resulted in massive anti-police protests and a decline in public support for the police, as well as formal investigations into the conduct of the MPD. In response to intensified criticism and scrutiny, police officers sometimes "de-police," or reduce effort on the job. Since policing behavior and outcomes are not race neutral, de-policing behavior may be racially specific as well. In this paper, I estimate the effect of the murder of George Floyd on MPD officers' behavior. Using a public dataset of more than 200,000 police stops over eight years, I determine whether, and to what extent, the murder caused MPD officers to de-police, and whether the de-policing behavior was race specific. The murder significantly reduced the number of stops made by the MPD, and caused officers to take less initiative in making stops. Additionally, Floyd's murder lowered the probability that a given stopped person's race was recorded as Black in the public data by 9.9 percentage points, and increased the probability that the race was recorded as "unknown" by 11 percentage points. Obfuscation of race in policing data is an unintended consequence of pressure to reform and improve police officer behavior, and an important component of de-policing.

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Introduction

In 2020 in Minneapolis, the murder of George Floyd, an unarmed Black man, by then-Minneapolis Police Department (MPD) officer Derek Chauvin, sparked the largest protests against police violence and racial inequality since the Civil Rights Movement of the 1960s. Anti-police sentiment spread throughout the political left. A movement to "defund the police" gained momentum in Minneapolis, and the Minneapolis City Council attempted to "end" and "dismantle" the MPD (Slotkin & Florido, 2020). Protests and anti-police speech and attitudes were perhaps experienced most intensely in Minneapolis, where the murder occurred. Three days after the murder, the MPD's 3rd Precinct headquarters were torched by protesters and subsequently abandoned by the MPD (Woltman, 2020). These events, which some officers alleged caused PTSD (Bailey, 2020), and the accompanying anti-police sentiment, may have not only affected MPD officers' psyches, but necessitated a strategic change in on-the-job behavior to avoid discipline, sanctions, or other negative attention.

This paper investigates whether and how the murder of George Floyd, and its aftermath, affected the on-the-job behavior of Minneapolis Police Department officers. I estimate the effect of the murder on the number of stops made, officer initiation of stops, and the racial composition of people stopped by the police. I find that the murder had a substantial de-policing effect, consistent with previous studies on the murder of George Floyd and de-policing. These results contextualize the paper's findings on race. The murder increased the probability that a given stopped subject's race was recorded as "unknown" in the public data by 11 percentage points. Simultaneously, the murder reduced the probability that a given stopped subject's race was recorded as Black by nearly 10 percentage points.

The obfuscation of race data makes it difficult to estimate the effects of the murder on longstanding racial disparities in policing outcomes, and to determine whether post-murder protests and reforms were effective in reducing racial inequality. Officer suppression of public data on the race of the people they police is an unintended consequence of efforts to eliminate racial discrimination and police violence. Police departments and the government bodies overseeing them should align officer incentives with stakeholder goals for transparent, accurate, and unbiased data collection.

Background

Prior to the murder of George Floyd, MPD officers engaged in policing practices that disparately impacted Black and Native American civilians (Gorsuch & Rho, 2019; Onookome-Okome et al., 2022). After controlling for a stop's location, time of day, season, neighborhood characteristics, cause, and associated problem, MPD officers were significantly more likely to stop, search, and arrest Black and Native American persons than those of other races (Gorsuch & Rho, 2019). There is some explicit evidence of racial profiling of Black individuals by MPD officers using the "veil of darkness" instrument, which exploits exogenous variation in the probability of observing a subject's race due to differences in daylight at the same time of day around daylight saving time (Wexler, 2020). Ritter (2017) uses the same instrument with MPD data from 2002, and finds no evidence of statistical discrimination or taste-based discrimination by officers stopping motorists, but instead evidence of unconscious, automatic bias in stopping and searching Black motorists at higher rates.

In addition to issues with racial disparities in treatment and outcomes, the MPD had issues with officer misconduct. Reviewing data on officer complaints, reporters for the

Minnesota Star Tribune found that only around three percent of complaints resulted in any form of disciplinary action against the officer. There were 16 misconduct complaints made against Derek Chauvin before he murdered George Floyd, none of which resulted in discipline (Bjorhus & Sawyer, 2020).

Floyd's murder in 2020 prompted an investigation of the MPD and City of Minneapolis by the Department of Justice, which was announced in April 2021 (City of Minneapolis, 2023). In 2023, the investigation was concluded and the final report was released. The DOJ's summary of the report states:

[T]he Justice Department finds that the MPD:

- *Uses excessive force, including unjustified deadly force and unreasonable use of tasers;*
- *Unlawfully discriminates against Black people and Native American people in its enforcement activities, including the use of force following stops;*
- *Violates the rights of people engaged in protected speech; and*
- *Along with the city, discriminates against people with behavioral health disabilities when responding to calls for assistance.*

Following the investigation, the MPD in June 2023 signed an agreement with the DOJ, pledging to negotiate together to eventually "reach a comprehensive settlement in the form of a consent decree…to ensure that the City and MPD comply with the Constitution and laws of the United States" (DOJ, 2023b). The federal consent decree, outlining legally binding reforms to the MPD's policing practices, and accountability measures, was pushed into legal limbo by the Trump Administration in 2025. In June 2025, Minneapolis Mayor Jacob Frey signed an

executive order requiring the City of Minneapolis to implement the reforms prescribed in the federal consent decree.

De-policing is an empirically documented (Adams, Mourtgos, & Nix, 2021; Campbell, 2023; Cheng & Long, 2022; Mikdash & Zaiour, 2022; Premkumar, 2019; Zhang, Zhao, & Lin, 2024) behavioral phenomenon in which police officers reduce effort on the job in response to external criticism of the police. Such criticism tends to be triggered by high-profile killings of civilians by police officers. In the aftermath of police killings, protests, audits, investigations, and media coverage are theorized to make police officers feel devalued and unappreciated by the communities they work within (Chanin & Sheats, 2017). De-policing has been framed as dissent shirking (Chanin & Sheats, 2017), a method by which police officers protest their treatment while engaging in the minimum amount of work necessary to remain employed. At the intensive margin, de-policing is usually measured as a reduction in arrests or the crime clearance rate. At the extensive margin, de-policing manifests as officer resignation, which increased dramatically nationwide following the murder of George Floyd (Adams, Mourtgos, & Nix, 2021).

De-policing may not only be an emotion-driven response to stress and criticism, but also a rational behavioral response to changes in incentives caused by investigations, audits, reforms, and higher levels of scrutiny placed on officers' work. Depending on the types of behaviors discouraged and sanctioned by stakeholders external and internal to a police department, officers may be incentivized to not only reduce effort, but to take other steps to alter perceptions of their work. Considering pre-existing racial disparities in policing and racial discrimination by the MPD, (Ritter, 2017; Wexler, 2020; Gorsuch & Rho, 2019), any de-policing response by the MPD following the murder may also be expected to be racially unequal. Officers may perceive

an increased risk of sanctions associated with policing Black civilians specifically, and adjust their policing behavior accordingly.

Data

The primary data source is a publicly available dataset provided by the Minneapolis Police Department on every civilian-officer interaction ("stop") between January 2017 and March 2025 (as of December 2025, more recent data have not been released). The data can be accessed at Open Minneapolis (opendata.minneapolismn.gov). For each stop, information is available on the stop's latitude and longitude, date and time, the police precinct in which the stop took place, the problem associated with the stop (e.g., curfew violation), the reason a stop was made (e.g., traffic control), characteristics of the subject (e.g., race and gender), and the outcome of the stop (e.g., the subject was gone when the officer arrived on scene, the subject was arrested). No information about the officer making the stop, such as an anonymized officer identifier, is available. Data on each stop are reported by the acting officer. The data include information on over 200,000 stops that occurred between January 1, 2017 and March 10, 2025 within the city of Minneapolis.

The dataset includes information on stops of persons and vehicles, as well as attempted stops, and "on-site" interactions between officers and civilians. In attempted stops, an officer attempts to stop, speak to, or locate a subject, but is unable to. This is clear in the fact that about 19 percent of stops in the dataset have a "call disposition" recorded as "unable to locate" or "gone on arrival." In on-site interactions, an officer records that they are unable to be dispatched to another location because they were interacting with someone, possibly not for the purpose of addressing suspected criminal activity. These innocuous interactions are recorded as "suspicious

person" stops and are not distinguishable from actual policing stops (Gorsuch & Rho, 2019). I therefore include them in the analysis.

Race is classified inconsistently in the police stops data. From the beginning of the dataset (January 1, 2017) to the end of August, 2023, the following race categories were included:

- Asian
- Black
- East African
- Latino
- Native American
- White
- Other
- Unknown

In September 2023, three months after the DOJ's report was released, and the agreement between the MPD and DOJ was signed, the race categories available in the dataset changed. The "unknown" category was removed, and a new category, "no contact," was introduced. The "other" category, and the actual race categories, remained available. This change was almost certainly made in response to the DOJ report, which noted a decline in the completeness of data on race and gender following George Floyd's murder (DOJ, 2023a). I use the race variable and categories as they are reported in the public data, with one exception. I combine the "East African" and "Black" categories into a single "Black" category.

The "unknown" race category is used when officers cannot discern the race of the individual they have stopped or attempted to stop. For instance, an officer may be dispatched to a location to apprehend an individual who is gone at the time of the officer's arrival. The officer records this attempted "stop" and, since she does not know the race of the person she attempted to locate, records the race as "unknown." In about 55 percent of stops where the race was

classified as “unknown,” the data indicate that the officer was unable to locate the subject or the subject was gone on arrival.

Three additional data sources are incorporated into the study. First, I use historical daily weather data from the Minnesota Department of Natural Resources, which report maximum and minimum temperature, inches of precipitation, and inches of snow. I use these data to control for weather conditions. Second, I use administrative data from the Minneapolis Police Department on the number of employed, sworn, active-duty officers. I use these data to control for number of officers in my analysis. These data were obtained from the MPD directly via a public data request. Third, I use block group-level summary data from the 2021 5-year American Community Survey from IPUMS NHGIS (Schroeder et al, 2025). Block groups, which usually contain between 600 and 3,000 residents, are the second-smallest type of census statistical area identified by the Census Bureau in summary data (U.S. Census Bureau, 2022). This dataset, along with the latitude and longitude information provided for each stop in the MPD dataset, allows me to place each police stop within a block group and determine the population characteristics of the neighborhood where the stop took place.

Descriptive statistics on the stops made by the MPD over the studied time period are presented in Table 1 below. Table 1 displays statistics by year on the number of stops made per week, the share of stops that were officer initiated, the racial composition and gender of the civilians who were stopped, the reasons and problems associated with stops, and the geographic locations of stops.

Table 1. Stops of civilians made by MPD officers, January 2017 - March 2025

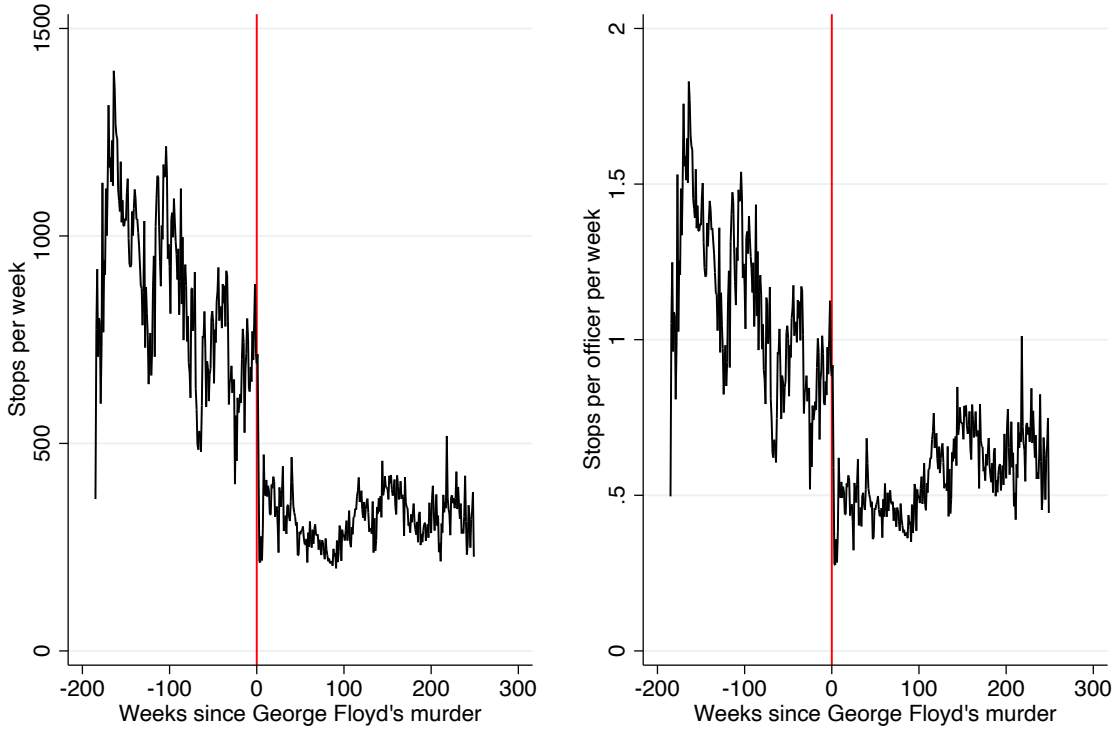
	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Stops per week	1062	948	727	568	292	306	360	336	307	714
Per officer	1.39	1.21	0.93	0.73	0.47	0.55	0.68	0.66	0.60	0.98
Stops per day	157	140	108	86	43	45	53	50	47	106
Per officer	0.21	0.18	0.14	0.11	0.07	0.08	0.10	0.10	0.09	0.14
Officer-initiated	0.82	0.76	0.68	0.60	0.42	0.45	0.53	0.54	0.67	0.67
Subject race										
White	0.26	0.25	0.23	0.17	0.14	0.12	0.12	0.16	0.15	0.21
Black	0.40	0.41	0.41	0.37	0.24	0.26	0.33	0.33	0.35	0.37
Native American	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03
Asian	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Latinx	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.06	0.08	0.04
Other	0.03	0.03	0.02	0.01	0.01	0.01	0.02	0.15	0.03	0.04
Unknown	0.21	0.23	0.27	0.38	0.55	0.54	0.32	0.00	0.00	0.31
No contact							0.05	0.27	0.36	0.24
Reason										
Citizen/911	0.28	0.28	0.33	0.43	0.62	0.60	0.52	0.51	0.37	0.39
Equip. violation	0.16	0.18	0.15	0.11	0.05	0.04	0.07	0.05	0.07	0.12
Investigative	0.24	0.21	0.20	0.20	0.16	0.19	0.20	0.19	0.22	0.21
Moving violation	0.32	0.33	0.32	0.25	0.17	0.17	0.22	0.25	0.33	0.28
Problem										
Attempt pick-up	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02
Curfew violations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Suspicious person	0.28	0.27	0.29	0.27	0.33	0.36	0.27	0.30	0.23	0.29
Suspicious vehicle	0.20	0.20	0.20	0.32	0.43	0.40	0.41	0.35	0.31	0.27
Traffic law enforcement	0.49	0.50	0.49	0.39	0.22	0.21	0.31	0.32	0.43	0.42
Truancy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Police precinct										
1	0.15	0.17	0.17	0.16	0.18	0.18	0.19	0.19	0.20	0.17
2	0.18	0.21	0.22	0.18	0.20	0.18	0.14	0.13	0.08	0.20
3	0.19	0.18	0.17	0.20	0.23	0.24	0.24	0.25	0.29	0.19
4	0.24	0.25	0.24	0.30	0.19	0.21	0.23	0.20	0.19	0.24
5	0.24	0.19	0.19	0.16	0.19	0.19	0.19	0.22	0.24	0.19
Black neighborhood	0.27	0.27	0.26	0.28	0.22	0.24	0.25	0.23	0.24	0.26
N	53,306	47,589	36,282	25,715	14,737	15,341	12,721	16,920	2,953	231,420

Data sources: Publicly available data from the Minneapolis Police department on every officer-civilian encounter from January 3, 2017 through March 10, 2025 accessible at opendata.minneapolismn.gov, and block-group level data from the 2021 5-year American Community Survey from IPUMS NHGIS.

Notes: Black neighborhood defined as a block group with a Black population share of at least 42%, the 75th percentile among all Minneapolis block groups.

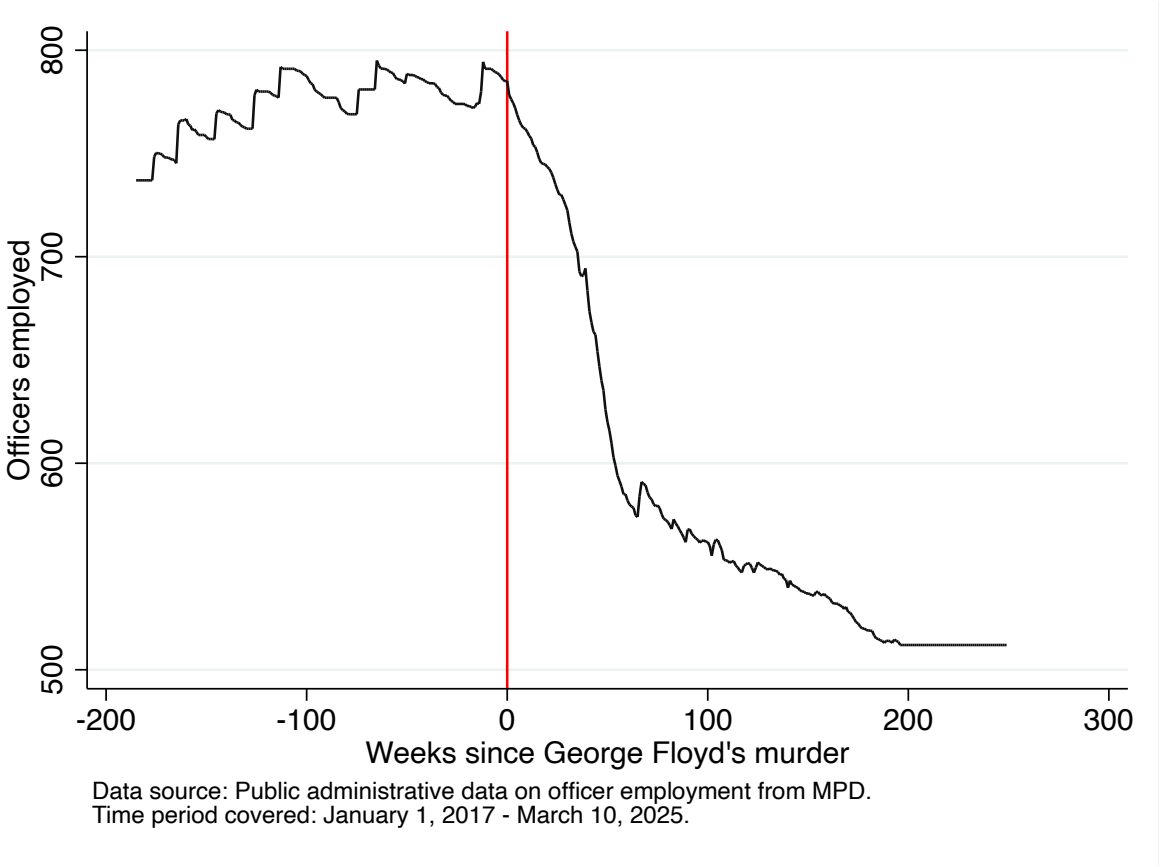
The graphs below display trends over time in several key variables. In each graph, the time variable on the x-axis (measured in weeks) is centered around the date of George Floyd's murder, marked with a red vertical line (week 0). Figure 1 displays the number of stops per week and the number of stops per week per officer over time. Figure 2 plots MPD officer employment by week. Figure 3 displays the number of stops made each week, total and per officer employed. Figures 4 and 5 plot the problems associated with police stops, and figures 6 and 7 plot the associated reasons. Figure 5 displays the stop volume and stop share by the race of the person stopped. Figure 6 displays the stop share by the race of the person stopped, zoomed in on the

Figure 1. Weekly stop counts



Data source: MPD police stops data from opendata.minneapolismn.gov, and public administrative data on officer employment from MPD.
Time period covered: January 1, 2017 - March 10, 2025.

Figure 2. Number of MPD officers

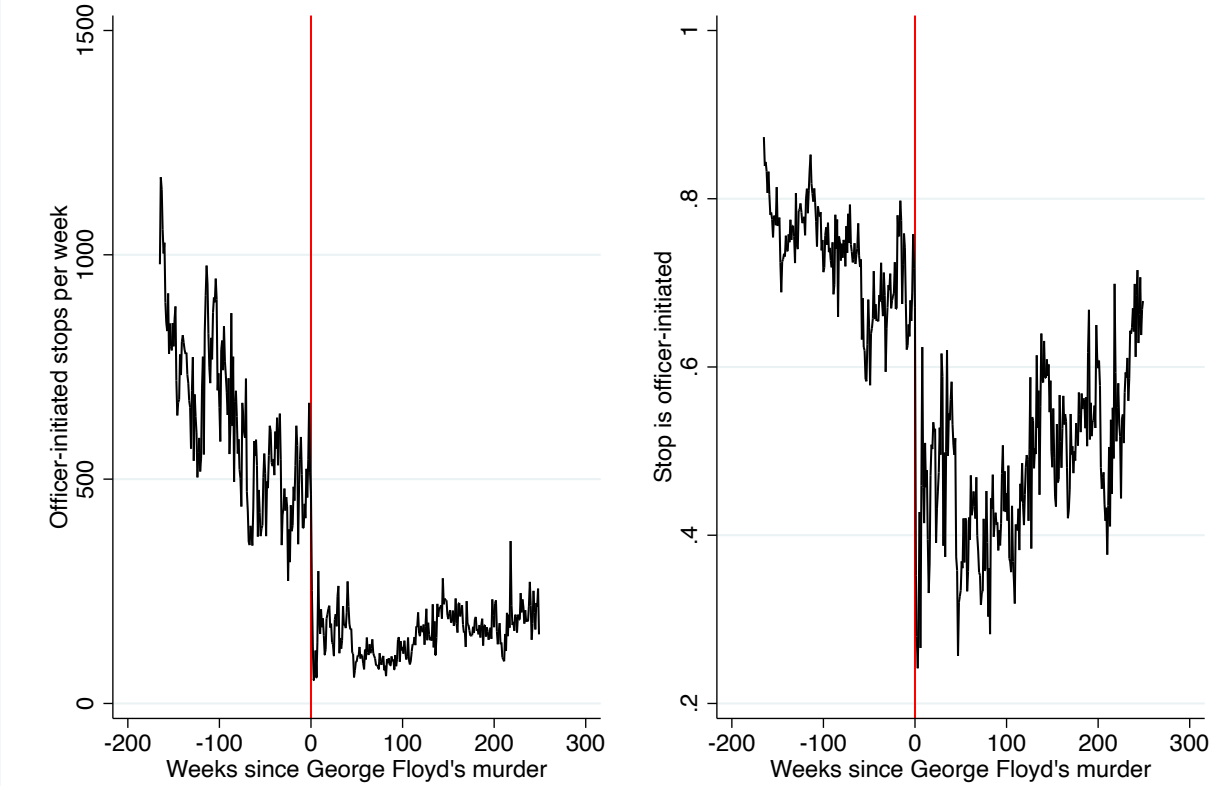


period of time surrounding the MPD's abandonment of the "unknown" race category and the introduction of the "no contact" race category, which occurred in September 2023.

The raw weekly stop volume, and the weekly stop volume divided by the number of employed officers, both decline over time. They drop sharply immediately the murder. MPD officer employment continues to decline, and has not recovered from the post-murder exodus of officers from the force (see Figure 2 below), reflected in the stagnation of total weekly stops in the post-murder period. Per-officer stops, however, have crept up.

Officer employment in the MPD plummeted following the murder of George Floyd. More than 780 officers were employed in the four weeks prior to the murder. By 54 weeks after the murder, the MPD employed fewer than 600 officers. Administrative data provided by the

Figure 3. Officer-initiated stops



Data source: MPD police stops data from opendata.minneapolismn.gov.
Time period covered: March 19, 2017 - March 10, 2025.

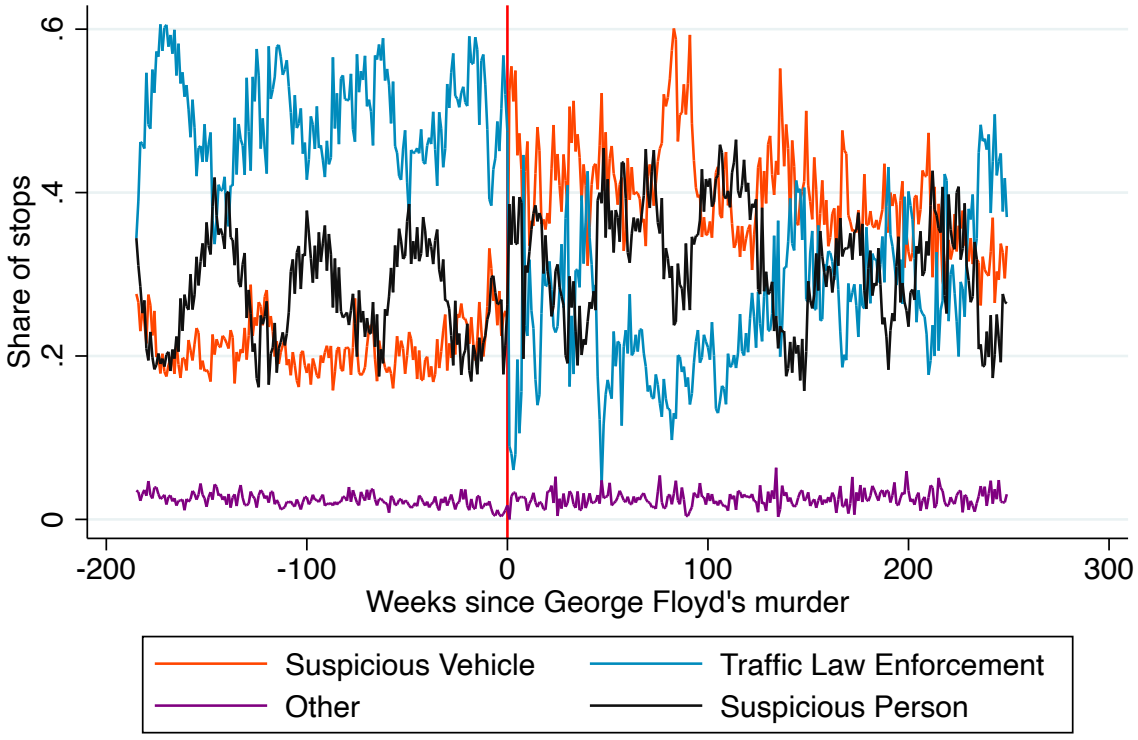
MPD show that the same group of 512 officers were employed at all times between January 1 and March 10, 2025.

The number of officer-initiated stops and the share of officer-initiated stops (officer-initiated stops over all stops) were both declining in the pre-murder period. Both measures of officer-initiated stops dropped sharply immediately following the murder. In the post-murder period, the number of officer-initiated stops per week has remained relatively stable, while the share has increased.

Of the six problems associated with stops, the three least common collectively make up zero to 6.3 percent of all stops in a given week, and are therefore aggregated into the "other"

category. Problems followed cyclical patterns in the pre-murder period. In particular, traffic law enforcement stops and suspicious person stops were moved countercyclically with each other. After the murder, the share of suspicious vehicle stops increased, while the share of traffic law enforcement stops declined. While the once-regular cycle of suspicious person stops was interrupted immediately around the murder date, there is no obvious level change correlated with the murder. The share of stops associated with "other" problems remained stable over time.

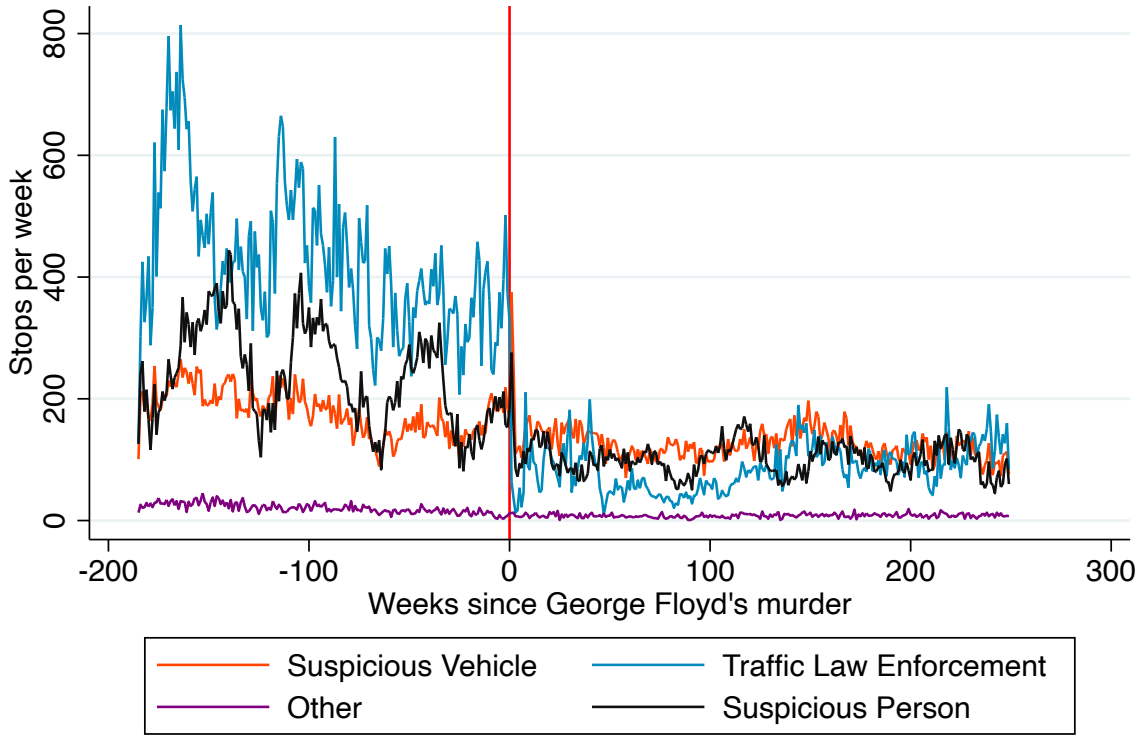
Figure 4. Problems associated with stops: Shares



Data source: MPD police stops data from opendata.minneapolismn.gov.
Time period covered: January 1, 2017 - March 10, 2025.
'Other' includes attempt pick-up, truancy, and curfew violation.

Figure 5 shows that the number of traffic law enforcement stops declined considerably following the murder and remained low throughout the post-murder period. The number of suspicious person stops per week also declined after the murder and maintained a stable level,

Figure 5. Problems associated with stops: Weekly counts



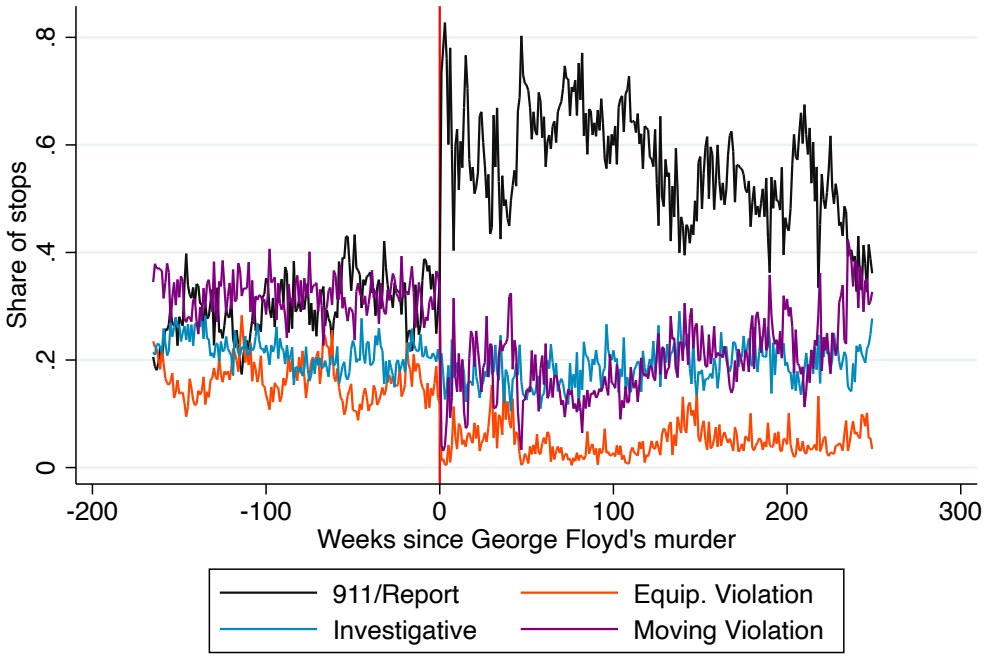
Data source: MPD police stops data from opendata.minneapolismn.gov.
Time period covered: January 1, 2017 - March 10, 2025.
'Other' includes attempt pick-up, truancy, and curfew violation.

exhibiting some cyclicality, as in the pre-murder period, but within a lower range. The weekly number of suspicious vehicle stops was relatively steady over the time period studied.

Each police stop has a reason associated with it in the dataset: 911 call/citizen report, equipment violation, investigative, or moving violation. The share of stops attributed to 911 calls and citizen reports was around 30 percent in the pre-murder period, and then increased sharply after the murder. Equipment violation stops became relatively less common, as did moving violation stops. The share of stops that were investigative remained stable over time.

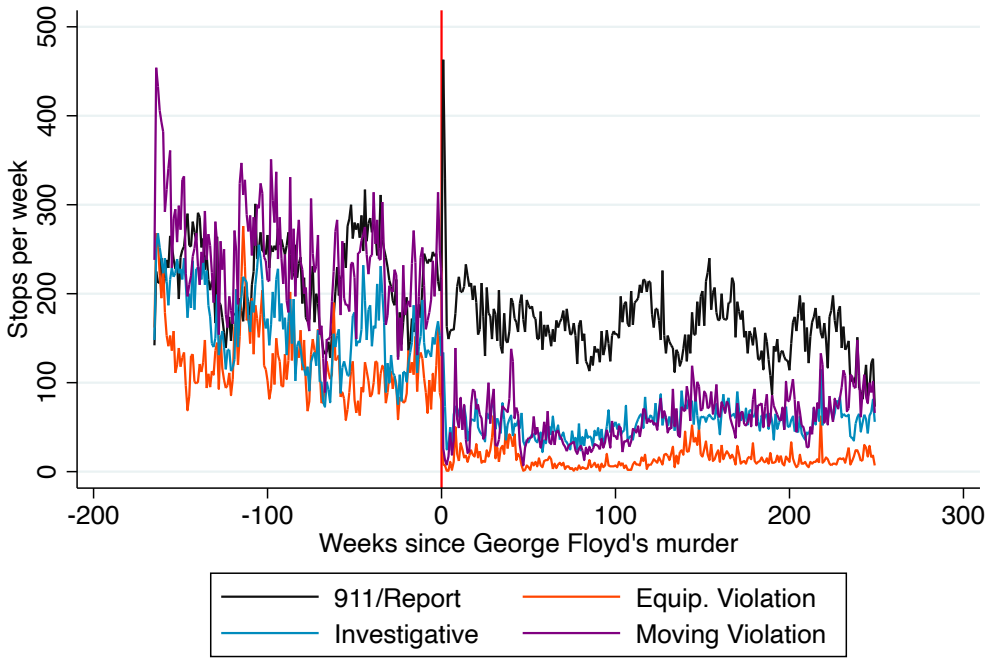
The number of stops associated with each reason also declined markedly after the murder, with the exception of stops associated with 911 calls/citizen reports, which gradually declined over the time period studied, after spiking sharply immediately following the murder.

Figure 7. Reasons associated with stops: Shares



Data source: MPD police stops data from opendata.minneapolismn.gov.
Time period covered: January 1, 2017 - March 10, 2025.

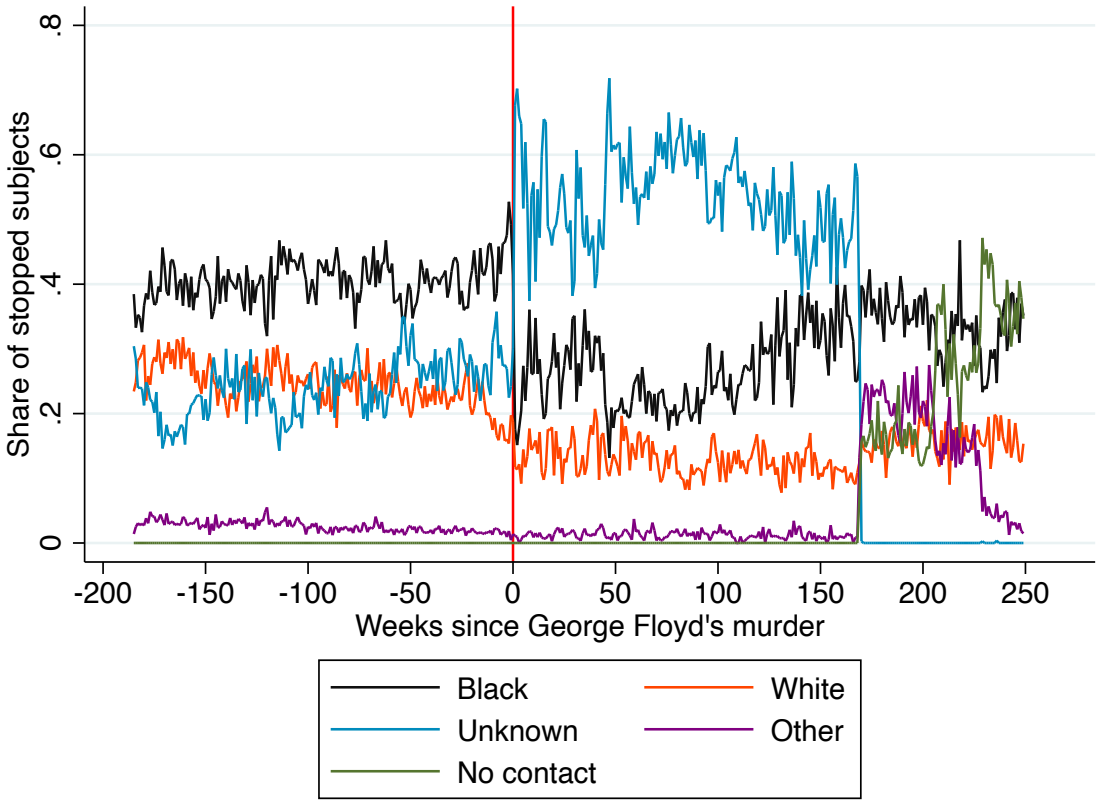
Figure 6. Reasons associated with stops: Weekly counts



Data source: MPD police stops data from opendata.minneapolismn.gov.
Time period covered: January 1, 2017 - March 10, 2025.

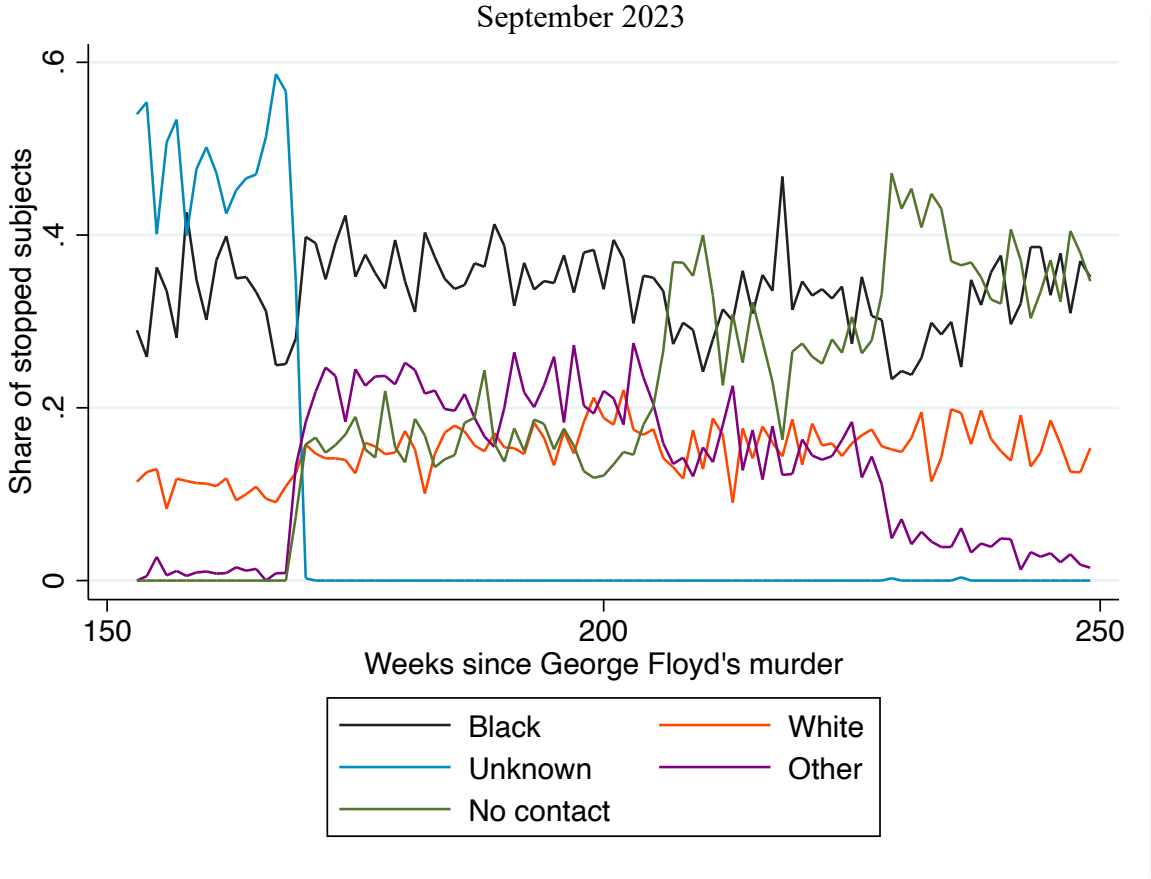
The racial composition of people stopped by the MPD was fairly stable from 2017 until the murder of George Floyd. Roughly 40 percent of stops were of Black civilians; about one fourth were of White civilians; and about one fifth were of people whose race was recorded as "unknown." A small share of stops were of Latinx, Native American, and Asian civilians, which

Figure 8. Racial composition of stopped persons



are not displayed on this graph. Following the murder of George Floyd, Black and White civilians made up a smaller share of all stops by the MPD. The "unknown" race category surged relative to the other race categories. The "other" race category was used rarely by officers until

Figure 9. Racial composition of stopped persons around category change in September 2023



September 2023 (170 weeks after the murder), when the "unknown" category became unavailable. Simultaneously, a new race category, called "no contact," was introduced.

Zooming in on these changes in Figure 9, it is apparent that under the new classification scheme, officers classified as "other" and "no contact" those persons previously classified as "unknown" race. The shares of Black and White stops did not change markedly after the change in data reporting. There is no clear evidence of abuse of the "no contact" category by officers; 41 percent of "no contact" stops were recorded as "gone on arrival" or "unable to locate." Officers reported that they conducted person searches (as opposed to vehicle searches) in less than half a percent of "no contact" stops, and arrested less than a quarter of a percent of individuals categorized as "no contact."

Figure 10 shows that the number of stops of individuals categorized as Black or White by officers declined sharply after the murder of George Floyd, and the variation in the weekly number of these stops also declined. The number of stops of people of "unknown" race remained more stable throughout the entire time period studied, at about 100 to 200 each week.

Figure 10. Number of stops by race

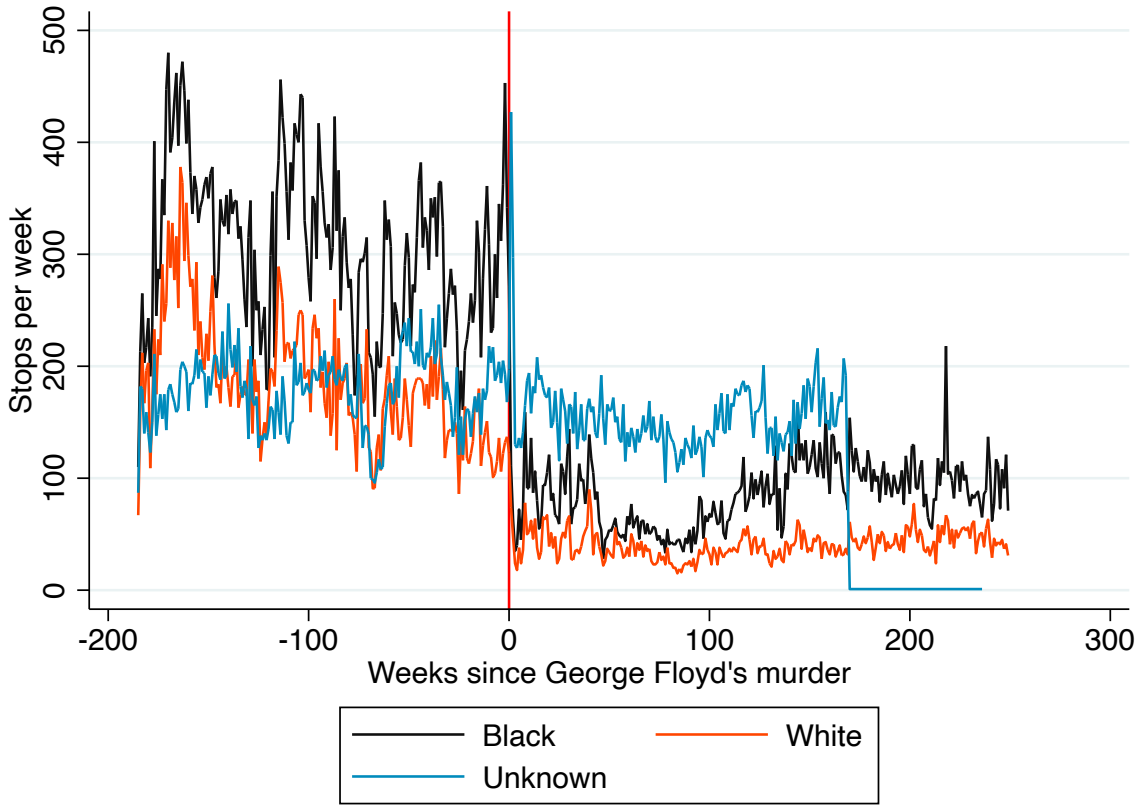
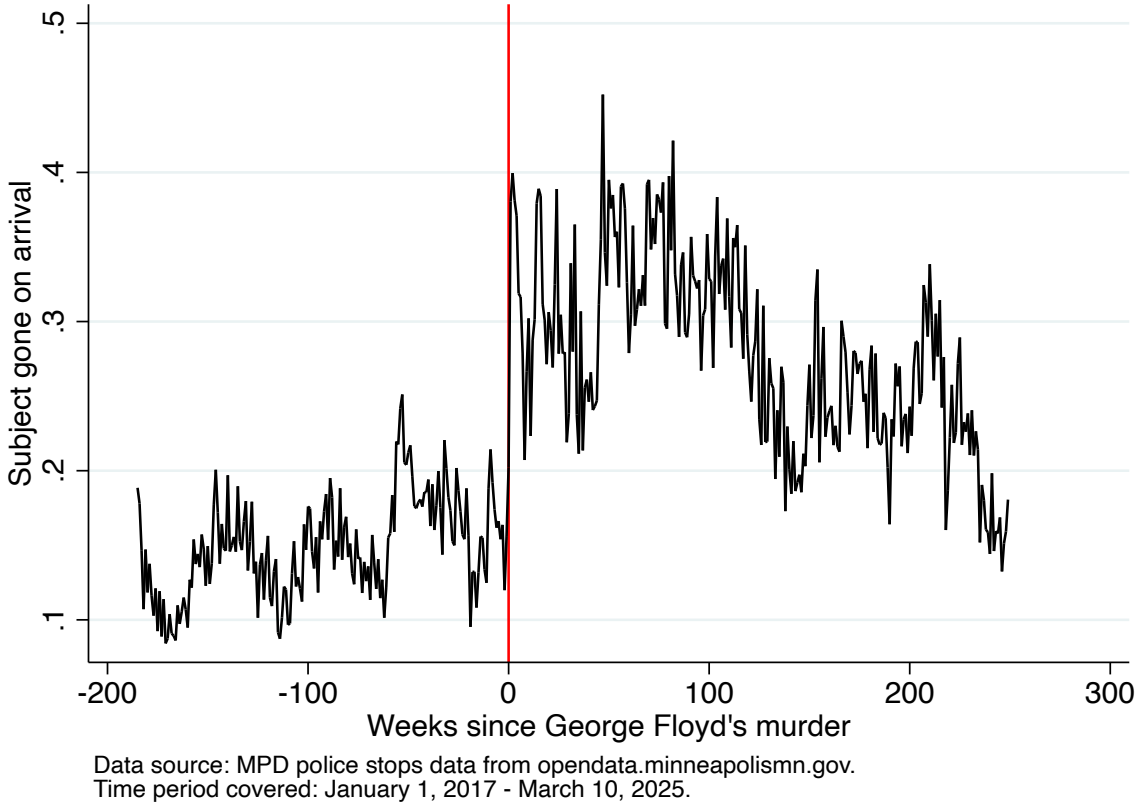


Figure 11 displays the share of stops where the subject was recorded as "gone on arrival" or "unable to locate." This share increased substantially after the murder of George Floyd and then declined over time, returning to pre-murder levels after several years.

Figure 11. Subject was gone on arrival



Methods

I employ an interrupted time series (ITS) design to the effect of the murder of George Floyd on the dependent variables. Given that there is no appropriate counterfactual group for the MPD, since all police departments in the United States were affected in some way by George Floyd's murder at roughly the same time, I use a single-group ITS design where the group is the MPD. This quasi-experimental design treats the MPD's behavior prior to the murder as the counterfactual. I assume that the treatment—the murder of George Floyd—is introduced all at once on the date of the murder, May 25, 2020, and that the treatment has an immediate impact. I also assume that the post-murder period (May 26, 2020 through March 10, 2025) would be sufficiently similar to the pre-murder period (January 1, 2017 through May 24, 2020) in absence

of the murder such that the MPD's behavior in the pre-treatment period can be used to estimate their behavior in the post-treatment period in absence of treatment.

An additional identifying assumption is that the murder occurred at a random point in time, that is, the timing of the treatment is exogenous to the model. In other words, the timing of the murder is not correlated with any variables that are also correlated with the outcomes under study. I assume that Chauvin and the other officers convicted of crimes in connection with murder acted as individuals, and that their behavior was not related to any trend in crime, the behavior of other MPD officers, the political environment, or other factors that would be expected to be correlated with the MPD's post-murder behavior.

I estimate the effects of the murder on officer productivity, initiative, and effort on the job and on the racial composition of subjects policed by MPD officers. Because the MPD stops data are stop-level microdata, and the goal is to model a time series process, I estimate the interrupted time series model in two ways:

1. Stop-level dependent variables aggregated weekly using a two-stage residualized interrupted time series
2. Week-level dependent variables using a single-stage interrupted time series

The details of two of these specifications are below.

Stop-level dependent variables aggregated weekly

I estimate the effect of the murder on stop-level variables (e.g., the person stopped is Black), controlling for stop-level characteristics (e.g., the stop occurred in the 16^{th} hour of the day). I use a two-stage residualized ITS design to aggregate the estimates to the week level. This is my

preferred model specification, as weekly effects are easily interpreted, and more smooth than daily changes. Crime and policing also follow weekly cycles, and over the course of a week, a broader range of types of criminal activity, stops, and arrests are more likely to occur than over the course of a single day. I display the results of this specification, along with the results for stop volume per officer per week (including by race) in the main body of the paper. These sets of results together provide insight into the absolute behavior change and outcome change (e.g., reductions in stop volume by race) and relative behavior change and outcome change (e.g., reductions in the probabilities that stopped persons are specified races, expressed weekly).

The dependent variables are:

1. Person stopped is Black, White, Asian, Native American, Latinx, "unknown"
2. Stop occurred in a Black neighborhood
3. Stop was officer-initiated

Stage 1

In the first stage, the dependent variable is regressed on stop-level covariates—but not the time series variables—using the estimating equation that follows:

$$Y_i = \alpha + \pi D_i + \rho M_i + \mu H_i + \beta_4 \mathrm{Max}_i + \beta_5 \mathrm{Min}_i + \beta_6 P_i + \beta_7 S_i + \beta_8 \mathrm{GOA}_i + \varepsilon_i$$

α is the y-intercept

Y_i is the dependent variable, measured for stop i

πD_i is a day of the week fixed effect

ρM_i is a calendar month fixed effect

μH_i is an hour of day fixed effect

Max_i is the maximum temperature on the day of stop i

Min_i is the minimum temperature on the day of stop i

P_i is the inches of precipitation on the day of stop i

S_i is the inches of snow on the day of stop i

GOA_i reports that the subject of stop i was gone on arrival or could not be located

ε_i is a mean-zero error term

I estimate the effect of the murder on the race of the stopped person with and without controlling for whether the person was gone when the officer arrived (either "unable to locate" or "gone on arrival" in the original data). Officers cannot ascertain the race of someone they did not see, and estimating the effects with and without this control provide insight into the mechanisms through which the murder affected the racial composition of people stopped by the MPD. As shown in Figure 11 in the previous section, a higher share of subjects were gone when the officer arrived after the murder.

The mean of the residuals is then computed for each week t:

$$\hat{\varepsilon}_i = Y_i - \hat{Y}_i$$

$$\bar{\varepsilon}_t = \frac{1}{N_t} \sum_{i \in t} \hat{\varepsilon}_i$$

Stage 2

In the second stage, the weekly mean of the residuals is regressed on the ITS variables using the estimating equation that follows:

$$\bar{\varepsilon}_t = \delta + \gamma_1 X_t + \zeta_1 W_t + \zeta_2 W_t^2 + \zeta_3 W_t^3 + \zeta_4 W_t^4 + \gamma_2 X_t \cdot W_t + \rho_t$$

δ is the y-intercept.

X_t is a binary variable equal to one if week t is after the murder date.

W_t is a running time variable, measured in weeks, centered at the week of the murder. That is, the variable reports how many weeks prior to or following the murder week t was.

ρ_t is a mean-zero error term.

The running time variable is included up to a quartic term, based on Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). I estimate Newey-West standard errors, which adjust for heteroskedasticity and for autocorrelation of errors (Newey & West, 1986). Errors are assumed to be autocorrelated up to about 30 to 40 lags (weeks) in most cases; the number of lags chosen is based on the results of Cumby-Huizinga general tests for autocorrelation in time series individually for each dependent variable. The standard errors from the first stage do not affect the residuals and therefore do not affect the second-stage estimates.

The coefficient γ_1 can be interpreted as the immediate effect of the murder on the level of the dependent variable, holding constant all covariates from stage 1. The coefficient γ_2 can be interpreted as the effect of the murder on the slope of the dependent variable, again holding constant all covariates from stage 1. The duration of the effect in weeks is computed by dividing $-\gamma_1$ by γ_2. This statistic is displayed in the results tables below, and is omitted if the value is negative (a negative value indicates the effect did not completely disappear by March 10, 2025).

Week-level dependent variables (stop volume)

I estimate the effect of the murder on week-level variables (e.g., the number of stops per officer per week), controlling for week-level covariates (e.g., average daily inches of snow that week). I use a single-stage ITS design. The dependent variables are:

1. Number of stops per week: This captures overall activity and productivity within the department, without accounting for endogenous changes in the number of officers employed.
2. Number of stops per officer per week: This captures per-officer productivity and accounts for endogenous changes in the number of officers employed (see Figure 2 above).
3. Number of stops of Black, White, Asian, Native American, Latinx, and "unknown race" individuals per week.
4. Number of stops of Black, White, Asian, Native American, Latinx, and "unknown race" individuals per officer per week.
5. Number of officer-initiated stops per week.
6. Number of officer-initiated stops per officer per week.

The estimating equation used for this specification is as follows:

$$Y_t = \alpha + \gamma_1 X_t + \zeta_1 W_t + \zeta_2 W_t^2 + \zeta_3 W_t^3 + \zeta_4 W_t^4 + \gamma_2 X_t \cdot W_t + \theta I_t + \beta_1 \text{Max}_t + \beta_2 \text{Min}_t + \beta_3 P_t + \beta_4 S_t + \rho_t$$

Y_t is the dependent variable, measured at the week level

α is the y-intercept

W_t is a running time variable, measured in weeks, centered at the week of the murder. That is, the variable reports how many weeks prior to or following the murder week t was.

θI_t is a fixed effect for the week of the calendar year, e.g., the first seven days of the year make up the first week of the year.

Max_t is the maximum daily temperature averaged over week t

Min_t is the minimum daily temperature averaged over week t

P_t is the daily inches of precipitation averaged over week t

S_t is the daily inches of snow averaged over week t

ρ_t is a mean-zero error term.

The running time variable is included up to a quartic term; this functional form was chosen based on Akaike Information Criterion and Bayesian Information Criterion. I estimate Newey-West standard errors, which adjust for heteroskedasticity and for autocorrelation of errors (Newey & West, 1986). Errors are assumed to be autocorrelated up to about 30 to 40 lags (weeks) in most cases; the number of lags chosen is based on the results of Cumby-Huizinga general tests for autocorrelation in time series individually for each dependent variable.

Results

The results of the interrupted time series analyses are displayed below. Table 2 displays the estimates of the effect of the murder on the number of police stops per week and the number of police stops per officer per week. The murder caused the MPD to make 289 fewer stops per week. Accounting for officer employment, which plummeted following the murder, I find that the murder caused a reduction of 0.38 stops per officer per week. Both effects are significant at the one percent level. The total, non-adjusted effect represents the net impact of the murder on officer employment *and* per-officer productivity. Simultaneously, a large number of officers resigned, and the officers who remained employed were less productive as a result of the murder.

Officer employment remained low throughout the post-murder period, and the net effect of the murder on stops per week did not disappear by March of 2025. The effect of the murder on stops per officer per week also persisted at least through the end of the dataset, and is projected to take about 14 years to return to baseline at the current rate of change. The persistence of this effect is particularly striking, given that the exact group of officers employed by the MPD

changed over time. Figure 12 displays the results from column 2, the effect of the murder on the number of stops per officer per week.

Table 2. Effect of George Floyd murder on police stops per week

	Stops per week	Stops per officer per week
Post-murder	-288.79***	-0.38***
	(38.07)	(0.05)
Weeks since murder (linear)	-1.13	-0.00
	(1.12)	(0.00)
Post-murder × weeks since murder	-1.06	0.00
	(1.91)	(0.00)
Constant	724.56***	0.89***
	(162.01)	(0.20)
N (weeks)	418	418
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	741.88

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Figure 12. Effect of George Floyd murder on stops per officer per week

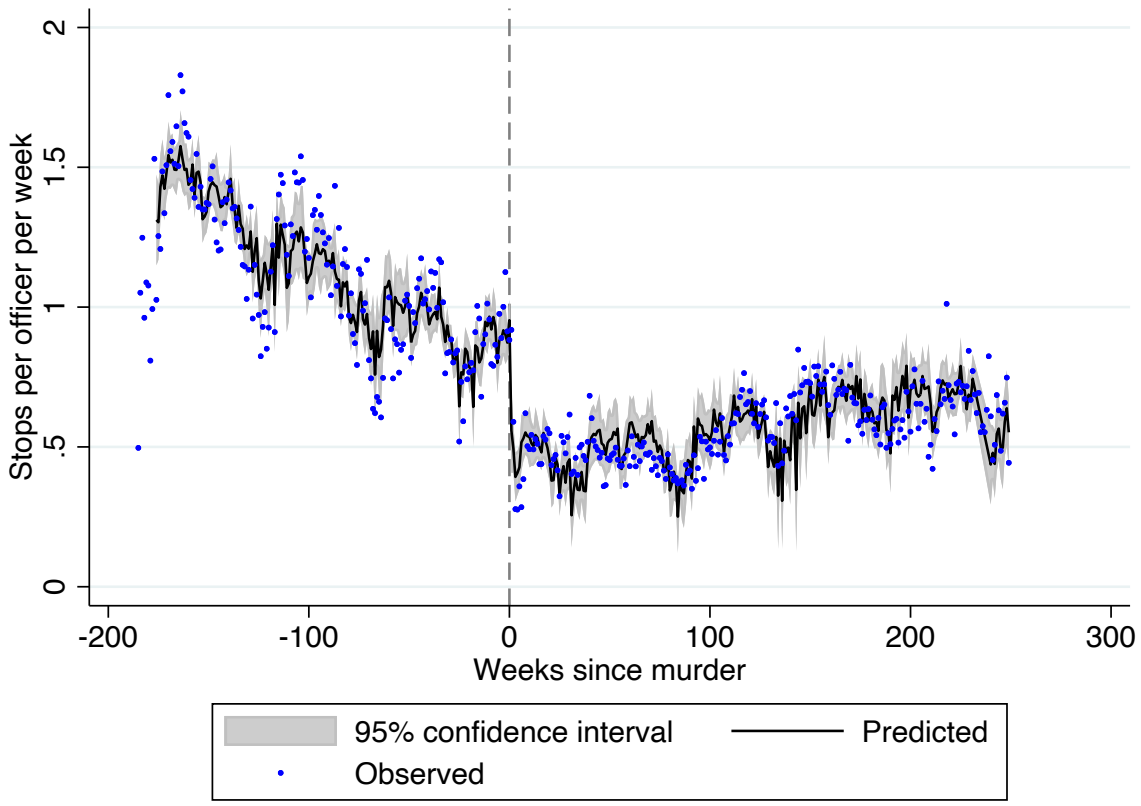


Table 3 displays the estimated effects of the murder on the number of officer-initiated stops made per week, the number of officer-initiated stops made per officer per week, and the probability that a given stop was officer initiated (aggregated at the week level). The murder reduced the probability that a given stop was officer initiated by 20 percentage points. It also caused a reduction of 267 officer-initiated stops per week, or 0.35 officer-initiated stops per officer. Together with the results in Table 2, the effects show that most of the de-policing effect of the murder took the form of officers initiating fewer stops, as opposed to being less likely to respond to citizen reports or 911 calls—where they likely have less discretion. These effects are suggestive of officer hesitancy to act on their own discretion and judgement to stop vehicles or

persons. Civilian reports and 911 calls likely provide some form of security or moral hazard to officers, who can easily justify their engagement in externally-triggered stops. Like the overall effects on the number of police stops made, the effects of the murder on officer-initiated stops persisted through latest available data from March of 2025.

Table 3. Effect of George Floyd murder on officer-initiated stops

	Officer-initiated stops per week	Officer-initiated stops per officer per week	Stop was officer initiated
Post-murder	-267.55***	-0.35***	-0.20***
	(39.36)	(0.05)	(0.03)
Weeks since murder (linear)	-1.15	-0.00	-0.00
	(1.28)	(0.00)	(0.00)
Post-murder × weeks since murder	-0.26	0.00	-0.00
	(1.75)	(0.00)	(0.00)
Constant	585.29***	0.71***	0.05
	(158.96)	(0.20)	(0.08)
N (weeks or stops)	407	407	216,850
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	2562.62	-

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

The remainder of the results tables display the estimates of the effects of the murder on the racial composition of individuals stopped by MPD officers. The first table below, Table 4, displays the effects on stops where the stopped person is classified as "unknown" race. Figure 13 displays the results from column 4, the effect of the murder on the probability that a given subject's race was recorded as "unknown," aggregated to the week level. The murder had large, significant effects on officers' propensity to record an actual race in public police stops data. The

murder increased the probability that a given subject's race was classified by the officer as "unknown" by 19 percentage points. After the murder, a larger share of subjects were gone on arrival; accounting for this, the murder increased the probability that a subject's race was recorded as "unknown" by 11 percentage points. Both effects are large in absolute and relative terms, and statistically significant at the one percent level. Recall that about one fifth of stops had an "unknown" race prior to the murder. The murder had no effect on the volume of stops with the "unknown" race classification.

These effects, and the explanatory power of the "gone on arrival" variable, have two critical implications. First, the murder lowered the probability that officers actually see the persons they are attempting to stop. This effect follows naturally from the reduction in officer initiation of stops discussed earlier. Officer-initiated stops are mechanically less likely to result in "gone on arrival" or "unable to locate" designations compared to stops (or attempted stops) prompted by 911 calls or citizen reports. Second, the murder caused officers to withhold information about the race of the persons they stop in the public police stops data. Both implications provide important context for interpreting the remainder of the results on race.

Table 5 displays the estimates of the effects of the murder on stops of Black civilians. Figure 14 displays the estimates from Table 5 column 4, the effect of the murder on the probability that a given stopped person's race was recorded as Black. The first column shows the effect on the total number of stops where the subject's race is recorded as Black. The murder reduced these stops by 194 for per week. Some of this effect reflects changes in officer employment levels. The murder reduced the number of stops of Black persons made per officer per week by 0.25. The reduction in stops of Black individuals makes up a large portion of the

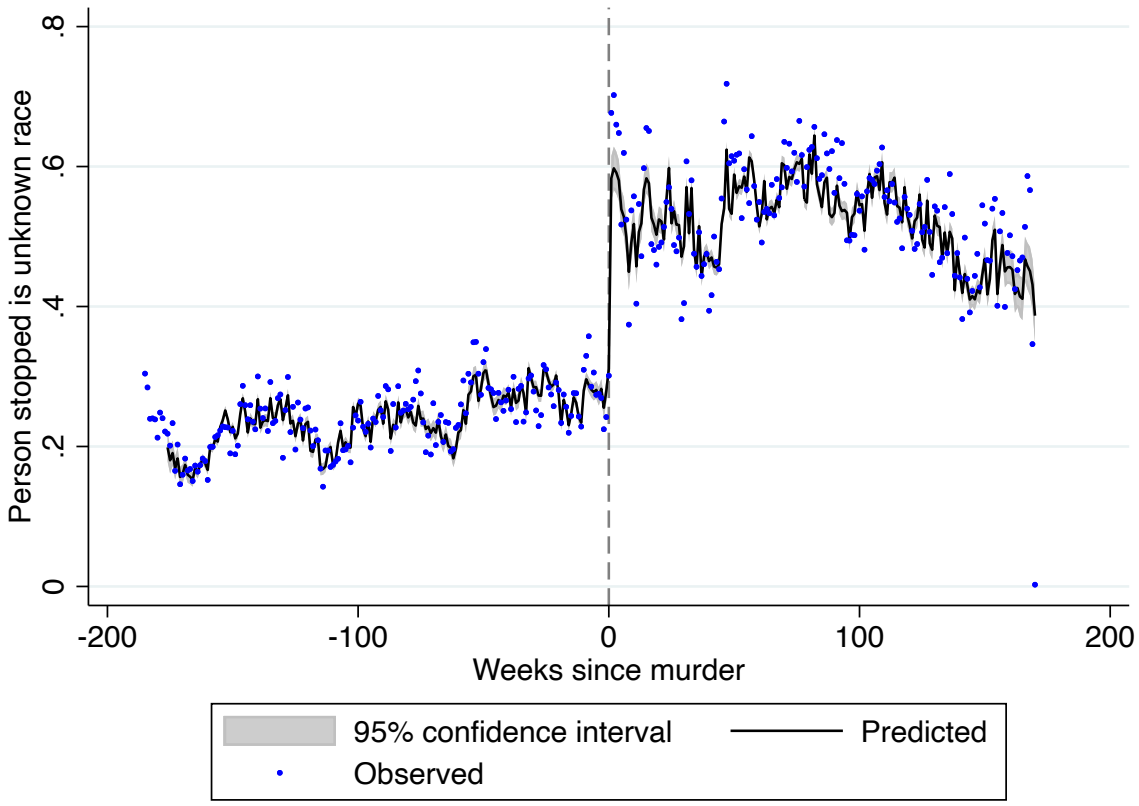
total weekly reduction in police stops: two thirds of the 289 stops, or 73 percent of the 0.35 stops per officer.

Table 4. Effect of George Floyd murder on stops with "unknown" race classification

	Stops with "unknown" race per week	Stops with "unknown" race per officer per week	Race recorded as "unknown"	Race recorded as "unknown"
Post-murder	-19.12	-0.03	0.19***	0.11***
	(14.65)	(0.02)	(0.02)	(0.02)
Weeks since murder (linear)	1.06***	0.00*	0.00	0.00***
	(0.40)	(0.00)	(0.00)	(0.00)
				-0.00
Post-murder × weeks since murder	-2.34***	-0.00*	-0.00	-0.00
	(0.82)	(0.00)	(0.00)	(0.00)
Constant	-14.68	-0.01	-0.20*	-0.24***
	(62.86)	(0.08)	(0.12)	(0.08)
N (weeks or stops)	347	347	183,057	183,057
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	-	1069.35	71.55
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and August 31, 2023, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
The "unknown" race category was eliminated in September 2023; this set of analyses was therefore performed for data through August 31, 2023.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Figure 13. Effect of George Floyd murder on "unknown" race stops



Floyd's murder also affected the *relative* prevalence of stops of Black persons by the MPD. The murder lowered the probability that a given stopped person's race was recorded as Black by 15 percentage points. Some of this effect is attributable to the increase in the probability that a subject was gone or unable to be located when the officer arrived, shown in Figure 11 above. When officers are less likely to initiate stops, and more likely to rely on 911 calls or reports to prompt them to interact with people, it is necessarily true that a subject is more likely to be gone on arrival. Most subjects that were gone on arrival or unable to be located naturally have no actual race recorded in the data. After controlling for whether the subject of a stop was gone on arrival, the murder lowered the probability that a given stopped person was

Black by 9.9 percentage points (rounded to the second decimal place in Table 5). All effects on the number and share of stops of Black civilians persist at least until March 2025.

Table 5. Effect of George Floyd murder on stops of Black persons

	Stops of Black persons per week	Stops of Black persons per officer per week	Person stopped was Black	Person stopped was Black
Post-murder	-194.60***	-0.25***	-0.15***	-0.10***
	(18.95)	(0.02)	(0.02)	(0.01)
Weeks since murder (linear)	0.52	0.00	0.00***	0.00***
	(0.47)	(0.00)	(0.00)	(0.00)
Post-murder × weeks since murder	-1.49*	-0.00*	-0.00***	-0.00***
	(0.79)	(0.00)	(0.00)	(0.00)
Constant	162.11**	0.17*	-0.18***	-0.16***
	(67.68)	(0.09)	(0.05)	(0.03)
N (weeks or stops)	418	418	203,389	203,389
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	-	-	-
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Figure 14. Effect of George Floyd murder on probability that stopped person is Black

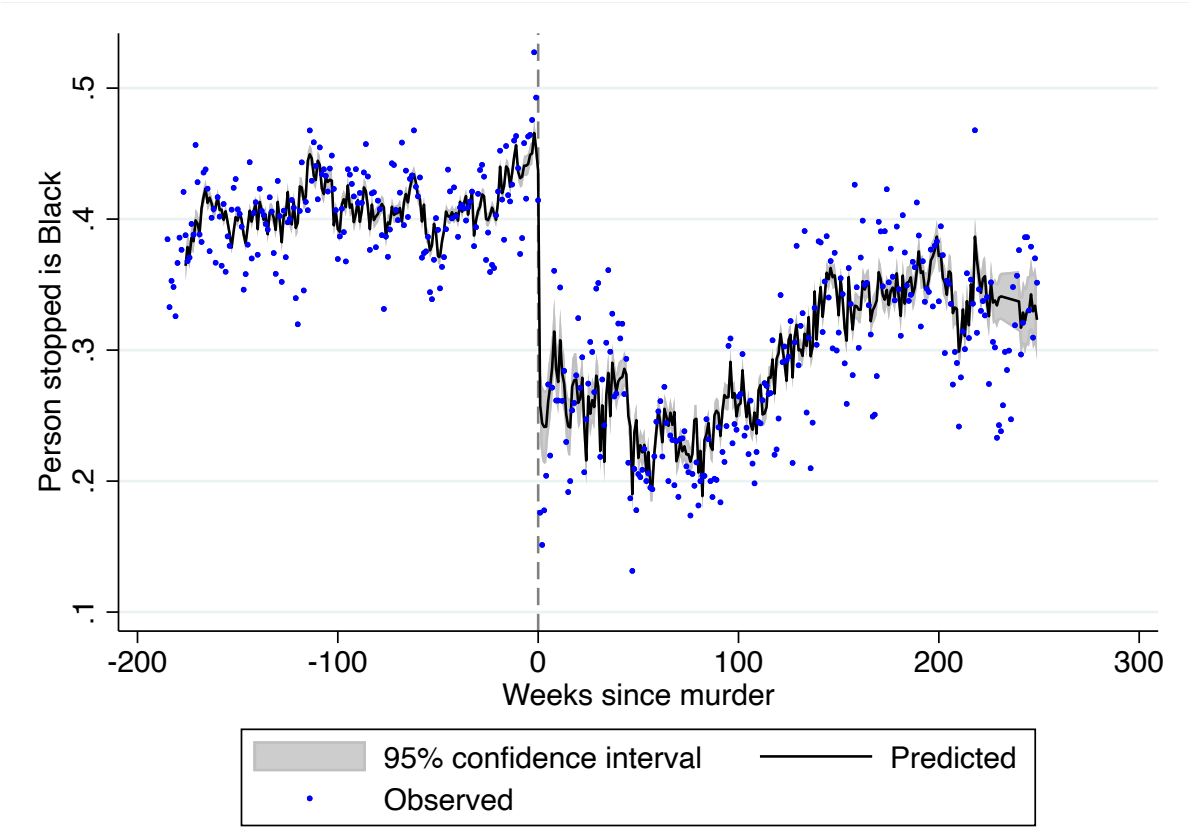


Table 6 displays the estimates of the effects of the murder on stops of White persons. The murder caused a decline of 87 stops of White persons per week, or 0.11 stops of White persons per officer per week. These effects are significant at the one percent level. Relative to other race categories, the murder lowered the probability that a stopped person was White by five percentage points. Any significant effect disappeared after controlling for whether the subject was gone on arrival. Officers may have reduced reporting of the race of White persons they stopped, or they may have actually stopped relatively fewer White people as a result of the

murder. The effects of the murder on stops of White individuals are smaller in both relative and absolute terms than the effects on stops of Black individuals.

Table 6. Effect of George Floyd murder on stops of White persons

	Stops of White persons per week	Stops of White persons per officer per week	Person stopped was White	Person stopped was White
Post-murder	-87.39***	-0.11***	-0.05***	-0.02
	(15.14)	(0.02)	(0.01)	(0.01)
Weeks since murder (linear)	-0.41	-0.00	-0.00	-0.00*
	(0.28)	(0.00)	(0.00)	(0.00)
Post-murder × weeks since murder	0.23	0.00	0.00	0.00
	(0.44)	(0.00)	(0.00)	(0.00)
Constant	174.04***	0.21***	0.09*	0.10*
	(39.58)	(0.05)	(0.05)	(0.05)
N (weeks or stops)	418	408	203,389	203,389
$-\gamma_1/\gamma_2$ (weeks to zero effect)	379.76	288.93	222.42	37.51
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Table 7 displays the estimates of the effects of the murder on stops of Asian persons. Asians make up about five percent of the population of Minneapolis, and 1.2 percent of all police stops in the 2017-2025 data are of Asian individuals. George Floyd's murder had small but significant negative effects on the number of stops of Asian persons and on the probability that a

stopped subject was Asian. But after controlling for whether the subject was gone on arrival, the murder had no significant effect on the share of stopped subjects who were Asian.

Table 7. Effect of George Floyd murder on stops of Asian persons

	Stops of Asian persons per week	Stops of Asian persons per officer per week	Person stopped was Asian	Person stopped was Asian
Post-murder	-5.00***	-0.01***	-0.002***	-0.00
	(0.75)	(0.00)	(0.00)	(0.00)
Weeks since murder (linear)	-0.04*	-0.00*	-0.00***	-0.00***
	(0.02)	(0.00)	(0.00)	(0.00)
Post-murder × weeks since murder	0.05	0.00*	0.00**	0.00***
	(0.03)	(0.00)	(0.00)	(0.00)
Constant	11.44***	0.01***	0.01***	0.01***
	(2.93)	(0.00)	(0.00)	(0.00)
N (weeks or stops)	395	395	203,389	203,389
$-\gamma_1/\gamma_2$ (weeks to zero effect)	100.82	78.19	29.08	7.12
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Table 8 displays the estimates of the effects of the murder on stops of Native Americans. Native Americans were subject to disproportionate stops, searches, and arrests by the MPD before the murder, as documented by Gorsuch and Rho (2019) and in the DOJ's report (DOJ, 2023a). While the murder significantly reduced the number of stops of Native Americans, this

appears to be simply the natural result of the de-policing effect of the murder. There was no effect on the probability that a stopped person was Native American.

Table 8. Effect of George Floyd murder on stops of Native American persons

	Stops of Native American persons per week	Stops of Native American persons per officer per week	Person stopped was Native American	Person stopped was Native American
Post-murder	-12.48***	-0.02***	-0.01	-0.00
	(3.16)	(0.00)	(0.00)	(0.00)
Weeks since murder (linear)	0.07*	0.00**	0.00	0.00
	(0.05)	(0.00)	(0.00)	(0.00)
Post-murder × weeks since murder	-0.15	-0.00	-0.00	-0.00
	(0.09)	(0.00)	(0.00)	(0.00)
Constant	-0.60	-0.00	-0.01	-0.01
	(7.18)	(0.01)	(0.01)	(0.01)
N (weeks or stops)	416	416	203,389	203,389
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	-	-	-
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

Table 9 displays the estimates of the effects of the murder on stops of Latinx persons. The murder significantly reduced both the number of stops of Latinx individuals, and the probability that a stopped subject was Latinx. After controlling for whether the subject was gone on arrival, the murder had no effect on the probability that a stopped person was Latinx. Again,

the effect was explained by the gone on arrival variable, meaning that de-policing or other factors influencing officers' direct contact with civilians affected the racial composition of stopped persons.

Table 9. Effect of George Floyd murder on stops of Latinx persons

	Stops of Latinx persons per week	Stops of Latinx persons per officer per week	Person stopped was Latinx	Person stopped was Latinx
Post-murder	-15.27***	-0.02***	-0.008***	-0.003
	(2.06)	(0.00)	(0.00)	(0.00)
Weeks since murder (linear)	0.01	0.00	0.00	0.00
	(0.05)	(0.00)	(0.00)	(0.00)
Post-murder × weeks since murder	-0.10	-0.00	-0.00	-0.00
	(0.08)	(0.00)	(0.00)	(0.00)
Constant	17.52**	0.02	-0.01	-0.01
	(8.32)	(0.01)	(0.01)	(0.01)
N (weeks or stops)	418	418	203,389	200,760
$-\gamma_1/\gamma_2$ (weeks to zero effect)	-	-	-	-
Control for gone on arrival				X

Data source: Public data from the MPD on police stops between January 1, 2017 and March 10, 2025, accessible at opendata.minneapolismn.gov.
Additional controls for columns 1 and 2 not shown: quadratic, cubic, and quartic running time variables, weekly average maximum and minimum temperature, weekly average precipitation, weekly average snowfall, and a fixed effect for the week of the calendar year.
Additional controls for columns 3 and 4 not shown: quadratic, cubic, and quartic running time variables, daily average maximum and minimum temperature, daily inches of precipitation, daily inches of snowfall, fixed effects for calendar month, day of week, and hour of day.
Newey-West standard errors in parentheses.
* $p \leq 0.1$, ** $p \leq 0.05$, *** $p \leq 0.01$

De-policing and data reporting practices interact in complex ways. The murder of George Floyd reduced the number of stops both because it triggered the departure of a large number of officers from the force, and because it affected individual officer behavior. MPD officers were less likely to initiate stops after the murder, relying more heavily on external cues to direct their

efforts. As a result, officers were less likely to directly observe the subjects on whom they recorded data, driving up the number and share of "unknown" race stops. But officers also made real changes to how they record race in the public police stops data, intentionally obfuscating information on the race of people they policed. Based on the effects of the murder on the racial composition of stopped subjects, it appears that MPD officers were most likely to conceal race information when they stopped Black individuals—the murder increased the share of subjects whose race was "unknown" by 11 percentage points, and lowered the share of subjects whose race was Black by 9.9 percentage points.

This set of results demonstrates the importance of estimating and interpreting effects on de-policing *and* race—and also the importance of estimating effects in terms of volume (e.g., stop or arrest volume) and percentages, as these two measures provide different and complementary information.

Conclusion

De-policing, a behavioral phenomenon in which police officers reduce effort on the job in response to criticism, occurs in the context of racialized policing behavior and outcomes. This paper investigates whether the murder of George Floyd in Minneapolis in 2020 caused Minneapolis Police Department (MPD) officers to de-police, and whether there were accompanying effects on the racial composition of the people policed by the department. I find that the murder caused the MPD to make 0.38 fewer stops per officer per week, and that it reduced the weekly probability that a stop was officer-initiated (as opposed to initiated by a civilian report or 911 call) by 19 percentage points. Simultaneously, the murder caused officers to reduce the probability of reporting of subjects' race in the public data by 11 percentage points. Non-reporting of race is, unsurprisingly, not race neutral. The murder lowered the probability

that a subject's race was recorded as Black by nearly 10 percentage points, or 89 percent of the non-reporting effect. Obfuscation of race in the public data on the MPD's policing behavior makes it difficult for the public, politicians, auditors, researchers, and other stakeholders to determine the extent to which racial disparities in policing outcomes remain a problem in Minneapolis.

Intentional misreporting or non-reporting of subjects' race in public policing data is an under-investigated phenomenon that could be widespread across U.S. police departments, especially after major events such as the murder of George Floyd. Luh (2022) finds evidence of systematic misreporting of Black and Hispanic motorists' race by Texas highway troopers between 2010 and 2015. Unlike the case of the MPD studied here, these Texas troopers were found to record the race of Black and Hispanic motorists as White. Luh also found that efforts to increase accountability for misreporting of race were effective in punishing offending officers in the labor market.

Nonreporting of race in public data is an unintended consequence of political and civilian efforts to reform police departments and reduce police violence against civilians. In lieu of reforms that cause real reductions in racial inequality in policing outcomes, nonreporting of subjects' race serves as a substitute for mitigating racial profiling, discrimination, and other policing practices that result in disparate impact. Authorities over the MPD should take steps to align officer incentives to report subject race with stakeholders' demand for high-quality, complete data on the MPD's activities. Future research should investigate whether misreporting or nonreporting of subjects' race occurs in other police departments, and whether this phenomenon has been exacerbated by movements to reform policing.

References

Adams, I. T., Mourtgos, S. M., & Nix, J. (2023). Turnover in large US policing agencies following the George Floyd protests. *Journal of Criminal Justice*, *88*, 102105.

Bailey, H. (2020, July 10). Minneapolis police officers say they are suffering from PTSD after George Floyd protests. *The Washington Post*.

Bjorhus, J., & Sawyer, L. (2020, June 9). Mpls. cops disciplined in fraction of cases. *Minnesota Star Tribune*.

Blakeslee, D. S., & Fishman, R. (2018). Weather shocks, agriculture, and crime: Evidence from India. *Journal of Human Resources*, *53*(3), 750-782.

Campbell, T. (2023). Black Lives Matter's effect on police lethal use of force. *Journal of Urban Economics*, 103587.

Cheng, C., & Long, W. (2022). The effect of highly publicized police killings on policing: Evidence from large US cities. *Journal of Public Economics*, *206*, 104557.

Cohen, F., & Gonzalez, F. (2024). Understanding the Link between Temperature and Crime. *American Economic Journal: Economic Policy*, *16*(2), 480-514.

Gorsuch, M. M., & Rho, D. T. (2019). Police stops and searches of indigenous people in Minneapolis: the roles of race, place, and gender. *The International Indigenous Policy Journal*, *10*(3).

Jonathan Schroeder, David Van Riper, Steven Manson, Katherine Knowles, Tracy Kugler, Finn Roberts, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 20.0 [dataset]. Minneapolis, MN: IPUMS. 2025. http://doi.org/10.18128/D050.V20.0

Luh, E. (2022). Not so black and white: Uncovering racial bias from systematically misreported trooper reports. *Available at SSRN 3357063*.

Mikdash, M., & Zaiour, R. (2022, May). Does (All) Police Violence Cause De-policing? Evidence from George Floyd and Police Shootings in Minneapolis. In *AEA Papers and Proceedings* (Vol. 112, pp. 170-173). 2014 Broadway, Suite 305, Nashville, TN 37203: American Economic Association.

Minneapolis, C. of. (2023, June 30). *Department of Justice Investigation*. City of Minneapolis. https://www.minneapolismn.gov/resident-services/public-safety/police-public-safety/investigations-settlement-agreement/investigations/doj/

Moreno-Medina, J. (2023). Sinning in the rain: Weather shocks, church attendance, and crime. *Review of Economics and Statistics*, *105*(1), 54-69.

Newey, W. K., & West, K. D. (1986). A simple, positive semi-definite, heteroskedasticity and autocorrelationconsistent covariance matrix.

Onookome-Okome, T., Gorondensky, J., Rose, E., Sauer, J., Lum, K., & Moodie, E. E. (2022). Characterizing patterns in police stops by race in Minneapolis from 2016 to 2021. *Journal of Ethnicity in Criminal Justice*, *20*(2), 142-164.

Premkumar, D. (2019). Public scrutiny, police behavior, and crime consequences: evidence from high-profile police killings. *Police Behavior, and Crime Consequences: Evidence from High-Profile Police Killings (September 15, 2019)*.

Sawyer, L., & Hargarten, J. (2023, September 16). Minneapolis police staffing levels reach historic lows amid struggle for recruitment, retention. *Minnesota Star Tribune*. Retrieved

2024, from https://www.startribune.com/minneapolis-police-staffing-levels-reach-historic-lows-amid-struggle-for-recruitment-retention/600305214.

Slotkin, J., & Florido, A. (2020, June 7). Minneapolis city council members announce intent to "Dismantle" police department. *MPR News*. Retrieved from https://www.npr.org/sections/live-updates-protests-for-racial-justice/2020/06/07/871727567/crowd-cries-shame-after-minneapolis-mayor-answers-no-to-defunding-police.

U.S. Census Bureau. (2022, April 11). *Glossary*. Census.gov. https://www.census.gov/programs-surveys/geography/about/glossary.html#:~:text=Block%20Groups%20(BGs)%20are%20statistical,data%20and%20control%20block%20numbering.

U.S. Department of Justice Civil Rights Division and U.S. Attorney's Office District of Minnesota Civil Division. (2023a, June 16). *Investigation of the City of Minneapolis and the Minneapolis Police Department.* https://www.justice.gov/d9/2023-06/minneapolis_findings_report.pdf.

U.S. Department of Justice. (2023b, 15 June). *Agreement in Principle Between the United States and the City of Minneapolis and the Minneapolis Police Department*. https://www.justice.gov/d9/2023-06/Minneapolis%20Agreement%20in%20Principle.pdf.

Wexler, N. (2020, November). Testing for Police Racial Profiling Using Data on Pre-Stop Race Visibility: Evidence from Minneapolis. In *2020 APPAM Fall Research Conference*. APPAM.

Winter, D. (2021, October 8). Minneapolis council member says he 'got got' at 'defund police' rally. *Minnesota Reformer*. Retrieved 2024, from

https://minnesotareformer.com/2021/10/08/minneapolis-council-member-says-he-got-got-at-defund-police-rally/.

Woltman, N. (2020, May 28). Minneapolis police precinct abandoned, torched; on Twitter, Trump threatens ‘thugs.’ *Pioneer Press.* https://www.twincities.com/2020/05/28/minneapolis-police-abandon-third-precinct-hq-as-george-floyd-protesters-pull-down-fences/

Zhang, Y., Zhao, J. S., & Lin, C. H. (2024). A link between the George Floyd incident and de-` policing: Evidence from police arrests across three racial and ethnic groups. *Police quarterly*, *27*(4), 475-504.