Police Stops and Searches of Indigenous People in Minneapolis: The Roles of Race, Place, and Gender

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Abstract: We examine disparities in police stops, searches, and arrests of Native Americans in Minneapolis, a major metropolitan area with a substantial Native American population. During the study period, we find that 1.42% of women in Minneapolis report their race as American Indian or Alaska Native, but the Minneapolis police report that 6.43% of police stops of women taking place in Minneapolis (including vehicle stops and non-vehicle stops) are Native American. Native American men comprise 1.51% of the male population and 3.29% of police stops of men. After they were stopped, 28% of Native American women were searched and 20% were arrested, over twice as often as women of any other race. The disparities in police interactions of Native American women are driven by stops for “suspicious person.” Native American women comprise 24% of all women stopped for being a “suspicious person” but only 2% of women stopped for traffic violations. Place plays an important role in this disparity; the disproportionate stops of Native American women are geographically concentrated in areas with high Native American residents and that are associated with sex work. Stops of Native American men, black women, and Latina women were not as concentrated.

The Center for Indian Country Development at the Federal Reserve Bank of Minneapolis and St. Catherine University generously funded this research. We greatly benefited from insightful feedback from Donna Feir, Patrick Button, Dick Todd, and Nikki Pieratos. We also are extremely grateful for our amazing research assistants: Nicole Busker, Amanda Williams, and Liz Axberg.
A growing literature investigates disparities facing Indigenous people in the labor market (Button & Walker, 2017; Feir, 2013; Gitter & Reagan, 2002; Hurst, 1997; Liebler, Wise, and Todd, 2018). However, less research examines Indigenous people’s experiences with police. Nationally, 32% of Native Americans report experiencing racial profiling from the police (National Public Radio, 2017). In 2018, the B.C. Civil Liberties Association and Union of B.C. Indian Chiefs found that Indigenous people were overrepresented in street checks which involve police stopping an individual outside of an investigation to question them (Prystupa, 2018). In the United States, Native Americans have the highest prevalence of fatal encounters with law enforcement of any racial or ethnic group (Ajilore, 2017). Yet these encounters are rarely covered in the media – for each fatal police shooting of a Native American there is an average of less than one media story; for African Americans there is an average of 6.3 media stories for each incident (Schroedel & Chin, 2017).

As described in the following section, due in part to the legacy of historical trauma and discrimination, Indigenous people disproportionately experience homelessness (Wilder Research, 2016; Wilder Research, 2017; Kunesh, 2018), drug use (Katzman et al., 2016), and human trafficking (Logan, 2015; Koepplinger, 2008; Aslanian, 2014). In Minneapolis, numerous Native American organizations are working to directly address these serious disparities. These underlying inequalities can mean that Indigenous people, and particularly Indigenous women, may experience different levels and types of interactions with law enforcement. To our knowledge, this is the first paper to empirically examine disparities in non-fatal police interactions between Native Americans and other groups. We specifically examine Native American interactions with police and show that Native Americans are disproportionately stopped, searched, and arrested by police in Minneapolis. For Native American women, these
police interactions are geographically concentrated in areas with large Native American populations.

The city of Minneapolis publishes data on every interaction the police have with civilians. Unlike many cities, the Minneapolis data includes both stops of vehicles and non-vehicle stops. Stops of people outside of cars play a different role in the police-civilian relationship. Interviews with police and community members both highlighted that stops of people not in cars more often involve police looking for street-level sex work, suspicious behavior, or vagrancy, as well as interactions not directly related to suspicious or illegal behavior. We find striking disparities facing Native Americans among non-vehicle stops and suspicious vehicle stops, but not among traffic enforcement stops.

1. Background

1.1 Disparities in police stops & their effects

There is an extensive literature that examines disparities in police treatment based on race. African American and Latino individuals are more often stopped by police in traffic stops and more likely to be searched given a stop (for example, Anwar & Fang, 2006; Gross & Barnes, 2006; Knowles et al., 2001; Pierson et al., 2017; Gelman, Fagan, & Kiss, 2007; Ritter, 2017). They are also more likely to be stopped by police in stop-and-frisk interactions (Coviello & Persico 2015; Ridgeway, 2007) and to be arrested (Bailey, 2014). There is an on-going debate whether these disparities are based on prejudice (where officers hold personal animus towards a group of people) or statistical discrimination (where officers are acting on different average probabilities of criminal behavior). A large amount of research finds that some officers act on personal prejudice (Goncalves & Mello, 2018; Antonovics & Knight, 2009; West, 2018; Fryer,
2016; Horrace & Rohlin, 2016), while others find evidence against prejudice (Coviello & Persico, 2015; Knowles et al., 2001; Grogger & Ridgeway, 2006).

We do not attempt to disentangle prejudice versus statistical discrimination in this paper. Rather, we explore the extent of disparities in police interactions facing an under-studied population: Native American women. Higher levels of police stops and searches are associated with a variety of negative outcomes, making disparities in police interactions an important policy concern regardless of what causes this disparity. For example, being stopped and searched by police is associated with increased risk for numerous mental and physical health problems (Geller, Fagan, Tyler, & Link, 2014; Sewell & Jefferson 2016). Although this association does not necessarily imply that police stops cause health issues, it nonetheless suggests that understanding the nature of Native American interactions with police is an important public policy concern.

Higher levels of arrest and incarceration are also associated with negative outcomes for the individuals arrested and their family members. Mueller-Smith (2014) uses variation in judge’s sentencing practices to show that incarceration dramatically decreases the post-incarceration income of the individual incarcerated, increases their use of food stamps, and increases the probability of divorce. Family members of those incarcerated experience financial instability and increased parenting stress, and children have less involvement with their incarcerated parent (Arditti, Lambert-Shute, & Joest, 2004; Miller, 2006). Incarceration may affect the broader community as well – family members of those incarcerated are less civically involved and report less trust in the government (Lee, Porter, & Comfort, 2014).
1.2 Minneapolis Police Department

The Minneapolis Police Department (MPD)\(^1\) is comprised of over 800 police officers across five precincts. The five police precincts operate somewhat independently – each precinct has its own station and leader (called Inspector). The following map shows the boundaries of the five precincts.

FIGURE 1 HERE

In a three-year span overlapping our data period, the MPD had experienced two high-profile shootings of black men. Minneapolis police officers shot and killed Jamar Clark in November 2015 and Thurman Belvins in June 2018. Weeks of protests followed both shootings. The MPD was also highlighted by the Minnesota ACLU as having severe racial disparities in low-level arrests – black and Native American Minnesotans were disproportionately arrested for crimes that would result is short jail time or a small fine (American Civil Liberties Union [ACLU], 2015).

During this time period, the MPD has also made numerous policy changes in an effort to reduce racial disparities in policing. In July 2016, the MPD stopped arresting people for misdemeanor bench warrants. In 2018, the MPD began a collaborative approach to homelessness that emphasizes providing social services and also suspended low-level undercover marijuana stings (Jany, 2018; Zezima, 2018).

\(^1\) The Minneapolis Police Department is currently headed by Chief Medaria Arradondo, who began his tenure in July 2017. From December 2012 to July 2017, the MPD was led by Chief Janeé Harteau. Our data includes police stops under both Chief Arradondo and Chief Harteau.
1.3 Native Americans in Minneapolis

The Twin Cities have long been an economic hub for many Native American tribes (Kunesh, 2018), and the Indian Relocation Act named Minneapolis as a destination for Native American migration. In the 1960’s, the American Indian Movement was founded in Minneapolis during the increased emphasis on a pan-Native identity (D'Arcus, 2010; Wittstock & Salinas, 2018). The Little Earth of United Tribes apartment complex was founded in 1973 as a unique HUD-subsidized rental assistant project for Native Americans (Fernández, 2016). As shown in the map below, there is a cluster of block groups in south Minneapolis where between 10 and 20% of the population is estimated to be American Indian/Alaska Native\(^2\) – these block groups include and surround Little Earth.

FIGURE 2 HERE

1.3.1 Barriers to housing, human trafficking, and opioid use

The Native American community in Minnesota experiences barriers to obtaining housing, due to a combination of lower average income and discrimination. Eight percent of homeless adults and 9% of homeless unaccompanied youth in Minnesota are Native American (Wilder Research, 2016; Wilder Research, 2017). The American Indian/Alaska Native community, both in urban areas and on reservation land, experiences over-crowding more often than other races (Kunesh, 2018). Similar patterns are found among the First Nations population in Canada (Feir & Akee, 2018). The low-income housing market in Minneapolis reached a crisis point in 2018,\(^2\)

\(^2\) The figure shows that proportion of ACS respondents who state their race is “American Indian/Alaska Native” and do not select any other races. This will not count people with multi-racial identities. We use this definition in Figure 2, because it is closest to the data recorded by the Minneapolis Police Department. As described more in the “Data” section, Minneapolis police officers are only able to enter one race when recording a stop.
when a homeless encampment of over 400 people developed along a highway in the 3rd Precinct, just blocks away from the Little Earth community. The encampment was called the “Wall of Forgotten Natives” because most residents were Native American (Nesterak, 2018). The Red Lake Band of Chippewa owns land near the settlement and is building a temporary shelter for the residents to live during winter.

Minneapolis and St. Paul are among the worst 15 metropolitan areas for sex trafficking in the U.S. (U.S. Attorney’s Office, 2007). Native American women are more likely to be trafficked into sex work than women of other races (Logan, 2015; Koepplinger, 2008). In 2013, 75% of juvenile sex trafficking victims in Minneapolis were Native American (Aslanian, 2014). The Phillips neighborhood is the most common recruitment location for juvenile sex trafficking in Minneapolis (Martin, Pierce, Peyton, Gabilondo, & Tulpule, 2014). This disparity is complex and results from a combination of unclear and conflicting jurisdictional issues, distrust of the government, generational trauma, and lack of the resources (Logan, 2015).

In Hennepin County (where Minneapolis is located), Native Americans are 2.2% of the population, but 25% of women on probation for prostitution (Minnesota Indian Women's Resource Center, 2009). Among Native women involved in sex work in Minneapolis, researchers have found high rates of homelessness, rape, arrest, and childhood abuse. Many Native women involved in sex work report experiences consistent with being trafficked, but often do not consider themselves victims of trafficking (Minnesota Indian Women's Resource Center, 2009). These disparities can be linked to historical community traumas, including the forced removal of children to abusive boarding schools (Farley et al., 2016). In Minneapolis, Native organizations have created programs and outreach activities that are culturally appropriate and emphasize Native values and heritage. For example, the Minnesota Indian Women's
Resource Center (www.miwrc.org) in Minneapolis is a highly visible and successful Native American led organization providing resources to Native American women, including those experiencing homelessness, drug addiction, or are involved with sex work.

Opioid use has dramatically increased in many racial groups, but the American Indian/Alaska Native community has seen a higher than average increase. In 2015, 6% of American Indian/Alaska Natives 18 years and older reported misusing opioids in the past year, compared to 4.8% overall (Center for Behavioral Health Statistics and Quality, 2017). Similarly, the national average growth rate of opioid use disorder was 4.2% in 2015, but among American Indians/Alaska Natives the growth rate was 6.9%. (Katzman et al., 2016). In Canada, drug use enforcement is a key driver of disproportionate interactions of Indigenous people with police (Bennett & Bernstein, 2013; Marshall, 2015). In Minneapolis and St. Paul, Native-led organizations like “Natives Against Heroin” work with Native Americans with substance abuse problems providing medical care and treatment options. Natives Against Heroin also directly confronts drug dealers by holding protests and burning sage outside known drug houses (Serres, 2018).

2. Data

2.1 Interactions, searches, and arrests in Minneapolis

Our main analysis is based on data\(^3\) from the Minneapolis Police Department on every interaction with a civilian (including both vehicle and non-vehicle stops) from November 1, 2016 to September 30, 2018. Every time a police officer interacts with someone, they enter the information into a computer system. If the stop involves a group of people, the officer selects one

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\(^3\) This data is available at http://opendata.minneapolismn.gov/datasets/police-stop-data.
person to include in the data. The data on each stop included the officer-reported race and gender of the person stopped; the problem that triggered the stop; if the person was searched; if a vehicle was searched; if the person was issued a citation or booked after the stop; the precinct, neighborhood, and latitude and longitude of the stop; and the time and date of the stop. Our data includes records on 61,893 stops that have information on the race and gender of the person stopped.

Importantly, the race of the individual is reported by the officer, not the person stopped. The officer’s perception of the race may not reflect the individual’s own self-identity. This data captures the socially assigned race (often referred to as the “street race”) of the individuals stopped. Previous research has shown that among the Latinx community, socially assigned race/ethnicity predicts discrimination beyond self-identified race/ethnicity (Vargas, Winston, Garcia, & Sanchez, 2016).

In February 2018, we shared our initial analysis with the Minneapolis Police Department in part to seek their feedback on how we were interpreting the data. The MPD performed an internal analysis of their data. Their analysis confirmed the main results we present below – Native Americans are disproportionately stopped in Minneapolis. The MPD then randomly selected 100 case reports of stops of Native American woman and examined those cases. We do not have access to the case reports, but the police shared some findings with us. The MPD found that 60% of these stops were a special type of interaction named an “on-site.” On-site is used to describe a time when the officer is unavailable to be dispatched because they are talking to someone. The data collection system will automatically convert these to “suspicious person” stops in the publically available data. This is a broad designation that could include having an impromptu conversation with a community leader, transporting someone for their own benefit, or
checking on someone. The police describe these as typically “non-enforcement” interactions, but little specific information is available. Because we cannot differentiate between on-sites and suspicious person stops, we will refer to these stops as “suspicious person/on-site.”

Additionally, the public data does not indicate any information about the officer. We do not know the officer’s race or gender or how many stops are by the same officer. We also do not know whether the same person is stopped multiple times. The MPD reported that of the 100 specific stops they analyzed, 14 women were stopped more than once and comprised 32 of the 100 stops.

Importantly, while the publicly available data includes whether the person was booked (arrested), the public data does not include information on why. There is also no distinction between people arrested for outstanding warrants and people arrested for a new offense. The internal data analyzed by the police suggested that the most common reasons were warrants, narcotics, trespassing, loitering, open bottle/public intoxication, prostitution, emotionally disturbed person, and panhandling. The internal data also suggested that some observations that were recorded as “booked” were actually people who were transported to another location (for example, the hospital). We do not know how common this error is.

2.2 Block group characteristics

We use data from the 2012–2016 5-year pooled American Community Survey (ACS) accessed through American FactFinder to create measures of Census block group characteristics. We use the latitude and longitude of each stop to place it in a Census block group. We merge in data from the ACS on the racial composition of the block group, unemployment rate, and labor force participation.
Of the 61,893 stops with race and gender, 605 do not have measures of latitude and longitude and 74 have values that place the stops just outside of Minneapolis city boundaries. We exclude these stops in the analysis of block group characteristics, but include them for the analyses that do not include block group characteristics. Results are robust to including or excluding these stops.

3. Approach

3.1 Approach 1: Disparities in stops, searches, and arrests

We first examine the proportion of stops by race and gender and compare them to estimates of the population. We also examine whether people of different races are searched and arrested at different rates after being stopped.

We then look at these disparities after controlling for other factors. The following equation shows how we examine whether Native Americans are searched after being stopped more often than people of other races after controlling for contextual factors. In Equation 1, the outcome variable is 1 if stop $i$ resulted in the person being searched and zero otherwise. The variable $I(\text{Native American}_i)$ is 1 if the individual was identified as Native American (and zero otherwise). $X_i$ is a vector that includes the variables for the hour of the day the stop occurred in (a set of 23 indicator variables, one for each hour and one omitted hour), the month the person was stopped (a set of 11 indicator variables – one for each month and one omitted). $X_i$ also includes an indicator variable for each reported cause for the stop (traffic law enforcement, suspicious person, suspicious vehicle, curfew, truancy, attempt pick up). Finally, Equation 1 includes neighborhood fixed effects ($\eta_n$). The “neighborhood” of the stop is reported by the
police and corresponds to the boundaries shown in Figure 1. The police data includes stops in 87 neighborhoods.

\[ \text{person searched}_i = \beta_0 + \beta_1 I(\text{Native American}_i) + X_i \gamma + \eta_i + \epsilon_i \]

In Equation 1, \( \hat{\beta}_1 \) will show whether Native Americans are more often searched after controlling for the other variables. For example, a positive \( \hat{\beta}_1 \) would show that Native Americans are searched more often than individuals of other races even after controlling for time of day, month, cause of stop, and neighborhood. We use the same type of regression to examine whether the person’s vehicle was searched and whether the stop resulted in an arrest. We also examine the police-reported cause for the stop to examine potential reasons for the disparities in stops, searches, and arrests.

3.2 Approach 2: Geography of Stops and Searches of Native Americans

After analyzing the overall disparities, we then examine whether stops are occurring in high sex work and drug areas. The police-reported cause of a stop is very broad, limiting our ability to determine factors driving disparities. Discussions with police and community members suggest that there are certain areas of Minneapolis, along Bloomington Ave. and Lake St., known for high prostitution and drug sales. These areas correspond to places where juveniles are recruited by sex traffickers (Martin et al., 2014). We geocode where stops of Native Americans are occurring and use this information to test whether the Bloomington Ave. and Lake St. areas have a higher proportion of Native Americans stopped.

We then examine whether contextual factors measured by American Community Survey block group are associated with the proportion of stops that are Native American. While the “neighborhood” used in Equation 1 was based on the Minneapolis Police Department report of
neighborhood, each block group in Equation 2 is defined by the Census and is generally smaller than the neighborhood reported in the police data. We use police-reported latitude and longitude to place each stop \((i)\) into a block group \((b)\). Stops occur in 394 block groups. We then test whether the probability of the person stopped being Native American varies by proportion of the block group that is American Indian/Alaska Native (AI/AN), the proportion of the block group that is white, the labor force participation rate in the block group, and the unemployment rate of the block group. We also test whether this relationship is different for men and women by interacting each variable with an indicator for if the person stopped was female, \(I(Female_i)\).

\[
\text{Native American}_i = \beta_0 + \beta_1 I(Female_i) + \beta_2 \text{proportion of block group AI/AN}_b \\
+ \beta_3 \text{proportion of block group white}_b + \beta_4 \text{Unemployment rate}_b \\
+ \beta_5 \text{Labor force participation rate}_b \\
+ \delta_1 \text{proportion of block group AI/AN}_b \ast I(Female_i) \\
+ \delta_2 \text{proportion of block group white}_b \ast I(Female_i) \\
+ \delta_3 \text{Unemployment rate}_b \ast I(Female_i) \\
+ \delta_4 \text{Labor force participation rate}_b \ast I(Female_i) + \varepsilon_{i,b}
\]

In Equation 2, \(\hat{\beta}_2, \hat{\beta}_3, \hat{\beta}_4\) and \(\hat{\beta}_5\) will all show the relationship between block group characteristics and the probability the person stopped was Native American. The coefficients, \(\delta_1, \delta_2, \delta_3\) and \(\delta_4\) will show whether these relationships are different for women.

Finally, in Equation 3 we examine whether block group characteristics are associated with being searched and arrested. We also test whether this relationship is different for Native Americans. As before, we use police-reported latitude and longitude to place each stop \((i)\) into a
block group \((b)\). We examine whether the probability that a stop results in the person being searched or arrested is associated with the proportion of the block group that is American Indian/Alaska Native (AI/AN), the proportion of the block group that is white, the labor force participation rate in the block group, and the unemployment rate of the block group. We also test whether this relationship is different for Native Americans by interacting each variable with our indicator variable for whether the person stopped was Native American. To assess whether the relationships vary by gender, we estimate Equation 3 separately for men and women.

\[
\text{person searched}_i = \beta_0 + \beta_1 I(\text{Native American}_i) + \beta_2 \text{proportion of block group AI/AN}_b \\
+ \beta_3 \text{proportion of block group white}_b + \beta_4 \text{Unemployment rate}_b \\
+ \beta_5 \text{Labor force participation rate}_b \\
+ \delta_2 \text{proportion of block group AI/AN}_b \ast I(\text{Native American}_i) \\
+ \delta_3 \text{proportion of block group white}_b \ast I(\text{Native American}_i) \\
+ \delta_4 \text{Unemployment rate}_b \ast I(\text{Native American}_i) \\
+ \delta_5 \text{Labor force participation rate}_b \ast I(\text{Native American}_i) + \varepsilon_{i,b}
\]

(3)

In Equation 3, \(\hat{\beta}_2, \hat{\beta}_3, \hat{\beta}_4\), and \(\hat{\beta}_5\) will all show the relationship between block group characteristics and the probability the person is searched (or arrested, when \(\text{person arrested}_i\) becomes the dependent variable). The coefficients \(\hat{\delta}_2, \hat{\delta}_3, \hat{\delta}_4\) and \(\hat{\delta}_5\) will show whether these relationships are different for Native Americans.
4. Results

4.1 Approach 1: Disparities in stops, searches, and arrests

In the 2016 ACS, 1.42% of women in Minneapolis report their race as American Indian or Alaska Native\(^4\), but for our data period the Minneapolis police report that 6.43% of their stops of women were Native American. Native American men comprise 1.51% of the male population and 3.29% of police stops. Men overall are much more likely to be stopped by police; among stops where the race and gender of the person is reported, 72.58% of stops are male.

After police officers initiated a stop, the stop often proceeded in a different way for Native American men and women than for people of other races. After a stop begins, the police officer may choose to perform a search of the person and/or the vehicle. If a person is arrested, they must be searched prior to transporting them. Among those stopped (for all reasons), Native Americans are searched far more often than those of other races. Among those stopped for suspicious person/on-site, Native Americans are searched at a similar rate to African Americans and other people of color, although more often than white people.

FIGURE 3 HERE

Among those stopped for a traffic violation or for a suspicious vehicle, Native Americans’ vehicles are searched more often than people of other races.

FIGURE 4 HERE

\(^4\) As in Figure 2, this calculation is based on ACS respondents who state their race is “American Indian/Alaska Native” and do not select any other races. This will not count people with multi-racial identities. We use this definition because it is closest to the data recorded by the Minneapolis Police Department.
Most police stops end with the police officer advising or warning the person who was stopped. Sometimes, the stop ends with the person being arrested and taken to booking. Twenty percent of stops of Native Americans result in an arrest—over twice as often as any other race.

FIGURE 5 HERE

4.1.1 Regression Analysis

To examine whether the disproportionate searches and arrests of American Indian women were driven by other characteristics – for example, where the stop happens, the time of the stop, and the “problem” of the stop – we examine differences in searches and arrests after controlling for these factors.

In Table 1, the first column for each outcome variable shows the raw difference, and the second column shows the difference after adjusting for these factors. For example, Native American women were searched 20.7 percentage points more often than women of other races. Controlling for location, time, and problem of the stop explained approximately half of the disproportionate searches of Native American women. After controlling for these factors, Native American women were still searched 12.5 percentage points more often than women of other races. Similarly, about one third of the disproportionate arrests were explained by location, time, and problem of the stop. As the table shows, the differences in vehicle searches persist, even after accounting for these other important variables.

TABLE 1 HERE
4.1.2 Why are Native Americans being stopped?

As shown in Figure 6, the majority of stops in Minneapolis were for traffic enforcement. However, the majority of stops of Native Americans were logged as a “Suspicious person.” This is a broad term for stops of a person not in a vehicle that can also include non-enforcement stops where the officer calls into dispatch as being “on-site” with a person.

The overall disparities in stops are dramatically larger among suspicious person/on-site stops. Twenty four percent of women stopped for suspicious person/on-site are Native American. Among traffic enforcement stops, Native American women are stopped approximately in proportion to their population (2% of all stops of women). The disproportionate stops of Native American women are mostly driven by these suspicious person/on-site stops, and not traffic enforcement stops.

4.2 Approach 2: Geography of Stops and Searches of Native Americans

South Minneapolis is home to a large Native American population - approximately 7% of the Phillips neighborhood in South Minneapolis is Native American. Unsurprisingly, stops of Native Americans were particularly concentrated in East Phillips and Midtown Phillips. However, the stops in this neighborhood were still disproportionate: over 40% of women stopped in East Phillips and Midtown Phillips were Native American. This disparity is slightly less
dramatic for men; 30.3% of stops of men in East Phillips and 13.6% of Midtown Phillips were Native American.

Within south Minneapolis, many stops of Native American women occurred on Bloomington Ave. The following heat map\textsuperscript{5} of south Minneapolis shows the geographic concentration of stops of Native American women. While many areas of concentrated stops are the same for men and women, women are more concentrated on Bloomington Ave. and at the intersection of Lake St. and Nicollet Ave., two areas known for sex work and drug sales.

\textbf{FIGURE 8 HERE}

Stops of African American women are more concentrated in downtown, particularly on Hennepin Ave. Latina women show little geographic concentration of stops, except for a small concentration near Lake St. and Nicollet Ave.

\textbf{FIGURE 9 HERE}

We used the latitude and longitude to identify all stops that occur on Bloomington Ave. between Lake St. and Franklin Ave.,\textsuperscript{6} an area of Minneapolis identified as having higher levels of sex work and drug sales. This area falls entirely within the 3rd Precinct. Twenty-two percent of men stopped on Bloomington Ave. are Native American, and 50% of women stopped on Bloomington Ave. are Native American. These proportions are far higher than other areas of the 3\textsuperscript{rd} Precinct.

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\textsuperscript{5} The latitude and longitude are approximate, so they do not exactly reflect the stop’s location. The latitude and longitude are altered slightly by the police department to anonymize the data.

\textsuperscript{6} A stop was considered to be in the Bloomington Ave. area if it had a latitude from 44.94839 to 44.962739 and a longitude from -93.256233 to -93.251105.
4.2.1 Regression analysis

**Stops.** Table 2 shows the results of Equation 2’s linear probability model using block group characteristics to predict whether the person stopped was Native American. As Table 2 shows, if the stop occurred in a block group with more Native Americans, unsurprisingly the person stopped was more likely to be Native American. However, this relationship is far stronger and statistically significant for women, compared to smaller and not significant for men. For every 1 percentage point increase in the percent of a block group that is Native American, the percent of stops that are Native American increased by 0.647 percentage points for men, and 1.12 percentage points for women. Similarly, women stopped were less likely to be Native American in block groups with a higher percentage of white residents, but this relationship did not hold for men. Neither the unemployment rate nor the labor force participation rate of a block group were associated with the person stopped being Native American.

**TABLE 2 HERE**

**Searches.** Table 3 shows the relationship between block group characteristics and the proportion of people who were searched. Among those stopped, Native Americans men and women were consistently more likely to be searched conditional on block group characteristics. In block groups with more Native Americans, Native American men were more likely to be searched in non-vehicle stops, but women were not. Men and women in both vehicle and non-vehicle stops were more likely to be searched in block groups with higher unemployment, and the same was true for non-vehicle stops and block groups with lower labor force participation.
However, the unemployment and labor force participation relationships did not vary between Native Americans and other groups.

**TABLE 3 HERE**

*Arrests.* Table 4 shows the relationship between block group characteristics and the proportion of people who were arrested. For men, stops were much more likely to result in arrest in block groups with larger American Indian/Alaska Native populations. For both men and women, stops in block groups with higher labor force participation were less likely to result in arrest, but this relationship did not vary between Native Americans and other groups.

**TABLE 4 HERE**

5. **Conclusions**

Nationally, 32% of Native Americans report that they are excessively stopped and unfairly treated by the police (National Public Radio, 2017). In Vancouver, Indigenous people were overrepresented in street checks which involve police stopping an individual outside of an investigation to question them (Prystupa, 2018). Disparities in interactions with police are associated with serious negative health outcomes (Geller et al., 2014; Sewell & Jefferson, 2016), but police interactions with Native Americans are understudied and under-reported by the media (Schroedel & Chin, 2017). Minneapolis is home to a substantial Native American population and also publishes data on all police stops, including traffic stops, suspicious vehicle stops, and non-vehicle stops. Police stops outside of cars often involve street-level prostitution, vagrancy, and suspicious behavior as well as non-enforcement encounters. The Native American community has experienced disproportionate levels of sex trafficking, opioid abuse, and homelessness – all factors that could increase interactions with police outside of traffic stops. The combination of a
substantial Native American population and detailed data on police stops provides an important opportunity to analyze the disparities in police stops facing Native Americans.

Our analysis shows that Minneapolis police disproportionately stopped Native Americans in Minneapolis in non-vehicle stops and suspicious vehicle stops, but not in traffic enforcement stops. The disproportionate stops of Native Americans are due to stops for being a “Suspicious person” – a broad catchall term for interactions that occur when a person is not in a car – and “Suspicious vehicle.” “Suspicious person” stops include “on-sites,” which can include non-enforcement interactions (potentially including transporting someone, talking to someone, etc.). Among women, 24% of people stopped for being a “Suspicious person” are Native American. After being stopped, Native Americans were far more likely to be searched and arrested, even after adjusting for the location, time, and problem that triggered the stop.

A striking result of this analysis is that stops of Native American women were highly concentrated in Midtown Phillips and East Phillips, particularly along Bloomington Avenue. This pattern does not occur as strongly for men, suggesting distinct factors underlie the inequalities for Native American women. This area is known to both the community members and the police for sex work and is one of the top areas where sex traffickers recruit juveniles. The stops that occur on Bloomington Ave. are not more likely to result in a search or arrest.

Our regression analysis controls for socio-demographic characteristics of the block group, a geographical measure smaller than the neighborhood. This analysis showed a stop was more likely to be Native American in high American Indian/Alaska Native block groups, but that this relationship was much stronger for women than men. However, Native American men were more likely to be searched and arrested in high American Indian/Alaska Native block groups, while women were not.
Together, these results raise the possibility that residential segregation and concerns related to sex trafficking are inducing police to disproportionately stop Native American women in specific areas. These findings also suggest that the Minneapolis Police Department should further consider and assess efforts to reduce enforcement of low-level crime that is often due to lack of housing and to target johns, and promoters/enforcers (e.g., pimps) rather than arresting street-level prostitutes. Additionally, the lack of clear data on what comprises a “suspicious person” stop is preventing a clear analysis of the level and cause of disparities in police stops facing Native Americans in Minneapolis. Half of all police interactions with Native Americans in Minneapolis are for being a “suspicious person,” but this label may actually be referring to non-enforcement stops or even where the police have rendered a service (like transporting a person to the hospital). Collecting more accurate data would allow the Minneapolis Police Department to determine the root causes of the disparities in stops as well as highlight potential needs that would be better met through Minneapolis social services or non-profit organizations.
Works Cited

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Figures and Tables

Figure 1: Minneapolis Police Precincts

(Source: https://communitycrimemap.com/?rms=Minneapolis_Crime_Map&type=simple&address=Minneapolis%20MN)
Figure 2: Map of Minneapolis with estimated proportion of each block group that is American Indian/Alaska Native (single race) based on the 2016 ACS 5-year pooled
Figure 3: The proportion of people of each race who were searched among all stops (L) and among people stopped for being a suspicious person/on-site (R). n=61,893 for all stops; n=13,084 for suspicious person stops.
Figure 4: The proportion of people of each race who were searched among traffic violations (L) and among people stopped for suspicious vehicle (R) n= 39,898 for traffic violation stops; n= 7,740 for suspicious vehicle stops
Figure 5: Proportion of stops for each race that resulted in the person being arrested/booked. n=61,893
Figure 6: The proportion of stops for each reported cause by race and gender. \( n=61,893 \)

Figure 7: Proportion of stops that are Native American for each type of stop. \( n=61,893 \)
Figure 8: Heat map of Native American women (left) and men (right) stopped for suspicious person/on-site. “Hotter” colors, like orange and red, represent areas with the highest number of stops. Green highlights areas with a moderate number of stops.
Figure 9: Heat map of black women (left) and Latina women (right) stopped for suspicious person/on-site. “Hotter” colors, like orange and red, represent areas with the highest number of stops. Green highlights areas with a moderate number of stops.
Figure 9: Within the 3rd precinct, the proportion of stops that are Native American on Bloomington Ave and off Bloomington Ave. N= 9,522 (1,032 on Bloomington Ave, 8,490 elsewhere in the 3rd Precinct)
Table 1: Linear probability model examining if Native American women are more often searched and arrested

<table>
<thead>
<tr>
<th></th>
<th>(1) Person searched</th>
<th>(2) Person searched</th>
<th>(3) Vehicle searched</th>
<th>(4) Vehicle searched</th>
<th>(5) Booked</th>
<th>(6) Booked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No controls</td>
<td>Controls</td>
<td>No controls</td>
<td>Controls</td>
<td>No controls</td>
<td>Controls</td>
</tr>
<tr>
<td>Native American</td>
<td>0.207*** (0.0151)</td>
<td>0.125*** (0.0138)</td>
<td>0.178*** (0.0174)</td>
<td>0.150*** (0.0202)</td>
<td>0.155*** (0.0121)</td>
<td>0.107*** (0.0139)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.026</td>
<td>0.077</td>
<td>0.031</td>
<td>0.112</td>
<td>0.005</td>
<td>0.056</td>
</tr>
</tbody>
</table>

This table reports the results from estimates of Equation 1. We implement a linear probability model regressing the outcome variable (if the person was searched in columns 1 and 2, if the vehicle was searched in columns 3 and 4, and if the person was booked in columns 5 and 6) on an indicator for the person being Native American. Columns 1, 3, and 5 do not include control variables. Columns 2, 4, and 6 include control variables for the cause of the stop, hour of the day, month of the year, and neighborhood fixed effects. Table 1 includes only stops of women. Data is from the MPD on every interaction with a civilian (including both vehicle and non-vehicle stops) from November 1, 2016 to September 30, 2018. All variables in this regression, including the race of the person stopped, are reported by the MPD.

Robust standard errors in parentheses, clustered by neighborhood.
N=16,785 for person searched and booked (stops of women with information on the control variables).
N=14,119 for vehicle searched (stops of women for traffic or suspicious vehicle with information on the control variables).
*** p<0.01, ** p<0.05, * p<0.1
Table 2: Linear probability model examining if a stop was of a Native American person based on block group characteristics

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Native American</td>
</tr>
<tr>
<td>Female</td>
<td>0.0294 (0.0345)</td>
</tr>
<tr>
<td>Proportion of block group that is AI/AN from ACS</td>
<td>0.647 (0.527)</td>
</tr>
<tr>
<td>Female*Proportion AI/AN</td>
<td>0.471* (0.264)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.0132 (0.0623)</td>
</tr>
<tr>
<td>Female* Unemployment rate</td>
<td>-0.0115 (0.0677)</td>
</tr>
<tr>
<td>Labor force participation rate</td>
<td>0.0178 (0.0457)</td>
</tr>
<tr>
<td>Female*Labor force participation</td>
<td>0.0310 (0.0432)</td>
</tr>
<tr>
<td>Proportion of block group that is white from ACS</td>
<td>-0.00880 (0.0152)</td>
</tr>
<tr>
<td>Female* Proportion white</td>
<td>-0.0490** (0.0190)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0120 (0.0308)</td>
</tr>
<tr>
<td>Observations</td>
<td>61,247</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.020</td>
</tr>
</tbody>
</table>

This table reports the results of Equation 2. We implement a linear probability model regressing the outcome variable (if the person was Native American) on a female indicator variable, proportion of block group that is American Indian/Alaska Native (AI/AN), unemployment rate of the block group, labor force participation rate of the block group, proportion of block group that is white, and interactions between the female indicator variable and the block group measures. This data includes every interaction with a civilian (including both vehicle and non-vehicle stops) from November 1, 2016 to September 30, 2018. The race and sex of the person stopped are reported by the Minneapolis Police Department. The block group characteristics are from the ACS 2016 5-year pooled accessed through the American Factfinder. Each observed police stop is placed into a block group based on the police-reported latitude and longitude of the stop.

Robust standard errors in parentheses, clustered by block group (394 block groups)

*** p<0.01, ** p<0.05, * p<0.1
Table 3: Linear probability model examining if block group characteristics predict being searched and if these associations are different for Native Americans

<table>
<thead>
<tr>
<th></th>
<th>(1) Person searched</th>
<th>(2) Person searched</th>
<th>(3) Vehicle searched</th>
<th>(4) Vehicle searched</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Native American</td>
<td>0.213***</td>
<td>0.229*</td>
<td>0.249*</td>
<td>0.352**</td>
</tr>
<tr>
<td></td>
<td>(0.0841)</td>
<td>(0.119)</td>
<td>(0.131)</td>
<td>(0.143)</td>
</tr>
<tr>
<td>Proportion of block group that is AI/AN from ACS</td>
<td>0.141</td>
<td>0.0822</td>
<td>-0.395***</td>
<td>-0.0419</td>
</tr>
<tr>
<td></td>
<td>(0.205)</td>
<td>(0.173)</td>
<td>(0.146)</td>
<td>(0.0716)</td>
</tr>
<tr>
<td>Native American * Proportion AI/AN</td>
<td>0.794*</td>
<td>-0.146</td>
<td>0.629</td>
<td>-0.587</td>
</tr>
<tr>
<td></td>
<td>(0.429)</td>
<td>(0.355)</td>
<td>(0.542)</td>
<td>(0.447)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.368***</td>
<td>0.201*</td>
<td>0.255***</td>
<td>0.0972**</td>
</tr>
<tr>
<td></td>
<td>(0.174)</td>
<td>(0.111)</td>
<td>(0.0661)</td>
<td>(0.0402)</td>
</tr>
<tr>
<td>Native American * Unemployment rate</td>
<td>-0.144</td>
<td>-0.0342</td>
<td>-0.670*</td>
<td>0.0792</td>
</tr>
<tr>
<td></td>
<td>(0.372)</td>
<td>(0.254)</td>
<td>(0.406)</td>
<td>(0.379)</td>
</tr>
<tr>
<td>Labor force participation rate</td>
<td>-0.139**</td>
<td>-0.0656**</td>
<td>-0.000247</td>
<td>-0.0149</td>
</tr>
<tr>
<td></td>
<td>(0.0612)</td>
<td>(0.0298)</td>
<td>(0.0381)</td>
<td>(0.0175)</td>
</tr>
<tr>
<td>Native American * Labor force participation rate</td>
<td>-0.102</td>
<td>-0.0824</td>
<td>-0.0923</td>
<td>-0.322*</td>
</tr>
<tr>
<td></td>
<td>(0.127)</td>
<td>(0.150)</td>
<td>(0.194)</td>
<td>(0.194)</td>
</tr>
<tr>
<td>Proportion of block group that is white from ACS</td>
<td>-0.113**</td>
<td>-0.0388</td>
<td>-0.167***</td>
<td>-0.0575***</td>
</tr>
<tr>
<td></td>
<td>(0.0474)</td>
<td>(0.0268)</td>
<td>(0.0259)</td>
<td>(0.0133)</td>
</tr>
<tr>
<td>Native American * Proportion white</td>
<td>0.0441</td>
<td>0.0746</td>
<td>0.0486</td>
<td>0.117</td>
</tr>
<tr>
<td></td>
<td>(0.113)</td>
<td>(0.0957)</td>
<td>(0.132)</td>
<td>(0.123)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.300***</td>
<td>0.127***</td>
<td>0.201***</td>
<td>0.0865***</td>
</tr>
<tr>
<td></td>
<td>(0.0422)</td>
<td>(0.0196)</td>
<td>(0.0276)</td>
<td>(0.0108)</td>
</tr>
</tbody>
</table>

This table reports the results of Equation 3. We implement a linear probability model regressing the outcome variable (if the person was searched after being stopped in columns 1 and 2, if the vehicle was searched in columns 3 and 4) on a Native American indicator variable, proportion of block group that is American Indian/Alaska Native (AI/AN), unemployment rate of the block group, labor force participation rate of the block group, proportion of block group that is white, and interactions between the Native American indicator variable and the block group measures. Columns 1 and 3 are stops of men and columns 2 and 4 are stops of women. This data includes every interaction with a civilian (including both vehicle and non-vehicle stops) from November 1, 2016 to September 30, 2018. The race and sex of the person stopped are reported by the Minneapolis Police Department. The block group characteristics are from the ACS 2016 5-year pooled accessed through the American Factfinder. Each observed police stop is placed into a block group based on the reported latitude and longitude of the stop. Because columns 3 and 4 examine if a vehicle was searched, these columns only include stops for traffic enforcement and suspicious vehicle.

Robust standard errors in parentheses, Clustered by block group (394 block groups)

*** p<0.01, ** p<0.05, * p<0.1
Table 4: Linear probability model examining if block group characteristics predict being arrested and if these associations are different for Native Americans

<table>
<thead>
<tr>
<th></th>
<th>(1) Booked Male</th>
<th>(2) Booked Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>0.0869</td>
<td>0.138</td>
</tr>
<tr>
<td></td>
<td>(0.0629)</td>
<td>(0.0983)</td>
</tr>
<tr>
<td>Proportion of block group that is AI/AN from ACS</td>
<td>0.226**</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>(0.0973)</td>
<td>(0.121)</td>
</tr>
<tr>
<td>Native American * Proportion AI/AN</td>
<td>0.334</td>
<td>-0.183</td>
</tr>
<tr>
<td></td>
<td>(0.257)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.142</td>
<td>0.113*</td>
</tr>
<tr>
<td></td>
<td>(0.0905)</td>
<td>(0.0673)</td>
</tr>
<tr>
<td>Native American * Unemployment rate</td>
<td>0.0994</td>
<td>0.0589</td>
</tr>
<tr>
<td></td>
<td>(0.245)</td>
<td>(0.228)</td>
</tr>
<tr>
<td>Labor force participation rate</td>
<td>-0.0904***</td>
<td>-0.0514***</td>
</tr>
<tr>
<td></td>
<td>(0.0312)</td>
<td>(0.0194)</td>
</tr>
<tr>
<td>Native American * Labor force participation rate</td>
<td>-0.0498</td>
<td>-0.0263</td>
</tr>
<tr>
<td></td>
<td>(0.0968)</td>
<td>(0.126)</td>
</tr>
<tr>
<td>Proportion of block group that is white from ACS</td>
<td>-0.0211</td>
<td>-0.00419</td>
</tr>
<tr>
<td></td>
<td>(0.0235)</td>
<td>(0.0163)</td>
</tr>
<tr>
<td>Native American * Proportion white</td>
<td>0.0761</td>
<td>0.0659</td>
</tr>
<tr>
<td></td>
<td>(0.0703)</td>
<td>(0.0852)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.140***</td>
<td>0.0773***</td>
</tr>
<tr>
<td></td>
<td>(0.0203)</td>
<td>(0.0135)</td>
</tr>
</tbody>
</table>

Observations 44,477 16,770
R-squared 0.013 0.029

This table reports the results of Equation 3. We implement a linear probability model regressing the outcome variable (if the person was booked/arrested after being stopped) on a Native American indicator variable, proportion of block group that is American Indian/Alaska Native (AI/AN), unemployment rate of the block group, labor force participation rate of the block group, proportion of block group that is white, and interactions between the Native American indicator variable and the block group measures. Column 1 includes stops of men and column 2 includes stops of women. This data includes every interaction with a civilian (including both vehicle and non-vehicle stops) from November 1, 2016 to September 30, 2018. The race and sex of the person stopped are reported by the Minneapolis Police Department. The block group characteristics are from the ACS 2016 5-year pooled accessed through the American Factfinder. Each observed police stop is placed into a block group based on the reported latitude and longitude of the stop.

Robust standard errors in parentheses, clustered by block group (394 block groups).

*** p<0.01, ** p<0.05, * p<0.1
Appendix 1

Stops for suspicious person/on-site have a distinct seasonality – more stops during the summer are for suspicious people/on-site. This category is broad and includes most stops that occur outside of a car – given that Minnesotan winters are cold, fewer people are outside during the winter months to interact with the police.

![Figure A1: Proportion of all stops that are “suspicious person” in each month.](image)

Similarly, Native Americans make up a larger share of stops during the summer. Among women, the proportion of stops that are Native American increases dramatically during summer 2017 with a smaller increase during summer 2018.
Figure A2: Proportion of all stops that are Native American in each month.