Police Stops and Searches of Native Americans: The Roles of Race, Place, and Gender

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We examine disparities in police stops, searches, and arrests of Native Americans in Minneapolis, a major metropolitan area with a substantial Native American population. This population faces patterns in police interactions that are different from those facing African American and Latino people. We find that 1.42% of women in Minneapolis report their race as American Indian or Alaska Native, but the Minneapolis police report that 6.08% of police stops of women taking place in Minneapolis (including traffic stops and non-vehicle stops) from November 1, 2016, through September 30, 2018 are Native American. Native American men comprise 1.51% of the male population and 2.96% of police stops of men. After they were stopped, 28% of Native American women were searched and 20% were arrested, far more often than 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.

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African American and Latino individuals are more often stopped by police in traffic stops and more likely to be searched given a stop (Anwar and Fang 2006; Gross and Barnes 2006; Knowles et al. 2001; Pierson et al. 2017). They are also more likely to be stopped by police in stop-and-frisk interactions (Coviello and Persico 2015; Ridgeway 2007) and to be arrested (Bailey 2014).

Far less research focuses on Native Americans’ experiences with police. Nationally, Native Americans report experiencing racial profiling from the police (National Public Radio 2017). However, Native Americans comprise only 2% of the U.S. population, making it hard to identify disparities in police stops.¹ By some counts, Native Americans have the highest prevalence of fatal encounters with law enforcement of any racial or ethnic group (Aljilor 2017). As described in the following section, due to the legacy of historical trauma and discrimination Native Americans disproportionately experience homelessness, prejudice, drug use, and human trafficking. Numerous Native American organizations are working to directly address these serious disparities. These underlying disparities can mean that Native Americans, and particularly Native 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 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 neighborhoods with large Native American populations.

¹ This is the proportion in 2014 and includes those of more than one race. See https://www.census.gov/newsroom/facts-for-features/2015/cb15-ff22.html
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. By focusing on disparities in traffic stops, other research may have missed disparities occurring among non-vehicle interactions. In this paper, we are able to distinguish between stops of vehicles and other stops. We find striking disparities facing Native Americans among non-traffic stops, but not among traffic stops.

**Background: Native Americans in Minneapolis**

*Rural to urban migration*

In the past decades, American Indian and Alaska Natives have increasingly moved from tribal land to urban locations. This was in large part spurred by the Indian Relocation Act of 1956, which terminated the tribal status of numerous tribes and created incentives for Native Americans to move to cities. Approximately 70% of AI/AN people now live in metropolitan areas. Because this migration remains relatively unnoticed, federal funds have not moved with American Indians who have migrated to urban areas – only 1% of spending by the Indian Health Service goes to urban areas (Williams 2013). The large migration to urban areas challenged Native Americans’ identities; Native Americans were viewed by outsiders as one homogenous group, obscuring important tribal identities (D'Arcus 2010).

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. The AI/AN community comprises 7% of the Phillips neighborhood in southern Minneapolis. The Little Earth of United Tribes apartment complex which was start in 1973 is the only HUD-subsidized housing geared towards Native Americans (Fernández 2016). In the 1960’s, the American Indian Movement was founded in Minneapolis during the increased emphasis on a pan-Native identity (Wittstock and Salinas 2018).

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. 11% of homeless adults & 20% of homeless youth in Minnesota are American Indian (CSH & Tribal Nations 2006). The AI/AN community, both in urban areas and on reservation land, experience over-crowding more often than other races (Kunesh 2018). The housing crisis in Minneapolis reached a crisis point in 2018, when a homeless encampment of over 400 people developed near a highway. 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 & St. Paul among worst 15 metropolitan areas for sex trafficking in the U.S. (U.S. Attorneys Office 2007). Native American women are more likely to be trafficked into sex work than women of other races (Logan 2015). 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 et al 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. The Minnesota Indian Women's Resource Center in Minneapolis is a highly visible and successful Native-led organization providing resources to Native women, including those experiencing homelessness, drug addiction, or are involved with sex work.

Opioid use has dramatically increased in many racial groups, but AI/AN has seen a higher than average increase. In 2015, the overall average growth rate of people with opioid use disorder was 4.2%, but among American Indians/Alaska Natives the growth rate was 6.9% (Katzman et al 2016). 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 confront drug dealers, including holding protests and burning sage outside known drug houses (Serres 2018).
Data

Interactions, searches, and arrests in Minneapolis

Our main analysis is based on data from the Minneapolis Police Department on every interaction with a civilian (including both traffic and non-traffic 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 office selects one person to include in the data. Each stop included officer-reported race and gender of person stopped, 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, precinct, neighborhood, and latitude & longitude of the stop, and time and date of stop. Our data includes 61,893 stops that have information on the race and gender of the person stopped.

In February 2018, we shared our initial analysis with the Minneapolis Police Department. The Minneapolis Police Department performed an internal analysis of their data. Their analysis confirmed our main results – Native Americans are disproportionately stopped in Minneapolis. The MPD then randomly selected 100 case reports of stops of Native American woman and found that 60% of these stops were a special type of interaction named a “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. This is a broad designation that could include having an impromptu conversation with a community leader, transporting someone, 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 or if 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 data includes if the person was booked (arrested), the 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.

**Block group characteristics**

We use data from 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.

**Interviews with police and members of community**

During May through July 2018, we conducted unstructured interviews with members of the Minneapolis Police Department and members of the community. We used a simple approach to these interviews: we shared the results of our initial analysis and asked for their thoughts. The
themes that came up in our interviews motivated much of the quantitative analysis we performed.

Police and community members often had very different reactions to the disparities in stops we presented, although one thing agreed on by both was the role of geography. Both police and community members agree that police interactions with Native Americans, and particularly women, were concentrated in certain areas known for sex work. Members of the community and people who work at non-profits reported that police were rude to them and they felt profiled as sex workers when stopped in this area. Members of the police department reported that they have made recent changes in how they approach prostitution. The 3rd precinct recently began emphasizing arresting johns and promoters (pimps) rather than prostitutes. The police felt that broader concerns of poverty and housing were driving the disparities in police interactions.

As described in our “Approach” section, we closely examine the role of geography in these disparities, including examining areas known for sex work, analyzing block group characteristics, and looking for differences at precinct boundaries.
Approach

We first examine the proportion of stops by race and gender and compare them to estimates of the population. We also examine if people of different races are searched and arrested at different rates, conditional on being stopped. We examine the reason reported for the stop and seasonality of the stop to examine potential reasons for the disparities in stops, searches, and arrests.

We then look at these disparities after controlling for other factors. The following equation shows how we examine if stop $i$ resulted in the person being searched is different for Native Americans after controlling for time of day of the stop, month the person was stopped, reason for the stop ($X_i$) and neighborhood fixed effects ($\eta_n$).

\[
person\ searched_i = \beta_0 + \beta_1 I(Native\ American_i) + X_i\gamma + \eta_n + \varepsilon_i
\]

We use the same regression to examine if the stop resulted in the person’s vehicle was searched and if the stop resulted in an arrest.

Second, we examine if stops are occurring in high sex work and drug areas. The reported reason for a stop is very broad, limiting our ability to determine factors driving disparities. We interviewed police, community members, and people who work at non-profits serving the Native American community. Interviews with police and community members suggest that there are certain areas of Minneapolis, along Bloomington Avenue and Lake St., known for high prostitution and drug sales. Native American women who work at a non-profit in this area reported feeling profiled as sex workers by the police. These areas correspond to places where juveniles are recruited by sex traffickers (Martin et al 2014).
We then examine if block group factors have different associations for stops and searches. We test if the probability of the person stopped being Native American varies by the demographic characteristics of the block group, and if this relationship is different for men and women.

\[ \text{Native American}_i \]

\[ = \beta_0 + \beta_2 \text{proportion of neighborhood Native American} \]
\[ + \beta_3 \text{proportion of neighborhood white} + \beta_4 \text{Unemployment rate} \]
\[ + \beta_5 \text{Labor force participation rate} \]
\[ + \delta_2 \text{proportion of neighborhood Native American} \times I(\text{Female}) \]
\[ + \delta_3 \text{proportion of neighborhood white} \times I(\text{Female}) \]
\[ + \delta_4 \text{Unemployment rate} \times I(\text{Female}) \]
\[ + \delta_5 \text{Labor force participation rate} \times I(\text{Female}) + \varepsilon_i \]

We examine if someone stopped in a higher poverty block group is more likely to be searched and if they are more likely to be arrested. We also test if this relationship is different for Native Americans.
\[ p_{\text{person searched}_i} = \beta_0 + \beta_1 I(\text{Native American}) + \beta_2 \text{proportion of neighborhood Native American} + \beta_3 \text{proportion of neighborhood white} + \beta_4 \text{Unemployment rate} + \beta_5 \text{Labor force participation rate} + \delta_2 \text{proportion of neighborhood Native American} * I(\text{Native American}) + \delta_3 \text{proportion of neighborhood white} * I(\text{Native American}) + \delta_4 \text{Unemployment rate} * I(\text{Native American}) + \delta_5 \text{Labor force participation rate} * I(\text{Native American}) + \epsilon_i \]

Finally, in Appendix 1 we examine role of precinct level behavior with a fuzzy regression discontinuity. People who work at non-profits serving the Native American community report that there is a perception that certain precincts have more racial disparities. We test if there is a difference between two precincts with high proportion to Native American residents.

**Results**

**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, but for our data period the Minneapolis police report that 6.08% of their stops of women were Native American. Native American men comprise 1.51% of the male population and 2.96% of police stops. Men overall are much more likely to be stopped by police; among stops where the gender of the person is reported, 73.5% 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, people of all races are searched equally. Among those stopped for a traffic violation or for a suspicious vehicle, Native Americans vehicles are searched more often than people of other races.
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.

Why are Native Americans being stopped?

As shown in the following graph, 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. 24% of women stopped for suspicious person/on-site at Native American. Among traffic enforcement stops, Native American women are stopped in proportion to their population (2% of all stops of women). The disproportionate stops of Native American women are mostly driven by these non-vehicle stops, and not traffic enforcement stops.
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.

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.
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 the following table, 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. After controlling for location, time, and problem of the stop, Native American women were still searched 12.5 percentage points more often than women of other races. As the table shows, the differences in searches and arrests persist, even after accounting for these other important variables.

<table>
<thead>
<tr>
<th>Controls?</th>
<th>Person searched</th>
<th>Vehicle searched</th>
<th>Booked</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>0.207***</td>
<td>0.0600***</td>
<td>0.155***</td>
</tr>
<tr>
<td>Yes</td>
<td>0.125***</td>
<td>0.0753***</td>
<td>0.107***</td>
</tr>
<tr>
<td>Controls?</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.026</td>
<td>0.031</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>0.077</td>
<td>0.112</td>
<td>0.056</td>
</tr>
</tbody>
</table>

Linear probability model. Robust standard errors in parentheses, clustered by neighborhood. Controls include neighborhood fixed effects, “problem” of the search, hour of the day, and month of the year. N=16,785 (stops of women with information on the control variables)

*** p<0.01, ** p<0.05, * p<0.1
Location

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 is still disproportionate: over 40% of women stopped in East Phillips and Midtown Phillips were Native American. This disparity is slightly less dramatic for men; 26.5% of stops of men in East Phillips and 11% of Midtown Phillips were Native American.

Within south Minneapolis, many stops of Native American women occurred on Bloomington Ave. The following heat map\(^2\) 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, two areas known for sex work and drug sales.

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\(^2\) The latitude and longitude are approximate, so do not exactly reflect the stop’s location. The latitude and longitude are altered slightly by the police department to anonymize the data.
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. Areas with no color are places where few or no stops occurred.

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.

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. Areas with no color are places where few or no stops occurred.
We used the latitude and longitude to identify all stops that occur on Bloomington Ave between Lake St. and Franklin Ave, an area of Minneapolis identified as having higher levels of sex work and drug sales. This area falls entirely within the 3rd Precinct. 18% of men stopped on Bloomington Ave are Native American, and 44% of women stopped on Bloomington Ave are Native American. These proportions are far higher than other areas of the 3rd Precinct.

N= 11,543 (1,199 on Bloomington Ave, 10,344 elsewhere in the 3rd Precinct)

Regression analysis

If a person was stopped 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 for women than it is for men. For every one percentage point increase in the percent of a block

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3 A stop was considered to be in the Bloomington area if it had a latitude from 44.94839 to 44.962739 and a longitude from -93.256233 to -93.251105.
Among those stopped, Native Americans were consistently more likely to be searched conditional on block group characteristics. In block groups with more Native Americans, men were more likely to be searched, but women were not. People were more likely to be searched in block groups with higher unemployment and lower labor force participation, but this relationship did not vary between Native Americans and everyone else.
Among those stopped, Native Americans are more likely to be arrested, but this difference is not statistically significant (Note – SEs large because of clusters). As before, women are not more likely to be arrested in block groups with higher proportions of Native Americans.
### Table

<table>
<thead>
<tr>
<th></th>
<th>(1) Person searched</th>
<th>(2) Person searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>0.138 (0.0983)</td>
<td>0.0869 (0.0629)</td>
</tr>
<tr>
<td>Proportion of block group that is AI/AN from ACS</td>
<td>0.119 (0.121)</td>
<td>0.226** (0.0973)</td>
</tr>
<tr>
<td>Native American * Proportion AI/AN</td>
<td>-0.183 (0.299)</td>
<td>0.334 (0.257)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.113* (0.0673)</td>
<td>0.142 (0.0905)</td>
</tr>
<tr>
<td>Native American * Unemployment rate</td>
<td>0.0589 (0.228)</td>
<td>0.0994 (0.245)</td>
</tr>
<tr>
<td>Labor force participation rate</td>
<td>-0.0514*** (0.0194)</td>
<td>-0.0904*** (0.0312)</td>
</tr>
<tr>
<td>Native American * Labor force participation rate</td>
<td>-0.0263 (0.126)</td>
<td>-0.0498 (0.0968)</td>
</tr>
<tr>
<td>Proportion of block group that is white from ACS</td>
<td>-0.00419 (0.0163)</td>
<td>-0.0211 (0.0235)</td>
</tr>
<tr>
<td>Native American * Proportion white</td>
<td>0.0659 (0.0852)</td>
<td>0.0761 (0.0703)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0773*** (0.0135)</td>
<td>0.140*** (0.0203)</td>
</tr>
<tr>
<td>Observations</td>
<td>16,770</td>
<td>44,477</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.029</td>
<td>0.013</td>
</tr>
<tr>
<td>sex</td>
<td>female</td>
<td>male</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses, Clustered by block group
*** p<0.01, ** p<0.05, * p<0.1

### Conclusions

Nationally, 32% of Native Americans report that they are excessively stopped and unfairly treated by the police. Disparities in police interactions with Native Americans is understudied, in part because Native Americans comprise only 2% of the national population. Moreover, analysis of police stops often focus exclusively on traffic stops, which will miss important disparities in police interactions for street-level prostitution, vagrancy, and suspicious behavior. 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.

Our analysis shows that Minneapolis police disproportionately stopped Native Americans in Minneapolis in non-traffic stops, but not in traffic 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 isn’t in a car. This type of stop includes “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 both the community members and the police as being known for sex work and is one of the top areas that sex traffickers recruit juveniles. The stops that occur on Bloomington Ave are not more likely to result in a search or arrest.

Together, these sets results suggest that residential segregation and concerns sex trafficking are inducing police to disproportionately stop Native American women in specific areas. Native women who work at non-profits in these areas have reported feeling profiled as sex workers by the police, when they are not. Heavy police enforcement in these areas appear to be driving the disproportionate stops of Native women, although not the disproportionate searches and arrests.
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Appendix 1: Regression discontinuity

South Minneapolis is split into two precincts, the 3rd and the 5th. Each precinct operates somewhat independently, with a precinct station and leader. The proportion of stops in the 3rd precinct that are Native American is far higher than in the 5th precinct.

As shown in the map, these two precincts are next to each other and share a long boundary. To examine if the behavior of the 3rd precinct varies from that of the 5th, we examine stops that are close to the boundary between the two precincts.
Almost all stops occur north of 35th Ave, so we focus on stops in this area. We divide these precincts into bins of .005 degrees longitude moving farther from the boundary (5th precinct has negative values, boundary is 0, and 3rd precinct has positive values).
While the areas of the 3rd precinct that are farther from the boundary have high proportions of Native Americans, these proportions fall moving closer to the boundary. There appears to be little difference on either side of the boundary.

This is formalized in a regression discontinuity. Because the latitude and longitude of the stop are sometimes altered to preserve anonymity and because our mapping of the boundary may not be exact, we use a fuzzy regression discontinuity. The following table shows the denominator of the Wald estimator (the impact of distance to the boundary on being in the 3rd Precinct) and the numerator (impact of distance to the boundary on proportion Native American). The ratio of the two is the Wald estimator of the impact of being in the 3rd precinct on the proportion of stops that are Native American. Three different bandwidths are used, the default, 50% the default, and 200% the default. For women, the estimate is always positive but never statistically significant. This suggests that there might be a slightly higher proportion of Native Americans stopped in the 3rd Precinct, but it is not statistically significant. For men, the results vary based on the bandwidth.
<table>
<thead>
<tr>
<th>Default bandwidth</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Wald estimate</th>
</tr>
</thead>
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<tr>
<td></td>
<td>0.0880</td>
<td>0.584***</td>
<td>0.0151</td>
</tr>
<tr>
<td></td>
<td>(0.0884)</td>
<td>(0.0962)</td>
<td>(0.149)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>50% of default bandwidth</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Wald estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0123</td>
<td>0.382***</td>
<td>0.0322</td>
</tr>
<tr>
<td></td>
<td>(0.133)</td>
<td>(0.145)</td>
<td>(0.345)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>200% of default bandwidth</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Wald estimate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.0743</td>
<td>0.760***</td>
<td>0.0978</td>
</tr>
<tr>
<td></td>
<td>(0.0609)</td>
<td>(0.0585)</td>
<td>(0.0796)</td>
</tr>
</tbody>
</table>

| Observations                              | 1,023     | 2,921       |
| Female                                    |           | Male        |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Stops are included if within .005 degrees longitude of boundary