The Effect of Immigration Enforcement on Crime Reporting: Evidence from Dallas*

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Abstract

Mistrust between immigrants and the police may undermine law enforcement's ability to keep communities safe. This paper documents that immigration policies affect an individual's willingness to report crime. I analyze the 2015 Priority Enforcement Program, which focused immigration enforcement on individuals convicted of serious crimes and shifted resources away from immigration-related offenses. I use data from the Dallas Police Department that include a complainant's ethnicity to show that Hispanic-reported incidents increased by 8 percent after the introduction of PEP. These results suggest that reducing enforcement of individuals who do not pose a threat to public safety can potentially improve trust between immigrant communities and the police.

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1 Introduction

The ability of law enforcement officials to detect and sanction criminal behavior depends on an individual's willingness to report crime. However, unauthorized immigrants or people living near unauthorized immigrants might fear that contact with the police could result in law enforcement learning about an individual's immigration status (see for example, Theodore 2013). Under-reporting of crime can make it more difficult for police departments to prevent and solve crimes, leading to a misallocation of resources and inhibiting investigation or prosecution of offenders (Langton et al. 2012). Yet, a majority of crimes—even serious violent crimes—often go unreported.¹

Immigrants' hesitancy to contact the police likely stems from federal immigration programs (i.e., the 287(g) and Secure Communities programs) that established cooperation between local law enforcement and the Department of Homeland Security (DHS)'s Immigration and Customs Enforcement (ICE) agency.² Indeed, as the number of detentions and deportations rose between 2008 and 2014 as a result of Secure Communities, a number of police departments expressed that worsening relations with the Hispanic community was making them less effective.³

As one illustration of this concern, former Chief of the Los Angeles Police Department William J. Bratton remarked:

Keeping America's neighborhoods safe requires our police forces to have the trust and help of everyone in our communities. My nearly 40 years in law enforcement and my experience as Police Commissioner in Boston and New York City and as Chief in Los Angeles has taught me this. Yet every day our effectiveness is diminished because immigrants living and working in our communities are afraid to have any contact with the police. [...] My officers can't prevent or solve crimes if victims or witnesses are

¹ The National Crime Victimization Survey found that in 2016, only 42 percent of 5.7 million violent crimes and 36 percent of 15.9 million property crimes were reported to the police (Morgan and Kena 2017).

² For more background and details on the strengthening of the 287(g) program in 2006 and the launch of Secure Communities in 2008, I refer the reader to Alsan and Yang (2018), Miles and Cox (2014), Wang and Kaushal (2018), and Watson (2013), among others.

³ Well over 90 percent of ICE detentions during Secure Communities were of Hispanic individuals (Alsan and Yang 2018).

unwilling to talk to us because of the fear of being deported. [...] We can't solve crimes that aren't reported because the victims are afraid to come forward to the police.

Many local jurisdictions began limiting their cooperation with ICE, which eventually convinced DHS to suspend the Secure Communities program in November of 2014.

This paper studies whether the Priority Enforcement Program (PEP)—a federal program that was launched in 2015 to rebuild trust between law enforcement and immigrant communities—changed the degree to which Hispanic individuals reported incidents to the police. Under PEP, the agency no longer sought to detain individuals with immigration offenses alone, and instead only focused on detaining individuals convicted of significant criminal offenses. In reducing the number of circumstances under which it could detain individuals, ICE attempted to re-establish the cooperation that it lost during the height of Secure Communities with state and local jurisdictions.

By redefining ICE's priorities to only focus on individuals who posed a threat to public safety, PEP reduced the likelihood that an unauthorized immigrant who had not committed a crime would be detained or deported, thereby reducing the cost of reporting an incident to the police. However, PEP did not lower the probability that an immigrant who was convicted of a serious crime would be detained. For these reasons, PEP—unlike most other immigration policies—directly increased the incentives for Hispanic victims to report incidents, without also increasing the incentives to commit a serious offense.

To explore the impact of this program on the share of crimes reported by Hispanic complainants, I use administrative data from the Dallas Police Department (DPD). This incident-level dataset from the DPD is relatively unique in that it includes information about a complainant's race and Hispanic ethnicity as well as his or her full name.⁴ Using this information, I employ a difference-in-differences strategy, in which I estimate how Hispanic complainants' reporting behavior changed relative to reporting by non-Hispanic complainants in the same neighborhood (i.e., Census tract) after the introduction of PEP. In addition to the richness of its policing data, Dallas is a useful setting for evaluating this policy because slightly more than 40 percent of the population

Most other police departments are either unwilling to release this level of information or have inaccurate data on complainants' race and ethnicity.

is Hispanic and the vast majority of neighborhoods are at least 20 percent Hispanic.⁵ Moreover, roughly 20–25 percent of Dallas County's Hispanic population is unauthorized immigrants (U.S. Census Bureau n.d.b.; Migration Policy Institute 2018).

Using this identification strategy, I find that after PEP was launched, the number of incidents reported to the police by Hispanics increased by around 8 percent (relative to the mean of 35 incidents in a Census tract per quarter). I also find that the reporting of violent and property crimes rose by around 4 percent (relative to the mean of 15 crimes in a tract per quarter). A rough estimate suggests that during the year and a half that PEP was in effect, the DPD was notified of around 6,000 and 1,200 more total incidents and serious crimes, respectively, than it would have been otherwise.⁶ These results are robust to the definition of neighborhood used as well as to the identification of Hispanic complainants using names (as opposed to using the race/ethnicity recorded by the DPD).

I consider two alternative explanations for the increase in reported incidents by Hispanic individuals following the implementation of PEP: a rise in the underlying crime rates of Hispanic offenders (who often commit crimes against other Hispanic individuals) and growth of the Hispanic population.⁷ I use arrest data from the DPD to show that the share of arrestees who were Hispanic stayed relatively constant over this time period. These results suggest that the increase in reported crime was likely not driven by Hispanic individuals committing more crimes, which is consistent with the program's goal of prioritizing the detainment of serious criminal offenders. I then use the American Community Survey as well as data on school enrollment to show that there was not a sudden influx of Hispanic individuals into Dallas that could explain the increase in complaints.

This paper contributes to a number of literatures. First, I add to a growing literature in economics about how immigration laws and policies can influence the choices and behavior of immigrants. A number of studies show that immigration policies that instill fear can affect the physical health,

⁵ The median Census tract in Dallas in 2010 was 30 percent Hispanic (TIGER/Line Shapefiles 2017).

⁶ For the remainder of the paper, "serious crimes" will refer to crimes classified by the FBI's Uniform Crime Reporting program as violent crimes (e.g., assault and robbery) or property crimes (e.g., burglary and theft).

As an example, between 2012 and 2015, 40 percent of violent victimizations against Hispanic individuals were committed by Hispanic offenders (Morgan 2017).

mental health, and economic outcomes of immigrants, and can have a "chilling" effect on their willingness to participate in safety-net programs (Alsan and Yang 2018; Amuedo-Dorantes et al. 2018; East et al. 2018; Wang and Kaushal 2018; Watson 2014). Previous studies have also shown that immigration policies affect immigrants' educational attainment as well as their willingness to file for permanent residency (Amuedo-Dorantes and Arenas-Arroyo 2019; Kuka et al. 2018; Liscow and Woolston 2018). The most closely related study to this one is Comino et al. (2016), which shows that the 1986 Immigration Reform and Control Act increased amnesty recipients' likelihood of reporting victimizations. To my knowledge, this study is one of the first in this literature to consider the effect of modern immigration policies on individuals' willingness to report a crime to the police, a key input into public safety.

Second, this paper is related to a number of studies, mainly in criminology and sociology, that use surveys to study the relationship between immigrant communities and law enforcement (see for example, Kirk et al. 2010 and Tyler et al. 2010). This paper is the first in this literature to use administrative data to estimate the causal effect of immigration enforcement on the number of interactions between immigrants and the police. Moreover, by showing how crime reporting increases when the enforcement environment changes, this study also contributes to a relatively small literature on the underreporting of crime as well as on policies that encourage individuals to report crime (Carr and Doleac 2016; Miller and Segal 2018). Indeed, despite the millions of crimes that go unreported, little is known about the effectiveness of policies to increase an individual's willingness to report a crime.

Finally, this paper complements a large body of literature that estimates the effect of immigration enforcement on crime rates and police effectiveness (Bohn et al. 2015; Chalfin and Deza 2018; Ciancio 2017; Freedman et al. 2018; Hines and Peri 2019; Miles and Cox 2014, 2015). Within this body of literature, an obstacle in interpreting results is differentiating whether changes in crime rates are driven by changes in underlying criminal behavior or changes in crime reporting. By studying Dallas' implementation of the Priority Enforcement Program—a program that reduced the cost of reporting incidents, without lowering the punishment for serious criminal offenses—this study is one of the first in this literature to be able to directly estimate changes in crime reporting.

The remainder of the paper is organized as follows. Section 2 provides a brief background

on the implementation of PEP nationwide and in Dallas. Section 3 discusses the theoretical predictions of PEP's effects. Section 4 outlines the data utilized, presents summary statistics, and introduces the methodological framework. Section 5 presents the results and conducts robustness checks. Section 6 discusses and rules out alternative explanations. Section 7 discusses the potential role of local enforcement and Section 8 concludes.

2 Background on the Priority Enforcement Program

2.1 Development and Passage of PEP

The 2008 Secure Communities program increased coordination between local law enforcement and federal immigration authorities in order to detain and deport non-citizen immigrants who had committed crimes. Secure Communities ensured that an arrested person's fingerprints were not only sent to the FBI, but were also forwarded to the Department of Homeland Security so that ICE could determine whether there was probable cause for deportation. Importantly, under this program, ICE could seek the transfer of non-citizen immigrants in state or local custody (i.e., issue a "detainer request") for a broad number of reasons, including immigration-related offenses.⁸ After the start of Secure Communities, the number of individuals detained and deported increased nationwide: between 2008 and 2013, more than 2.3 million individuals were deported.⁹

A few years after its introduction, a number of state and local jurisdictions became wary of the Secure Communities program and began limiting their cooperation with ICE, citing reduced trust between immigrant communities and the police as a primary reason.¹⁰ Moreover, some local

⁸ A detainer request is a written notice from ICE requesting local jails or law enforcement to detain an individual while ICE decides whether he or she will be taken into federal custody for removal purposes.

⁹ To better assess this magnitude, roughly 239,000 individuals were deported each year between 2005 and 2007, compared to roughly 388,000 individuals between 2008 and 2013, implying a 62 percent increase in the annual deportation levels (TRAC 2010, 2014).

For example, in 2012 the Los Angeles Police Department announced that it would no longer honor ICE detainer requests for unauthorized immigrants arrested for nonviolent offenses (e.g., driving without a license) unless they were part of a gang or had a criminal record. Police Chief Charlie Beck said that Secure Communities had hampered efforts to keep the city safe by eroding trust between communities and the police. He announced, "Community trust is extremely important to effective policing. So it's my intent, by issuing this change in procedures, that we gain this trust back." See: "Los Angeles to Cease Transferring Some Immigrants." The New York Times. October 4, 2012.

jurisdictions were hesitant to cooperate with ICE after federal courts found that parts of the Secure Communities program were unconstitutional. By 2014, more than 100 localities—not including Dallas—had limited or ended their cooperation with ICE.¹¹

In November of that year, Secretary of Homeland Security Jeh Johnson issued a memo suspending Secure Communities, citing the reduced cooperation at the local level as well as the federal court decisions as the main reasons (DHS 2014). He then announced the program that would soon take its place: the Priority Enforcement Program. The program was officially launched in July of 2015 after ICE released a brochure on PEP with the new enforcement guidelines as well as the new forms for law enforcement officials and ICE officers.¹²

The main goal of the program was to target resources toward detaining and deporting individuals convicted of *significant criminal offenses*. PEP's guidelines directed ICE to focus on detaining individuals who posed a threat to public safety (e.g., participating in gang or terrorist activity, being convicted of a felony), and to no longer seek the transfer of individuals with solely civil immigration offenses or those who had not been convicted of a criminal offense.¹³

Unlike most other immigration policies that affect both victims and offenders, PEP is unique in that by design, it increases the incentives for individuals to report incidents, but does not lower the punishment for serious criminal behavior. Indeed, in his original memo announcing PEP, Secretary Johnson motivated the changes by highlighting the need to support community policing and to maintain the trust of individuals in working with local law enforcement. Throughout 2015, ICE (and DHS more broadly) "conducted a nationwide effort to implement PEP and promote collaboration, reaching out to thousands of local law enforcement agencies and government officials"

¹¹ "Why cities are rebelling against the Obama administration's deportation policies." *Vox.* June 6, 2014.

¹² The six-month period between the suspension of Secure Communities and the official launch of PEP was a period of relative uncertainty. In January of 2015, the U.S. House of Representatives tried to pass a bill to reinstate Secure Communities, but it was blocked by the Senate. ICE slowly began implementing the new program after its announcement, but it was not until June 12, 2015 that ICE distributed an official brochure on PEP as well as the new forms.

¹³ More precisely, the prioritized enforcement included: participating in an organized criminal gang or terrorism; constituting a threat to national security; or being convicted of a felony or aggravated felony, three or more misdemeanor offenses, or one "significant" misdemeanor (e.g., burglary, domestic violence, DUI). The de-prioritized enforcement included individuals with civil immigration offenses alone or individuals who had been charged, but not convicted of criminal offenses (U.S. Immigration and Customs Enforcement 2015).

(DHS 2015). The Department of Homeland Security announced in their FY2015 report that most law enforcement agencies were back to cooperating with ICE via PEP. This program remained in effect until January of 2017 with the start of the new administration.

2.2 Implementation of PEP in Dallas

As mentioned above, after announcing PEP, ICE tried to engage with state and local governments as well as law enforcement officials in order to introduce the program and ensure cooperation. Even though Dallas did not stop cooperating with ICE during Secure Communities, the director of ICE still visited the city in May of 2015 to introduce the agency's new priorities. ¹⁴ She remarked at one meeting that "People think of us as deporting women and children and adult males willy nilly. It is my job to ensure that each of our 26 field officers are actually enforcing the priorities which focuses on criminals." ICE representatives then met with Dallas County officials in July and August of 2015 to further discuss PEP, and Dallas County Sheriff Lupe Valdez formally agreed to participate in the program.

In late August, Sheriff Valdez also introduced a local policy to ensure the enforcement of these new priorities. Dallas County officials began reviewing ICE's requests prior to honoring them—with the vetting guidelines being very similar to the PEP priorities—thereby ensuring that only individuals who posed a threat to public safety were transferred to ICE's custody. Given the similarity between the federal and the local policies, the Sheriff's office did not decline any of ICE's requests following the launch of PEP. In a spreadsheet tracking PEP's reception by local jurisdictions, ICE officials write about Dallas County (DALCO): "DALCO detainer vetting is similar to our PEP priorities. DALCO provided [ICE] with the points-of-contact for detainer vetting and all detainers have been approved since the inception of the process." 16

¹⁴ "ICE chief says immigration removals focus on convicted criminals." *The Dallas Morning News*. May 20, 2015.

¹⁵ The motivation behind the sheriff's new policy was not clear, but it was perhaps the result of growing controversy and legal challenges to immigration holds and inmate deaths in Dallas County earlier that year.

¹⁶ I am grateful to the Immigrant Legal Resource Center for obtaining and sharing information about whether particular jurisdictions complied with PEP as well as about meetings between ICE officers and local officials.

2.3 ICE Requests Before and After PEP

Following the announcement and implementation of these redefined enforcement priorities, the number of ICE detainer requests issued—and thus the number of individuals held in county jails with detainer requests—began to fall. Figure 1 uses reports written for the Texas Commission on Jail Standards to plot the number of inmates (i.e., the stock of individuals) held in Dallas County jails with an immigration detainer. The figure shows a slight decline in the number of inmates following the announcement of PEP (dashed green line), and a continued fall after its launch (solid green line). ¹⁷

As a result of the changing enforcement priorities, the composition of individuals with immigration detainers also changed with PEP. Using data on ICE detainer requests from the Transactional Records Access Clearinghouse (TRAC), Figure 2 shows the number of immigration detainers issued in Dallas County each month between 2013 and 2015 as well as broken down by an individual's most serious criminal conviction. The drop in the total number of detainers after the announcement of PEP in panel (a) corresponds with the lower number of immates held with immigration detainers in 2015 in Figure 1. Importantly, panel (b) of Figure 2 highlights that PEP seems to have achieved its enforcement goals in Dallas County: it hardly changed the number of immigration detainers issued for individuals convicted of a felony or aggravated felony, but it lowered the number of detainers issued for individuals convicted of misdemeanors and for those with no conviction. A back-of-the-envelope calculation suggests that if the number of detainers for these latter two groups stayed at their November 2014 levels, ICE would have detained nearly 1,000 more individuals in Dallas County by the end of 2015.

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¹⁷ It is not clear from these monthly counts why the number of inmates sometimes rises (for example, in 2014 or 2016), but it is worth reiterating that these data measure the stock, not the flow, of inmates. So, if any incident occurred that resulted in a large number of immigration detainer requests in Dallas County (e.g., targeted raids, spikes in gang activity), the number of inmates would remain at those higher levels for the subsequent months. Since inmates are held in jails for several weeks or months, the numbers in Figure 2 will not add up to the numbers in Figure 1, but will contribute to the total stock of inmates.

¹⁸ Unfortunately, ICE has refused to release data that include individuals' criminal convictions for any month after November of 2015.

3 Theoretical Predictions for PEP's effects

In this section, I discuss the effect that PEP likely had on the share of incidents reported to the police as well as on the amount of crime committed. PEP lowered the average cost of reporting an incident, and we therefore expect the share of crimes reported by Hispanic complainants to increase following the program's introduction. Criminal offenders likely responded to this increased probability of reporting, and we therefore expect the number of serious crimes committed—particularly against Hispanic victims—to unambiguously fall.

3.1 Effect on Reporting

Consider a simple model of crime reporting in which victim i chooses whether to report an incident (R = 1) or not (R = 0) based on the utility derived from each alternative:

$$U_{R=1} = f(B_i) - g(C_i, \pi_i) + \alpha_i$$

$$U_{R=0} = 0$$

Individual i's decision to report a crime is a function of the perceived benefits of reporting B_i , which include benefits to the individual (e.g., personal safety, the potential to recover a stolen good) as well as benefits to the community (e.g., improved public safety from finding the offender). Analogously, the decision to report a crime is also dependent on the costs to the individual C_i (e.g., time or psychic costs).

As noted above, unauthorized immigrants might fear that contact with the police could result in law enforcement learning about their immigration status. Anecdotal and empirical evidence also suggests that individuals living with or near unauthorized immigrants alter their behavior out of fear of revealing their non-citizen contacts.²⁰ An individual's decision to report a crime is therefore

¹⁹ The costs and benefits of reporting can differ across incident types k and time periods t. The corresponding subscripts are suppressed for simplicity.

²⁰ For example, in a 2012 survey of over 2,000 Latinos around the United States, 44 percent of respondents reported that they were less likely to contact the police if they had been the victim of a crime because they feared that law enforcement officials would use the interaction as an opportunity to inquire into their immigration status or that of

also a function of the immigration-related cost of reporting a crime, π_i ; the cost π_i is an increasing function of the individual's likelihood of being deported, P_i , as well as of the probability that the individual's contacts are deported, P_n .²¹

Finally, the utility obtained from reporting an incident is also a function of α_i , which is individual i's relative idiosyncratic preference for reporting (where utility from not reporting has been normalized to 0). Individual i will choose to report an incident if and only if the utility obtained from reporting the crime exceeds the utility derived from not reporting the crime:

$$\alpha_i > g(C_i, \pi_i) - f(B_i).$$

By de-prioritizing immigration-related offenses, PEP reduced the likelihood that non-citizen immigrants *without* a criminal history would be deported, thereby lowering their P_i and thus their cost π_i of reporting an incident to the police. Similarly, PEP reduced P_n for individuals with non-criminal non-citizen contacts, thereby also decreasing these individuals' cost of reporting an incident. Because PEP's goal was to continue detaining criminals, the program likely did not lower P_i for unauthorized victims with criminal histories, nor did it lower P_n for individuals with unauthorized contacts with criminal histories. Overall, though, by lowering π_i for *some* individuals, PEP on average decreased the cost of reporting an offense, and we therefore expect to see the share of incidents reported to increase following the introduction of the program.²²

people they know (Theodore 2013).

²¹ For individuals who are citizens and who do not have non-citizen contacts, $\pi_i = 0$ and this term does not alter their decision to report a crime.

It is also plausible that a victim i might consider the immigrant status of offender j in deciding whether to report a crime, so that π_i is also increasing in P_j (see, for example, Iyengar 2009). For these individuals, we should still expect their likelihood of reporting to increase with PEP, although likely by a smaller magnitude than for individuals who do not factor P_j into their decision. Regardless of whether P_j enters into π_i , however, PEP incentivizes immigrant victims and their contacts to report crime by lowering P_i or P_n , and we should therefore expect, on average, an increase in the share of incidents reported.

3.2 Endogenous Behavioral Response

By increasing the likelihood of reporting a crime, PEP also in principle affected the number of crimes committed. Here, I consider how PEP's priorities affected the likelihood that an offender would victimize individual v, where $v \in \{H, N\}$ represents Hispanic and non-Hispanic victims.

PEP increased Hispanic victims' likelihood of reporting, and we therefore expect the overall number of crimes committed against Hispanic victims to decrease with the introduction of PEP; γ therefore represents offenders' substitution away from Hispanic to non-Hispanic victims.²³ We also expect an overall decline in the number of crimes in which the offender does not know the victim type (e.g., auto theft of a stranger's car) because the likelihood of getting caught has risen due to increased reporting; this change is represented by β . Finally, there potentially could be additional deterrence effects δ from improved allocation of police resources (as a result of increased crime reporting).

	Change in victimizations
Hispanic victims	$-\gamma - \beta - \delta$
Non-Hispanic victims	$\gamma - \beta - \delta$

Combined, these changes yield two main predictions.²⁴ First, the change in the victimization rate of Hispanic individuals is unambiguously negative. Second, the change in the victimization rate of Hispanic individuals is unambiguously *more* negative than the change in the victimization rate of non-Hispanic individuals.

In Section 5 below, I discuss how these predictions might differ for low-level offenses (e.g., disorderly conduct or vandalism). For a more detailed discussion of these predictions, I refer the reader to Appendix B.

Finally, it is worth reiterating that ICE's treatment of serious criminal offenders did not change with PEP, and the policy therefore did *not* directly alter the incentives for offenders to commit

²³ It is also possible that offenders will be deterred from crime altogether, as opposed to switching to non-Hispanic victims. The two main predictions from this subsection are unchanged in this scenario.

²⁴ Note that the predictions are written as changes in the number of victimizations from a pre-period baseline level.

serious crimes. In this way, PEP differs from other immigration policies—which change the incentives for both victims and offenders—and I conclude that PEP only affected the amount of serious crime committed through its effect on reporting.

3.3 Summary of Predictions

The primary goal of PEP was to increase trust between immigrant communities and law enforcement officials. The new priorities lowered the cost of reporting, and I thus expect the share of incidents reported by Hispanic complainants to increase following the launch of the program. By increasing individuals' likelihood of reporting, I also expect that PEP affected the number of crimes committed; overall, I expect the number of crimes committed against Hispanic victims to decrease and for this decline to be more negative than the change in the number of crimes committed against non-Hispanic victims.²⁵

4 Data and Methodology

4.1 Data on Police Incidents

In order to estimate whether PEP had an effect on a Hispanic individual's willingness to report crime to the police, I utilize data on police incidents in Dallas; these data come from the Crime Analysis Unit of the Dallas Police Department and report information on every incident report written by a DPD officer. These data not only include information about the incident (e.g., the offense code and the location's spatial coordinates), but they also include details about the complainant (e.g., his or her full name as well as race/ethnicity). I restrict the sample to include all reported incidents in which the complainant was categorized as white, black, or Hispanic, and restrict the sample period to the years 2014 through 2016.²⁶

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²⁵ These predictions are similar to those in Comino et al. (2016), which considers the effect of granting amnesty to unauthorized immigrants. Their model predicts that the 1986 policy change increased immigrants' likelihood of reporting crime and reduced the number of immigrants who were victims of crime.

²⁶ Individuals with missing race or ethnicity (0.5 percent of the sample) are excluded from the sample. Individuals categorized as belonging to any other group (roughly 3 percent of the sample) are also dropped since it is not clear if or how they were affected by the new enforcement priorities. With regard to the sample period, the number of ICE detainer requests was often spiking in 2012 and 2013 during Secure Communities, suggesting that 2012 and

Table 1 shows the share of police incidents reported by Hispanics and non-Hispanics in Dallas.²⁷
This table highlights that only 31 percent of incidents are reported by Hispanics, even though roughly 40 percent of Dallas is Hispanic (U.S. Census n.d.a.). In contrast, 38 percent of incidents are reported by black complainants, even though only 23 percent of Dallas is black. These differences could arise from differences in crime rates, reporting rates, or a combination of both. Table 1 also shows the breakdown of reported incidents into violent crimes (e.g., assault and robbery), property crimes (e.g., burglary and theft), low-level offenses (e.g., criminal mischief, disorderly conduct), and non-criminal incidents (e.g., motor vehicle accidents). Roughly 40 percent of the incidents in these data are classified as violent or property crimes, and another 40 percent are classified as non-criminal incidents. The distribution of crimes is generally similar for both Hispanic and non-Hispanic complainants, although a higher share of reported incidents with non-Hispanic complainants are non-criminal events.

To get a better sense of the spatial distribution of Hispanic residents across Dallas, panel (a) in appendix figure A1 shows the share of incidents that have a Hispanic complainant for each tract. Panel (b) uses data from the 2010 Census to display the share of each Census tract's population that is Hispanic. These maps suggests that even though Hispanic communities are concentrated in the southwest and southeast parts of Dallas, most neighborhoods are at least 15–20 percent Hispanic. Moreover, the fact that these two maps are so similar in representing where Hispanic communities reside suggests that the DPD data are relatively accurate in identifying whether a complainant is Hispanic.

4.2 Empirical Strategy

In order to estimate the effect of PEP on the degree to which Hispanic individuals in Dallas reported incidents, I employ a difference-in-differences strategy. The spirit of the analysis is that

²⁰¹³ are not suitable years for the pre-period since the incentives for crime reporting were likely changing then (TRAC 2019). As noted above, PEP was suspended in January of 2017, so I focus on the time period during which the program was active. Doing a similar analysis to the one below with 2017 data shows that the reporting behavior of non-Hispanic individuals seems to change in 2017 (perhaps also because of the new administration), so that non-Hispanic individuals no longer seem like a suitable comparison group in that year.

²⁷ For the remainder of this paper, "non-Hispanic" refers to complainants categorized as white or black by the DPD.

the immigration policy change only affected Hispanic individuals' incentives to report crime, while leaving the incentives unchanged for white and black individuals. I therefore compare the change in the number of police incidents reported by Hispanic individuals (i.e., the treatment group) with the change for non-Hispanic individuals (i.e., the control group) in the *same* neighborhood. The main assumption underlying this approach is that the reporting behavior of Hispanic and non-Hispanic individuals would have continued to trend similarly in the absence of PEP. This analysis also assumes that unauthorized immigrants as well as individuals with non-citizen contacts in Dallas are more likely to be Hispanic.²⁸

Specifically, I estimate the following equation:

$$\ln(\operatorname{Incidents})_{nht} = \beta_0 + \beta_1 \operatorname{Hispanic}_h + \sum_{t=-6}^{6} \theta_t(\operatorname{Hispanic}_h \times \operatorname{Quarter}_t) + \lambda_t + \omega_n + \varepsilon_{nht}$$
 (1)

where n, h, and t index neighborhoods, Hispanic ethnicity, and time, respectively. The dependent variable is the logged number of incidents in neighborhood n, in time period t, reported by ethnicity h. Equation (1) estimates a coefficient θ_t for each quarter in the sample, so that I can plot changes in reporting over the entire time period (with the difference in reporting centered at zero in the second quarter of 2015 before PEP is launched).

I also group pre- and post-PEP quarters and quantify the average effects from equation (1) by fitting simplified models of the following form:

$$ln(Incidents)_{nht} = \beta_0 + \beta_1 Hispanic_h + \beta_2 (Hispanic_h \times Post_t) + \lambda_t + \omega_n + \varepsilon_{nht}$$
 (2)

 β_2 is a difference-in-differences estimate, capturing the extent to which changes in reporting before and after PEP differ for Hispanics relative to non-Hispanics.

²⁸ In the 2012–2016 American Community Survey, 80 percent of non-citizen individuals residing in Dallas County Public Use Microdata Areas (PUMAs) were Hispanic (Ruggles et al. 2019).

²⁹ The level of observation is ethnicity × neighborhood × quarter × year. Some neighborhoods have zero incidents reported by either Hispanics or non-Hispanics in a quarter × year. In order to incorporate these observations into the analysis, I add one to all of the counts and then apply the log transformation. I choose to use the log transformation in order to reduce the influence of outliers and to estimate the average percent change in crime reporting (since there is wide heterogeneity in crime reporting across neighborhoods).

The specifications include neighborhood fixed effects to absorb level differences in crime across neighborhoods. Both models also include quarter × year fixed effects to account for time-variant factors, such as the seasonality of crime, that influence the number of police incidents. Standard errors are clustered at the neighborhood level. In all of the main results, a neighborhood is synonymous to a Census tract (of which there are approximately 340 in Dallas, with an average population of 4,000 individuals), but I check the robustness of results to the definition of neighborhood in Section 5.

4.3 Interpreting the Difference-in-Differences Estimate

In the empirical strategy, β_2 is the coefficient of interest, estimating how the difference in the number of incidents reported by Hispanics and non-Hispanics changes before and after the policy. I now discuss how a positive coefficient implies that Hispanic reporting increased and how β_2 is likely underestimating the increase in crime reporting.

The number of incidents in the data is a function of both the total amount of crime that occurred as well as the share of incidents that were reported:

$$\hat{N}_{ht} = N_{ht} \times P_{ht} \tag{3}$$

where $t \in \{0,1\}$ represents the time before and after the policy change, and $h \in \{H,N\}$ represents Hispanic and non-Hispanic complainants. N_{ht} is therefore the number of crimes committed against ethnicity h in time period t, and P_{ht} is the share of incidents reported by ethnicity h in time period t (or in other words, ethnicity h's probability of reporting an incident to the police).

Empirically, equation (2) estimates the difference-in-differences coefficient as follows:

$$\beta_2 = \mathbb{E}[(\ln(\hat{N}_{H,1}) - \ln(\hat{N}_{H,0})) - (\ln(\hat{N}_{N,1}) - \ln(\hat{N}_{N,0}))]$$
(4)

difference-in-differences coefficient.

One might think that the desired specification would include neighborhood × time fixed effects in order to flexibly control for idiosyncratic shocks within a neighborhood and quarter. However, each neighborhood × time pair in the data has exactly one treatment and one control observation. So by construction, the empirical approach already compares the treatment and control units within a neighborhood and quarter × year. Including neighborhood × time fixed effects does not change the treatment-control differences, and therefore mechanically does not affect the

Plugging in equation (3) into equation (4) and assuming that $P_{N,0} = P_{N,1}$ (i.e., non-Hispanic complainants' propensity to report crime did not change with PEP), we see that:

$$\beta_{2} = \underbrace{\mathbb{E}[\ln(P_{H,1}) - \ln(P_{H,0})]}_{\text{(a): Hispanic reporting effect}} + \underbrace{\mathbb{E}[\ln(N_{H,1}) - \ln(N_{H,0})]}_{\text{(b): Hispanic victimization effect}} - \underbrace{\mathbb{E}[\ln(N_{H,1}) - \ln(N_{H,0})]}_{\text{(c): Non-Hispanic victimization effect}}$$
(5)

The first term of this expression is the program's effect on Hispanic individuals' propensity to report incidents to the police (i.e., the main parameter of interest). Given the program's goals, we expect this term to be positive. The second and third terms represent the changes in the number of crimes committed against Hispanic and non-Hispanic individuals, respectively. Based on the theoretical predictions in Section 3.2, we expect the second and third terms to be negative due to increased reporting and for the change in (b) to be greater in magnitude than the change in (c). These predictions imply that if β_2 is positive, it must be the case that Hispanic individuals' propensity to report incidents increased.

Importantly, the empirical strategy allows us to compare the change in the number of victimizations in the *same* neighborhood. Following the predictions outlined above, if Hispanic individuals are now victimized less often than non-Hispanic individuals in the same neighborhood (i.e., (b) minus (c) is negative), then β_2 will be an underestimate of the increase in the share of incidents that are reported by Hispanic individuals. Alternatively, if the number of victimizations declined equally for Hispanic and non-Hispanic individuals in the same neighborhood (i.e., (b) and (c) are each negative but essentially equal to each other), then we can simply interpret β_2 as the increase in Hispanic complainants' propensity to report incidents in the average neighborhood.

5 Results

5.1 Increase in Total Number of Reported Incidents

I first plot the raw data to see how the number of incidents reported by Hispanic and non-Hispanic complainants trended over time. Figure 3 shows that reporting by Hispanics and non-Hispanics mirror each other from 2014 through the second quarter of 2015. In the third quarter of 2015 however (at the time PEP is launched), reporting by Hispanics begins to increase and diverges

from the reporting patterns of non-Hispanics.

To visualize the reporting behavior of Hispanics and non-Hispanics over time after taking into account neighborhood and time fixed effects, panel (a) of Figure 4 plots the reporting behavior of the two groups separately. This figure confirms that the reporting behavior of the treatment and control group trended similarly (providing support for the parallel trends assumption), and then deviated with the launch of PEP. Panel (b) of Figure 4 plots the θ_t coefficients from equation (1), showing the difference in reporting between Hispanic and non-Hispanic complainants over time. The figure shows that after the launch of PEP, the Dallas Police Department saw an increase in the number of police reports with a Hispanic complainant. The corresponding result in column 1 of Table 2 suggests that reporting of incidents by Hispanic complainants increased by around 8 percent (on a baseline of 35 incidents per tract per quarter) following the introduction of PEP.

The 8 percent increase implies that on average, the police was notified of three more incidents in each neighborhood per quarter following the introduction of PEP. A back-of-the-envelope calculation suggests that in the six quarters that PEP was in effect, the police was notified of around 6,000 more incidents than they would have been if the enforcement priorities had not changed.³¹ Another way to gauge the magnitude of this estimate is to assume that PEP only affects the behavior of unauthorized immigrants (and not of individuals in their networks); if roughly 25 percent of the Hispanic population in Dallas is unauthorized, then the 8 percent result suggests an implied effect of the policy of 32 percent for unauthorized immigrants.³²

In terms of comparing this magnitude to those found in other studies, Comino et al. (2016) finds that the 1986 Immigration Reform and Control Act, which provided legal status to millions of immigrants, increased the reporting rate of unauthorized individuals by 20 percentage points.³³

³¹ There were roughly 150,000 total incidents in Dallas while PEP was in effect, and roughly 45,000 of those were reported by Hispanic individuals.

³² The unauthorized share comes from the author's calculations using U.S. Census Bureau (n.d.b.) and Migration Policy Institute (2018).

³³ As another point of comparison, Miller and Segal (2018) find that a 7.4 percentage point increase in the female police officer share (corresponding to the increase in average female officer share between 1979 and 1990) increases the reporting of female assaults by 7 percentage points; this estimate corresponds to a 14 percent increase in women's likelihood of reporting an assault.

Nevertheless, it is not straightforward to compare PEP's effect to that of other policies since an elasticity of reporting cannot be calculated; although PEP had straightforward goals, it is not obvious who responded to the policy change (i.e., unauthorized immigrants, their families, their networks) and to what degree the cost of reporting a crime fell (i.e., by how much the likelihood of deportation changed with the policy). However, to the extent that building trust is more difficult than perpetuating fear, we would expect the findings of this study to be smaller in magnitude than those found in studies about immigration policies' "chilling" effects.³⁴

Finally, it is worth noting the timing of the response. The theoretical framework outlined above suggests that individuals will alter their reporting behavior following a change in the immigration-related cost of reporting a crime. Figure 4 shows that the number of Hispanic complainants increases following PEP's introduction, even though the enforcement environment began changing with the program's announcement (as seen in Figures 1 and 2). The timing of the response is thus consistent with individuals' perceived probability of deportation changing with the official adoption of PEP, thereby suggesting that the formality of an immigration policy change might be an important factor for improving trust between immigrant communities and the police.

5.2 Changes in Reporting by Crime Type

The incident-level data include all types of police incidents such as assaults, burglaries, drug offenses, and accidents. In this subsection, I classify the incidents into three categories, estimate the policy's effect on reporting for each crime type, and discuss the corresponding estimates and interpretations.

5.2.1 Serious Crimes

I first restrict the sample to incidents that are classified as either violent or property crimes using the Uniform Crime Report (UCR) offense code (roughly 40 percent of all incidents).³⁵ As noted

³⁴ Alsan and Yang (2018) finds that the implementation of Secure Communities resulted in a 10 and 30 percent decline in the take up of food stamps and Supplemental Security Income, respectively, among Hispanic citizen households.

³⁵ The Dallas Police Department changed its crime classification methods in June of 2014; for the remaining specifications in this and the following two subsections, I begin the sample period with the third quarter of 2014 (although the main findings are relatively unchanged if I maintain the full sample period). If I restrict the sample

earlier, since PEP prioritized the removal of offenders of these serious crimes—and thus did not incentivize offenders to commit more of these offenses—a positive β_2 coefficient implies that the program increased the propensity of Hispanic individuals to report serious crimes.

Column 3 of Table 2 displays the results; I find an increase of roughly 4 percent in the reporting of these more serious incidents by Hispanic complainants. Moreover, as noted in Section 4.3, if we assume that Hispanic individuals were victimized less often than non-Hispanic individuals after PEP—i.e., (b) minus (c) is negative in equation (5)—then this 4 percent estimate is likely a lower-bound for the increase in the share of crimes reported by Hispanic individuals. A similar back-of-the-envelope calculation as the one above suggests that the police was notified of around 1,200 more violent or property crimes than they would have been in the absence of the program.

As a placebo check, I consider murders, since we would not expect to see a change in the number of victimizations or in the amount of reporting (because they typically already have high reporting rates) following the introduction of the program. Indeed, column 4 of Table 2 shows that the policy has a precisely estimated zero effect on the reporting of murders.

5.2.2 Non-Criminal Incidents

I now consider incidents that are not criminal in nature (another 40 percent of the total incidents in the sample). More specifically, residents of Dallas report incidents to the police that do not represent criminal activity, such as motor vehicle accidents, animal bites, missing persons, and other miscellaneous incidents. Because these events do not typically involve perpetrators, it is straightforward to estimate PEP's effect on individuals' willingness to contact the police. In other words, if we assume that the number of these incidents did not change with PEP, then we can interpret the β_2 estimate as solely reflecting the increased propensity of Hispanic individuals to report non-criminal incidents to the police.³⁶

period in this way for all incidents, the difference-in-differences coefficient in column 2 of Table 2 also suggests an 8 percent increase in the reporting of incidents.

³⁶ One caveat is that it is possible that this estimate might be a combination of increased reporting and increased human activity (e.g., unauthorized individuals leaving the house more freely), so that (a) and (b) in equation 5 would both be positive. If so, then β_2 is an upper-bound on the increase in the probability of reporting non-criminal incidents.

Column 5 of Table 2 shows an increase of 8 percent in the reporting of these non-criminal events. These findings imply that PEP not only incentivized crime reporting, but also incentivized Hispanic individuals, who might have previously been hesitant to interact with law enforcement over non-criminal matters, to report these incidents to the police.

5.2.3 Low-Level Offenses

Finally, I consider low-level offenses (e.g., drunk and disorderly conduct, vandalism), which are roughly 20 percent of total incidents. Given PEP's focus on detaining serious criminals, it is plausible that the new priorities might have decreased the likelihood of deportation for offenders of these less serious incidents, thereby incentivizing unauthorized individuals to commit more low-level offenses. If so, then the β_2 estimate might reflect changes in reporting as well as changes in low-level offending. In the parlance of Section 4.3, if both of the victimization terms in equation (5) are positive, and if the change in the number of victimizations is larger for Hispanic individuals than for non-Hispanic individuals (e.g., if unauthorized offenders tend to victimize Hispanic individuals), then the β_2 coefficient might reflect both a reporting as well as a victimization effect.³⁷

Table 2 shows a 5 percent increase in the number of these offenses reported by Hispanic complainants. Interpreting this coefficient—and comparing it to the coefficient for serious offenses—is not straightforward. On the one hand, there might be heterogeneity by crime type in the policy's effect on reporting, so that the difference in the coefficients could partially be capturing this heterogeneity.³⁸ On the other hand, if we assume homogeneous effects by crime type, then we could conclude that Hispanic complainants' overall propensity to report criminal activity rose by 4 percent and that the program increased Hispanic offenders' propensity to commit lower-level offenses by roughly 1 percent. Overall, though, this estimate suggests that the police was notified of around 700 more low-level offenses after the launch of PEP, likely driven by increased reporting but potentially also by increased offending.

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³⁷ For a lengthier discussion, I refer the reader to Section B.3 in Appendix B.

³⁸ For example, if individuals were already reporting serious crimes to the police before PEP, but were on the margin of reporting less serious incidents, then we would expect to see a larger effect for this latter group.

5.3 Alternate Definitions of Neighborhoods and Hispanic Ethnicity

There are alternative ways to divide Dallas into neighborhoods besides using Census tracts. To check the robustness of the main results, I run the same specification but use bigger and smaller neighborhoods: namely, the Dallas Police Department's police beats (of which there are roughly 235) and reporting areas (of which there are roughly 1,150). The corresponding results in Figure 5 and Table 3 confirm the robustness of the main result, and suggest that the total number of incidents reported by Hispanics increased by approximately 6–10 percent after PEP.

Up to this point, I have been identifying Hispanic complainants using the race/ethnicity recorded by the police. If Hispanic people were more willing to identify themselves as Hispanic to law enforcement or if police officers were more willing to write down that a complainant was Hispanic after PEP, then I would see an increase in the number of Hispanic complainants that was unrelated to an increased willingness to contact the police. To rule out these explanations, I use the last name of the complainant to identify Hispanic ethnicity. Following Arnold et al. (2017), I match the surnames in the DPD data to the 2010 Census genealogical records of surnames. If the probability that a given surname is Hispanic is greater than 80 percent, I identify this complainant as Hispanic.³⁹ The Hispanic identification written down by the DPD is highly correlated to the Hispanic identification using surnames for all years in the sample period (overall correlation of 0.88), implying that the DPD data are relatively accurate in identifying Hispanic complainants. Appendix Figure A2 and Table 3 show that the main results are hardly changed when using surnames, which leads me to conclude that the increase in complaints is indeed driven by a greater number of Hispanic complainants and not by different patterns in identifying Hispanic ethnicity over time.⁴⁰

Additional robustness checks are included in Appendix Tables A1 and A2. In the former, I

³⁹ I am able to match 91 percent of last names to the 2010 record of surnames. For individuals with more than one surname, I match each surname individually and jointly. If any of the probabilities are greater than 80 percent, then I label this individual as Hispanic.

⁴⁰ An alternative way to consider this possibility is to see whether the rates of missing ethnicity and names declines after PEP; I find that the share of observations with missing ethnicity or name does not fall after the introduction of the program, thereby suggesting that the results are not driven by improved recording of Hispanic complainants in the incident reports.

confirm the robustness of the results by crime type to these alternative definitions. In the latter table, columns 2 and 3 confirm that the findings are robust to only counting each incident once and to using reporting rates as the dependent variable instead of the logged number of incidents.⁴¹

5.4 No Effect on Clearance Rates

As discussed above, PEP's primary goal was to re-establish trust between immigrant communities and the police. In addition to studying changes in the number of incidents reported, I also consider a different component of community trust in the police: changes in cooperative behavior, as proxied by changes in the clearance rate of crimes (i.e., the share of incidents that were "closed" or "cleared by arrest").

Ex-ante, it is not clear if or how we should expect the clearance rate to change with the new policy's priorities. On the one hand, the program might have significantly increased community cooperation, thereby making it easier for the police to solve crimes. On the other hand, the program might have alerted the police to more crimes or changed the composition of crimes committed, without necessarily improving the police's ability to solve them.

Panel (a) of Figure 6 plots the raw data, showing that the clearance rate for crimes reported by Hispanic and non-Hispanic complainants seem to mirror each other over time. Panel (b) shows the results from an empirical estimation, similar to that of equation (1) but using the clearance rate as the dependent variable. This figure illustrates that the clearance rate of incidents reported by Hispanics trended similarly to the clearance rate of incidents reported by non-Hispanics. These graphs therefore indicate that even though the DPD was informed of more incidents by Hispanic complainants after the launch of PEP, it was still able to clear a similar share of them in order to keep the clearance rates across ethnicities comparable. This result mirrors Miles and Cox (2015)'s

⁴¹ One might wonder whether the 8 percent increase actually resulted in reporting *more* crime to the police, or whether these complainants reported crimes that the police would have known about anyway (for example, if non-Hispanic individuals would have also reported the same crime). To test this possibility, column 2 runs the same specification as above, but this time only counting each incident *one* time (in contrast to counting each complainant-incident pair). For incidents with multiple complainants, I assume the incident was reported by a non-Hispanic individual if any of the complainants were non-Hispanic. The main result hardly changes in this specification, suggesting that the increase in Hispanic complaints was likely not driven by double reporting of incidents that the police would have seen anyway.

and Hines and Peri (2019)'s findings that the introduction of the Secure Communities program did not affect police's clearance rates.

Finally, it is worth noting that the lack of a decrease in the clearance rate, together with a higher number of incidents reported, suggest that the DPD was able to clear a larger number of incidents after PEP's introduction. Appendix Table A3 shows that the number of "cleared" incidents increased by 5 percent after the introduction of PEP.

6 Ruling Out Alternative Explanations

So far, I have found that the number of incidents reported by Hispanic individuals increased by roughly 4–8 percent after the introduction of PEP. However, if something besides individuals' willingness to report crime changed at the same time that PEP was introduced, then I could be incorrectly attributing this rise in the number of complaints to increased willingness to report crime. In this section, I consider two other possible explanations—increased criminal behavior and population growth—that could result in more Hispanic individuals reporting incidents to the police.

6.1 Increasing Criminal Behavior

As noted previously, the reason that PEP is a particularly useful policy for studying an individual's willingness to report crime is that it increases the incentive to report crime, without reducing the punishment for serious criminal offenses. Moreover, the empirical strategy allows me to see how reporting by Hispanic complainants changes relative to reporting by non-Hispanic complainants in the *same* neighborhood, thereby holding overall victimization levels relatively constant in the comparison. Nevertheless, I still consider the possibility that Hispanic offenders decided to commit more crimes at the time of PEP's introduction, so that part of the increase in the number of Hispanic complaints I find is driven by this increase in criminal behavior (because Hispanic offenders often commit crimes against other Hispanic individuals).

To test for this scenario, I use arrest data from the Dallas Police Department to see whether Hispanic individuals seem to be committing more crime after PEP. I first consider the arrests that can be linked to specific incident reports, and focus only on the incidents reported by non-Hispanic complainants.⁴² By focusing on white and black individuals whose reporting incentives did not change with PEP, I can isolate changes in the criminal behavior of Hispanic individuals. If the share of arrested individuals who are Hispanic increases after PEP, then this increase would suggest that Hispanic individuals were indeed committing more crime. Figure 7(a) shows that the share of arrestees who are Hispanic seems to stay relatively constant after PEP.

Because focusing on crimes with non-Hispanic complainants might reduce the types of crimes considered to select cases, I also consider all arrests (i.e., not just the arrests that can be linked to specific incident reports). The analogous time series is shown in panel (b) of Figure 7. Like with the previous graph, the lack of an increase in the share of arrestees who are Hispanic implies that Hispanic individuals in Dallas did not suddenly commit more crimes following the introduction of PEP relative to non-Hispanic offenders.⁴³

Appendix Figure A4 illustrates this point in a different way, plotting the number of Hispanic and non-Hispanic arrestees over time as well as the corresponding difference-in-differences estimates. Panel (b) plots the estimates from the baseline specification (i.e., equation (1)) but using the logged number of arrestees of ethnicity h, in neighborhood n, and in time period t as the dependent variable. Because we might be particularly worried that PEP incentivized individuals to commit more low-level offenses (or to shift from serious crimes to low-level offenses), I also show the corresponding difference-in-differences estimate for arrestees charged with misdemeanors (panel (c)). All of these figures confirm that the number and percent of Hispanic arrestees does not increase relative to non-Hispanic arrestees after the introduction of PEP.

It is worth acknowledging that since most criminal offenders are not arrested, any analysis that relies on arrest data is not going to tell a full picture about who is committing crime. However, if the change in policy did incentivize Hispanic offenders to commit more crime, then we should

⁴² Because most incidents are not immediately resolved with an arrest, only a small share of the incidents in the data can be linked to arrests.

⁴³ I can do this same exercise with data on suspects. Unlike with the arrest-level data, many more incidents have suspects, so the sample size used for this figure is larger. Appendix Figure A3 shows that the share of suspects who are Hispanic—for incidents reported by non-Hispanic complainants and for all incidents—also seems to stay relatively unchanged over this time period.

see a corresponding increase in Hispanic arrestees as long as law enforcement officials investigate incidents reported by all ethnicities equally, both before and after the policy change. The fact that we do not see an increase in arrestees—together with the fact that the DPD did not alter its behavior, as evidenced by the lack of a change in clearance rates—lead me to conclude that the increase in reported crime that I find is not driven by Hispanic offenders' increased propensity to commit crime.⁴⁴ These findings therefore suggest that at least in Dallas, PEP achieved its intended goal of increasing trust in law enforcement without adversely impacting crime rates.⁴⁵

6.2 Population Growth and Other Economic Factors

The main result of the analysis shows that Hispanic individuals reported more incidents to the police following the introduction of PEP. However, if there was a large influx of Hispanic people into Dallas around this time, then part of the increase in the number of complaints could be driven by growth in the Hispanic population. Previous papers in the literature have indeed shown that migration choices can be responsive to immigration policy. For example, Bohn et al. (2014) show that Arizona's immigrant population declined quickly and significantly after the passage of the 2007 Legal Arizona Workers Act. In the case of Dallas in 2015, sudden growth in the Hispanic population would have had to be the result of the Dallas County Sheriff's local enforcement of the policy (given that PEP was a federal policy).

To test whether there was an influx of Hispanic people into the Dallas area around the time of

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⁴⁴ In other words, if the DPD de-prioritized the investigation of crimes with Hispanic complainants, then we might see an increase in criminal behavior as well as a lack of an increase in Hispanic arrestees. However, the previous result showing that clearance rates did not change for incidents with Hispanic complainants rules out this possibility. Moreover, the null clearance rate result also helps rule out the possibility that Hispanic offenders are only committing crimes for which the clearance rate is nearly zero (thus explaining the lack of an increase in Hispanic arrestees); in that scenario, we would also see a drop in the clearance rate of incidents with a Hispanic complainant.

⁴⁵ I can do a similar analysis using aggregate statistics from the National Crime Victimization Survey (NCVS), which reflects the "true" trends in victimizations (Bureau of Justice Statistics 2019a; 2019b). Even though the sample size of Hispanic individuals reporting an incident is relatively small, the trends in the data show that neither violent nor property victimizations of Hispanic people outpaced those of non-Hispanics in the months following PEP's introduction, both nationally or in the South. These results thus indicate that the increase in reported crime I see in Dallas was likely not driven by Hispanic individuals being victimized more often after the launch of PEP.

⁴⁶ Similarly, Watson (2013) shows that foreign-born individuals, especially non-citizens, relocated within the United States following the local adoption of 287(g) agreements.

PEP's introduction, I use the American Community Survey (ACS) for 2012–2016 (Ruggles et al. 2019). Panel (a) of Appendix Figure A5 shows the share of the population that is Hispanic in the Dallas-Forth Worth-Arlington (DFW) metropolitan area and in Dallas County. Panel (b) shows the same time series, but for the share of the population that is Hispanic and not a citizen. The graphs illustrate that the share of Hispanic individuals, and of Hispanic non-citizens in particular, seems to stay relatively unchanged between 2012 and 2016. Importantly, it does not appear that there was a significant influx of Hispanic individuals into the DFW metropolitan area or into Dallas County around the time of PEP's launch, which suggests that the increase in Hispanic complainants was likely not driven by population growth.

I confirm this finding by using student enrollment reports from the Texas Education Agency's Public Education Information Management System (PEIMS). Appendix Figure A6 shows that the share of students who are Hispanic in Dallas County and in the Dallas Independent School District stayed relatively constant at 55 percent and 70 percent, respectively, between 2011 and 2017.

Finally, a similar threat to the identification of PEP's effect could be that "treatment" (i.e., being Hispanic) was correlated with other shocks occurring around the same time as PEP's introduction. To explore this possibility, Appendix Figure A7 shows the aggregate unemployment rate in the DFW metropolitan area as well as the annual employment and poverty rates by Hispanic ethnicity in Dallas County.⁴⁷ The results confirm that economic outcomes did not deviate differentially for Hispanic and non-Hispanic individuals around the launch of PEP.

7 Discussion

The empirical findings of this paper imply that more-targeted immigration policies can incentivize Hispanic individuals to report more incidents to the police. In terms of generalizing these results to other states and localities, it is important to acknowledge that even though PEP was a federal program, it was enforced at the local level by the Dallas County Sheriff's Office. Indeed, shortly

⁴⁷ Since 40 percent of Dallas' population is Hispanic, if the unemployment rate of the Hispanic population suddenly increased while that of non-Hispanics stayed constant, then we should expect the aggregate unemployment rate to increase as well.

after the introduction of PEP, Sheriff Lupe Valdez implemented a local policy, in which the Sheriff's Office reviewed each of ICE's detainer requests to ensure that only serious criminals would be detained.⁴⁸

Even though the local policy mirrored PEP's priorities, Sheriff Valdez received significant media attention after introducing these guidelines.⁴⁹ Texas Governor Greg Abbott publicly criticized the Sheriff's policy and wrote a letter to Sheriff Valdez demanding that Dallas County unconditionally honor all ICE requests.⁵⁰ Sheriff Valdez responded to Governor Abbott's criticism by assuring him that she had not denied any of their requests in the first two months of the policy.⁵¹

Given the amount of media attention surrounding the clash between the Sheriff and the Governor, it is possible that Hispanic individuals in Dallas were particularly well-informed about the change in the immigration enforcement environment. It is thus plausible that some Hispanic individuals were more willing to report incidents because of the Sheriff's new policy, rather than because of the federal program (even though on paper the two policies were essentially the same).⁵² If so, then we might expect increases in reporting to perhaps be of different magnitudes in other cities, in accordance with the local salience of the immigration policy among their Hispanic population.

⁴⁸ The Dallas Morning News reported that the Sheriff introduced this policy after meeting with ICE officials as well as activists from the Texas Organizing Project, and that the policy was well-received by the activist group. See: "Activist group commends Dallas County Sheriff's Department for new policy." *The Dallas Morning News*. September 19, 2015.

⁴⁹ The Dallas Morning News published at least ten articles between mid-September and mid-December, detailing the widespread support for and criticism of the Sheriff's new policy (articles accessed via Newsbank's archives of *The Dallas Morning News*, 1984–2016).

⁵⁰ Following the Governor's letter, support for Sheriff Valdez grew with the hashtag #StandWithLupe. Both the Texas Democratic Party and its collegiate arm, the Texas College Democrats, released statements of support for the Sheriff. The latter group claimed that they "support [Sheriff Valdez] in her efforts to build a strong relationship between the Sheriff's department and the residents of Dallas County."

⁵¹ The sheriff's spokesman noted, "ICE is familiar with our agreement and doesn't submit a detainer unless it falls into the upper two categories that are designated so in effect we have declined zero. See: "Dallas sheriff responds to Texas governor: All ICE detainers honored this year." *The Dallas Morning News*. October 26, 2015.

⁵² The Dallas director of the Texas Organizing Project claimed that the Sheriff's policy had "strengthened trust and safety in the community." It is also worth noting that Dallas residents might have been particularly well informed (relative to other localities) because of the Dallas Police Department's Latino Community Outreach program, which provides Hispanic communities with resources and information; each Division Patrol holds quarterly meetings throughout the year and brings in speakers (for example, individuals from Catholic Charities or the Mexican consulate) to talk about immigration laws and other relevant topics with community leaders and other attendees.

Without similar administrative data from other cities, it is difficult to come to a definitive conclusion about the extent to which the local enforcement of the new priorities contributed to the surge in crime reporting.⁵³ Nevertheless, the main take-away from the increase we see in Dallas seems to be that introducing immigration policies that shift enforcement attention away from individuals who do not pose a threat to public safety can serve as a way to improve trust between immigrants and law enforcement officials. Improving our understanding of how a policy's local salience can affect the magnitude of the subsequent community response is a fruitful avenue for future research.

8 Conclusion

In this paper, I study the launch of the Priority Enforcement Program and estimate the degree to which the program increased Hispanic individuals' willingness to report incidents to the police. PEP was introduced to replace Secure Communities, and thus to re-establish cooperation between local law enforcement and ICE. In order to do so, PEP restricted ICE's enforcement priorities to focus only on individuals who posed a threat to public safety, and not on individuals who had only committed immigration offenses. These narrower priorities therefore reduced the cost of reporting incidents for immigrant victims, without lowering the punishment for serious criminal offenses. Unlike other immigration policies that typically affect both victims and offenders, the introduction of this program allows me to directly estimate the effect of immigration enforcement on crime reporting.

Using incident-level data from the Dallas Police Department that contains the ethnicity of the complainant, I employ a difference-in-differences strategy to estimate the degree to which reporting by Hispanic complainants changed relative to reporting by non-Hispanic complainants

⁵³ In theory, one could do a similar analysis with data from the National Incident-Based Reporting System (NIBRS). Unfortunately, the variable for Hispanic ethnicity is often missing in this data and many states with large Hispanic populations (e.g., California, Florida) do not report incidents to this system. Since the difference-in-differences is contingent on accurate and consistent identification of Hispanic individuals over time, administrative data from police departments (that includes a reliable Hispanic identifier as well as names and locations in order to verify the accuracy of the Hispanic identifier) is far better for this analysis. Moreover, the NIBRS data is collected at the agency level, which would not allow me to compare individuals residing in neighborhoods with similar crime levels.

in the same neighborhood. I find that after PEP was introduced, the total number of incidents reported by Hispanic individuals increased by around 8 percent. Disaggregating by crime type, I find that PEP increased Hispanic victims' likelihood of reporting violent and property crimes by roughly 4 percent. The results are robust to a number of checks (including using the surname of the complainant to identify Hispanic ethnicity and alternative definitions of neighborhood), and I also rule out alternative explanations for this increase in reporting (namely, increased criminal behavior and population growth). The estimates imply that the Dallas Police Department was notified of around 6,000 more incidents than it would have been otherwise, including 1,200 more violent and property crimes. Moreover, since some criminal offenders might have been dissuaded from committing crime because of the increased reporting, these numbers are likely conservative estimates. Finally, I find that the clearance rate remained unchanged following the introduction of the policy, but because more incidents were reported to the police, the DPD was able to "clear" a larger number of incidents.

Overall, the findings of this paper suggest that lessening immigration enforcement of individuals who do not pose a threat to public safety (i.e., crime victims) can enhance levels of trust between immigrant communities and law enforcement, and thus increase immigrants' propensity to report incidents to the police. Quantifying the program's effect on underlying crime rates is beyond the scope of this paper and an important topic for future research. However, to the extent that increased reporting deterred criminals or helped law enforcement officials do their job more effectively, this paper provides evidence that tailored immigration policies can play a role in improving public safety and the effectiveness of police departments.

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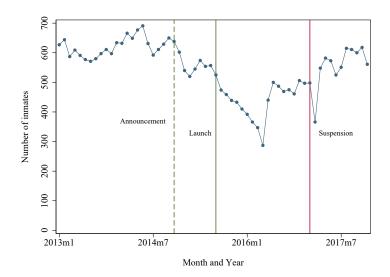
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10 Figures and Tables

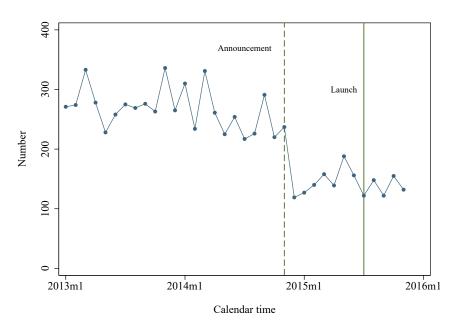
Figure 1: Inmates in Dallas County with Immigration Detainers



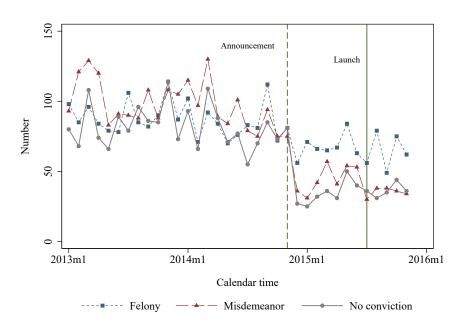
NOTE: This figure plots the number of inmates in Dallas County with immigration detainers (i.e., individuals being held in jail or prison at ICE's request prior to being transferred to federal immigration authorities). Data come from reports for the Texas Commission on Jail Standards. The dashed and solid green lines mark the announcement and launch of PEP, respectively. The red line marks the month in which PEP was suspended.

Figure 2: Number of Detainers Issued in Dallas County

(a) Total Number of Detainers

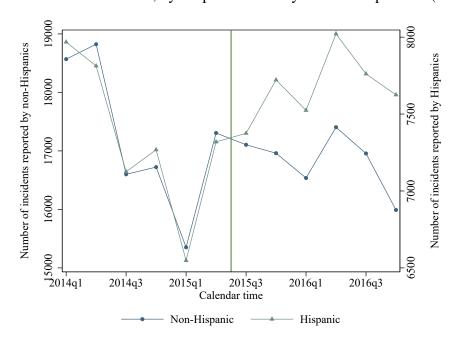


(b) Detainers by Most Serious Criminal Conviction



NOTE: This figure plots the number of detainer requests over time, using data on detainer requests from the Transactional Records Access Clearinghouse (TRAC 2018). "Felony" refers to detainer requests issued for individuals convicted of a felony or aggravated felony. "No conviction" refers to detainer requests issued for individuals who were either charged but not convicted of a crime or neither charged nor convicted of a crime. The vertical dashed and solid lines mark the announcement and launch of PEP, respectively.

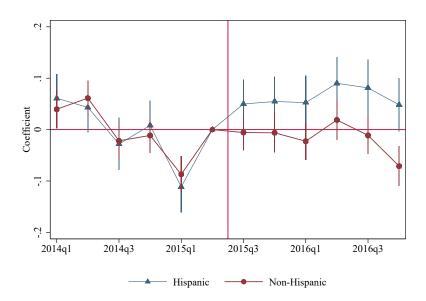
Figure 3: Number of Incidents, by Hispanic Ethnicity of the Complainant (Raw Data)



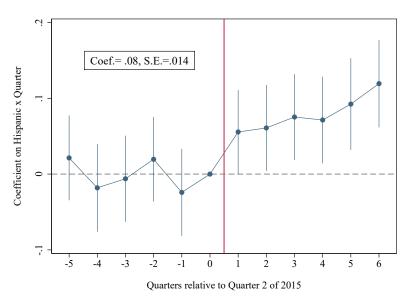
NOTE: This figure plots the number of incidents reported by non-Hispanic and Hispanic complainants (left and right y-axis, respectively). The green line represents the launch of PEP in the third quarter of 2015.

Figure 4: Difference in Crime Reporting for Hispanics and non-Hispanics

(a) Treatment vs. Control



(b) Difference-in-Differences Estimates

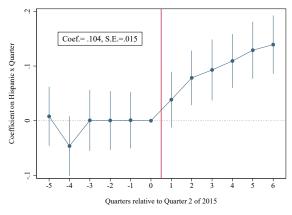


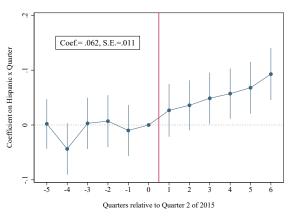
NOTE: This figure uses all police incidents from the Dallas Police Department between 2014 and 2016. Panel (a) plots the time coefficients from equation (1) (i.e., reporting by the control group) against the sum of the time coefficients and the corresponding Hispanic \times time interactions (i.e., reporting by the treatment group). Panel (b) plots the coefficients on Hispanic \times Quarter from equation (1). The coefficient and standard error reported are the difference-in-differences estimates from equation (2). Standard errors are clustered at the Census tract level.

Figure 5: Difference in Crime Reporting Using Different Definitions of Neighborhoods

(a) Beats

(b) Reporting Areas



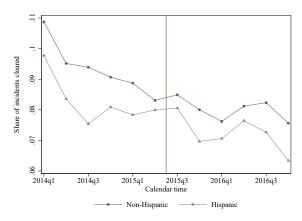


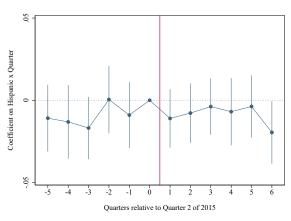
NOTE: This figure plots the coefficients on Hispanic × Quarter from equation (1) using all police incidents from the Dallas Police Department between 2014 and 2016. The coefficients and standard errors reported in the figures are the difference-in-differences estimates from the corresponding equation (2). Standard errors are clustered at the neighborhood level.

Figure 6: Clearance Rates for Incidents with Hispanic and non-Hispanic Complainants

(a) Raw Data

(b) Difference-in-Differences Estimates



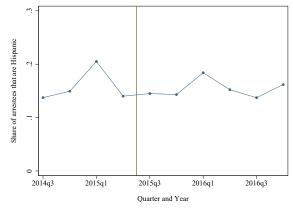


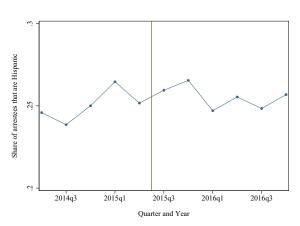
NOTE: This figure uses all police incidents from the Dallas Police Department for 2014–2016. An incident is considered "cleared" if it was cleared by arrest or if it was closed. Panel (a) plots the raw data of clearance rates for incidents reported by Hispanics and non-Hispanics over time. Panel (b) plots the coefficients on Hispanic \times Quarter from an analogous version of equation (1), which uses the clearance rate of incidents reported by ethnicity h in neighborhood n and in time period t as the dependent variable. Standard errors are clustered at the Census tract level.

Figure 7: Share of Arrestees that are Hispanic

(a) For incidents reported by non-Hispanics

(b) All arrests





NOTE: These figures plot the share of arrestees that are Hispanic using arrest data from the Dallas Police Department for 2014–2016. Hispanic arrestees are identified using the race/ethnicity marked down by the DPD. Panel (a) only uses arrests that can be linked to the incident-level data, and whose complainant was non-Hispanic. Panel (b) uses all arrests. The green line indicates the launch of PEP.

Table 1: Summary Statistics for Police Incidents in Dallas, by Ethnicity of Complainant

	All Incidents	Incidents with Hispanic Complainant	Incidents with Non-Hispanic Complainant
Hispanic	0.31		
Black	0.38		0.55
White	0.31		0.45
Violent crime	0.12	0.14	0.12
Property crime	0.30	0.33	0.28
Low-level offense	0.19	0.19	0.19
Non-criminal incident	0.39	0.35	0.41
Observations	294,397	90,069	204,328

NOTE: These data include all incidents for 2014–2016 in which the complainant was classified as white, black, or Hispanic. Non-Hispanic refers to individuals categorized as "white" or "black" in the data. All crimes are classified using the Uniform Crime Report offense code. Violent crime refers to assault, human trafficking, kidnapping, intoxicated manslaughter, murder, robbery, terrorist threats, weapons offenses, and organized crime. Property crime refers to arson, burglary, thefts, and unauthorized use of a motor vehicle (UUMV). Low-level offenses refer to crimes classified as alarm incidents, criminal mischief, criminal trespassing, disorderly conduct, DWIs, embezzlement, escaping/evading, forge and counterfeit, fraud, liquor offenses, lost property, narcotics and drugs, offenses against child, prostitution, resisting arrest, runaway, seized property, and sex offenses. Accidents refers to firearms accidents, motor vehicle accidents, and occupational injuries, among others. Non-criminal incidents refer to all other incidents reported to the police that are not criminal in nature (namely, motor vehicle or firearms accidents, missing persons, injuries, etc.).

Table 2: Difference-in-Differences Estimates: Main and by Crime Type

	(1) All Crimes	(2) All Crimes	(3) Violent and Prop. Crimes	(4) Murder	(5) Non-criminal Incidents	(6) Low-level Offenses
Hispanic x Start of PEP	0.080***	0.082***	0.036**	-0.011	0.075***	0.049***
	[0.014]	[0.015]	[0.018]	[0.007]	[0.020]	[0.018]
Mean of Outcome	2.90	2.89	2.16	0.03	2.06	1.56
Average Incidents	35.44	34.84	14.82	0.05	13.20	6.82
Full Sample Period	Yes	No	No	No	No	No
Observations	8304	6920	6920	6920	6920	6920

NOTE: This table uses incident-level data from the Dallas Police Department. The first column shows the main estimate, using all incidents between 2014 and 2016. The rest of the columns restrict the sample period to start in the third quarter of 2014. The second column re-runs the same specification as column 1. The remaining columns split the sample using the Uniform Crime Report offense code for each incident (for more details, see the footnote to Table 1). "Average incidents" refers to the average number of incidents per tract per quarter. Standard errors are clustered at the tract level.

Table 3: Difference-in-Differences Estimates: Alternative Variable Definitions

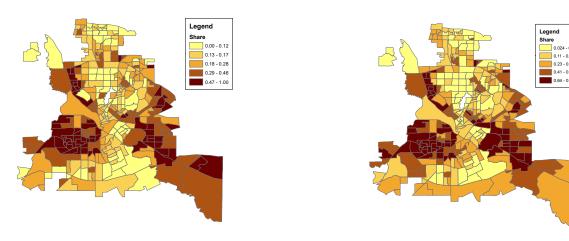
	(1)	(2)	(3)	(4)
	Main	Police	Reporting	Using
	Estimate	Beats	Area	Names
Hispanic x Start of PEP	0.080***	0.104***	0.062***	0.082***
	[0.014]	[0.015]	[0.011]	[0.015]
Mean of Outcome	2.90	3.69	1.81	2.84
Average Incidents	35.44	52.40	10.64	32.49
Observations	8304	5616	27648	8280

NOTE: The first column reproduces the main estimate. The second and third column vary the definition of neighborhood. The fourth column uses the complainants surname to identify whether he or she is Hispanic. "Average incidents" refers to the average number of incidents per tract per quarter. Standard errors are clustered at the beat and reporting areas level in columns 2 and 3, respectively, and at the tract level otherwise.

A Appendix A

Figure A1: Spatial Distribution of Hispanic Complainants and Population, by Census Tract

- (a) Share of incidents with Hispanic complainant
- (b) Share of Census Tract that is Hispanic, 2010



NOTE: The first map uses data on all incidents reported by white, black, and Hispanic individuals between 2014 and 2016. Each color represents a quintile in the corresponding distribution (share of incidents with a Hispanic complainant per tract, respectively). The second panel uses uses tract-level data from the 2010 Census from TIGER/Line Shapefiles (2017).

Coef.= .082, S.E.=.015

Coef.= .082, S.E.=.015

Quarters relative to Quarter 2 of 2015

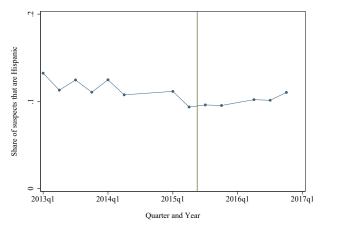
Figure A2: Difference in Crime Reporting Using Complainant Surnames

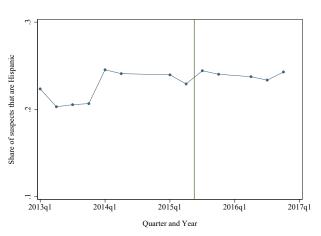
NOTE: This figure plots the coefficients on Hispanic \times Quarter from equation (1) using all police incidents as well as the surname of the complainant. If the probability that the complainant's last name was Hispanic was greater than 80 percent, the individual is identified as Hispanic. The coefficient and standard error reported in the figure are the estimates from the corresponding equation (2). Standard errors are clustered at the Census tract level.

Figure A3: Share of Suspects that are Hispanic

(a) Incidents with non-Hispanic comp.

(b) All suspects



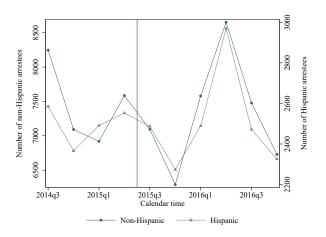


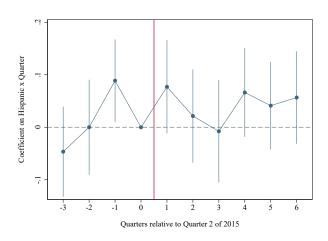
NOTE: These figures plot the share of suspects that are Hispanic using data from the Dallas Police Department for 2013–2016. Hispanic suspects are identified using the race/ethnicity marked down by the DPD. Panel (a) uses suspects for incidents that can be linked to the incident-level data, and whose complainant was non-Hispanic. Panel (b) uses all suspects. Data are missing for some months in 2014 and 2016 due to changes in the DPD's Records Management System.. The green line indicates the launch of PEP.

Figure A4: Comparison of Hispanic and non-Hispanic Arrestees

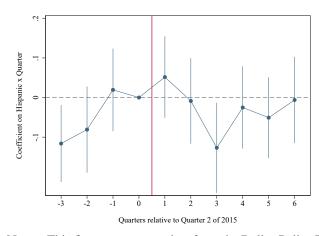
(a) Raw Data, All Arrestees

(b) Difference-in-Differences, All Arrestees



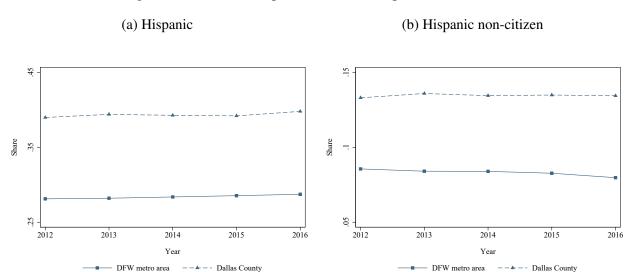


(c) Difference-in-Differences, Misdemeanors



NOTE: This figure uses arrest data from the Dallas Police Department for 2014–2016. An arrestee is identified as Hispanic using the race/ethnicity marked down by the DPD. Panel (a) plots the raw data, showing the number of Hispanic and non-Hispanic arrestees over time. Panel (b) plots the coefficients on Hispanic \times Quarter from an analogous version of equation (1), which uses the logged number of arrestees of ethnicity h in neighborhood n and in time period t as the dependent variable. Panel (c) restricts the sample to arrestees charged with a misdemeanor crime. Standard errors are clustered at the police beat level. The green line indicates the launch of PEP.

Figure A5: Share of Population that is Hispanic, 2012–2016



NOTE: This figure uses the 2012–2016 American Community Survey to plot the share of the population that is identified as Hispanic and as Hispanic non-citizen in the metropolitan area of Dallas-Forth Worth-Arlington (DFW) and in the PUMAs representing Dallas County.

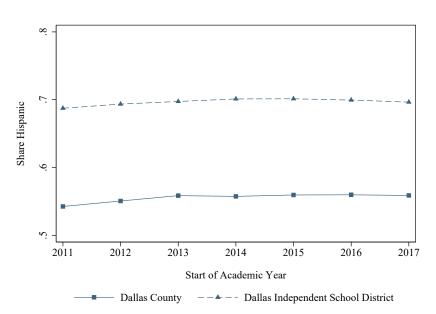
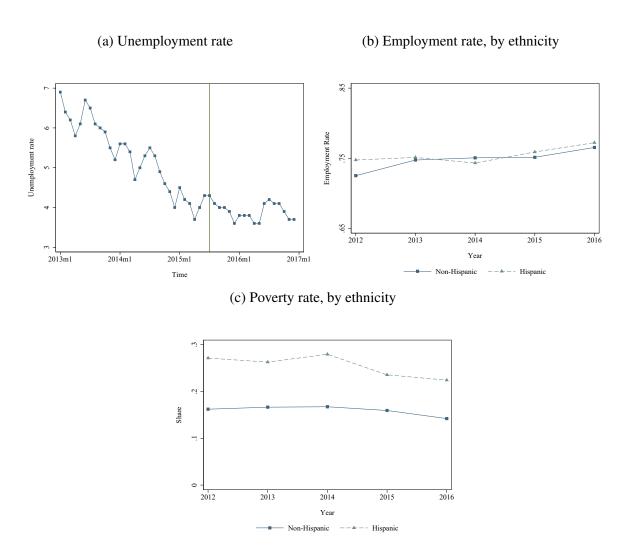


Figure A6: Share of Students that are Hispanic, 2011–2017

NOTE: This figure uses student enrollment reports from the Texas Education Agency's Public Education Information Management System (PEIMS) to plot the share of students who are Hispanic enrolled in Dallas County and in the Dallas Independent School District.

Figure A7: Employment outcomes in Dallas Area



NOTE: Panel (a) uses data from U.S. Bureau of Labor Statistics (2018) to plot the monthly unemployment rate in the Dallas-Forth Worth-Arlington (DFW) Metropolitan Area. Panel (b) uses the American Community Survey to plot the share of the Hispanic and non-Hispanic population ages 25–64 that is employed in the PUMAs representing Dallas County. Panel (c) uses the annual American Community Survey to plot the poverty rate for the Hispanic and non-Hispanic population in the PUMAs representing Dallas County.

Table A1: Difference-in-Differences Estimates by Crime Type: Robustness Checks

(a) Violent and Property Crimes

	(1)	(2)	(3)	(4)
	Main	Police	Reporting	Using
	Estimate	Beats	Area	Names
Hispanic x Start of PEP	0.036**	0.044***	0.015	0.040**
	[0.018]	[0.013]	[0.013]	[0.017]
Mean of Outcome	2.16	1.91	1.19	2.10
Average Incidents	14.82	14.61	4.45	13.56
Observations	6920	14040	23040	6900

(b) Non-criminal Incidents

	(1)	(2)	(3)	(4)
	Main	Police	Reporting	Using
	Estimate	Beats	Area	Names
Hispanic x Start of PEP	0.075***	0.069***	0.046***	0.088***
	[0.020]	[0.014]	[0.013]	[0.020]
Mean of Outcome	2.06	1.81	1.12	2.01
Average Incidents	13.20	13.01	3.96	12.13
Observations	6920	14040	23040	6900

(c) Low-level Offenses

	(1)	(2)	(3)	(4)
	Main	Police	Reporting	Using
	Estimate	Beats	Area	Names
Hispanic x Start of PEP	0.049***	0.041***	0.023**	0.052***
	[0.018]	[0.015]	[0.012]	[0.019]
Mean of Outcome	1.56	1.38	0.72	1.52
Average Incidents	6.82	6.72	2.05	6.26
Observations	6920	14040	23040	6900

NOTE: This table uses incident-level data from the Dallas Police Department. The first column reproduces the main estimate from Table 2. The second and third column vary the definition of neighborhood. The fourth column uses the complainants surname to identify whether he or she is Hispanic. "Average incidents" refers to the average number of incidents per tract per quarter. Standard errors are clustered at the beat and reporting areas level in columns 2 and 3, respectively, and at the tract level otherwise.

Table A2: Difference-in-Differences Estimates: Additional Robustness Checks

	(1) Main Estimate	(2) One Complainant	(3) Reporting Rate	
Hispanic x Start of PEP	0.080*** [0.014]	0.073*** [0.014]	0.231*** [0.048]	
Mean of Outcome Average Incidents Observations	2.90 35.44 8304	2.87 34.23 8304	2.39 2.39 7423	

NOTE: This figure uses data from the DPD using all incidents between 2014 and 2016. The first column reproduces the main estimate from Table 2. The second column only counts each incident once regardless of the number of complainants (if any of the complainants were non-Hispanic, I assume the incident was reported by a non-Hispanic individual). The third column uses the rate of reporting (i.e., the number of incidents reported by ethnicity *h* divided by the population of ethnicity *h* in that tract) as the dependent variable. "Average incidents" refers to the average number of incidents per tract per quarter (except for in the third column, in which it refers to the average reporting rate). Standard errors are clustered at the tract level.

Table A3: Difference-in-Differences Estimates: Clearance Rates and Levels

		Clearance Rate			Logged Number of Clearances			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	All	Serious	Non-criminal	Low-level	All	Serious	Non-criminal	Low-level
	Crimes	Crimes	Incidents	Offenses	Crimes	Crimes	Incidents	Offenses
Hisp. x PEP	-0.003	0.001	0.005	-0.008	0.053**	0.042	0.066***	-0.017
	[0.004]	[0.006]	[0.007]	[0.007]	[0.025]	[0.026]	[0.023]	[0.015]
Mean of Outcome	0.08	0.08	0.09	0.04	1.05	0.64	0.62	0.15
Average Incidents	0.08	0.08	0.09	0.04	3.13	1.47	1.42	0.25
Observations	6225	5968	5952	5299	6225	6225	6225	6225

NOTE: This figure uses incident-level data from the Dallas Police Department using all incidents starting in the third quarter of 2014 through 2016. The first four columns use the clearance rate as the dependent variable. Columns 5–8 use the logged number of cleared incidents. "Serious crimes" refers to violent and property crimes. "Average incidents" refers to the average number of cleared incidents per tract per quarter (except for in the first three columns, in which it refers to the average clearance rate). Standard errors are clustered at the tract level.

B Appendix B

In this appendix, I more-formally consider the endogenous behavioral response that PEP would likely elicit from criminal offenders. More precisely, the classic Becker model of crime posits that criminal offenders commit crime if the expected utility of committing a crime exceeds the utility from abstention:

$$(1-p)U_{c1} + pU_{c2} > U_{nc}$$

where p is the probability of being punished, U_{c1} is the payoff from committing crime if the individual is not punished, U_{c2} is the payoff from committing crime if the offender is punished, and U_{nc} is the utility associated with the choice to abstain from crime (Becker 1968).

B.1 Response to Increased Reporting

I expand on this framework to allow for victims to have different likelihoods of reporting based on their ethnicity, for offenders to face different punishments based on their immigration status, and for the possibility that offenders know the ethnicity of their victim. In this context, there are two types of offenders α , where $\alpha \in \{A,U\}$ represents authorized and unauthorized offenders. Similarly, there are two types of victims v, where $v \in \{H,N\}$ represents Hispanic and non-Hispanic victims. ⁵⁴ I consider the two possible relationships between victims and offenders, since they yield slightly different predictions.

B.1.1 Offender Knows Victim Type

In scenarios where offenders know the potential victim's type, the expected utility for offender α of committing a crime against victim v is:

$$EU_{\mathbf{v}}^{\alpha} = (1 - p_{\mathbf{v}})U_{c1}^{\alpha} + p_{\mathbf{v}}U_{c2}^{\alpha}$$

⁵⁴ As noted above, Hispanic individuals with non-citizen contacts might be less willing to report a crime. For this reason, I divide victims by ethnicity, rather than by immigration status.

I assume that $p_N > p_H$ (i.e., Hispanic victims are less likely to report crime as a result of immigration-related costs).⁵⁵ This assumption implies that, all else equal, $EU_H^{\alpha} > EU_N^{\alpha}$, so that an offender of type α prefers to commit a crime against a Hispanic individual than against a non-Hispanic individual.

By altering the probability that immigrant victims report crime, PEP increased p_H , and therefore lowered EU_H^{α} for both types of offenders. We therefore expect that the overall number of crimes committed against Hispanic victims likely decreased with the introduction of PEP.⁵⁶

B.1.2 Offender Does Not Know Victim Type

There are also instances in which the offender does not know the potential victim's type. In this case, offender α considers a weighted average of the two possible expected utilities:

$$EU^{\alpha} = S_{H} \underbrace{\left[(1 - p_{H})U_{c1}^{\alpha} + p_{H}U_{c2}^{\alpha} \right]}_{EU_{H}^{\alpha}} + S_{N} \underbrace{\left[(1 - p_{N})U_{c1}^{\alpha} + p_{N}U_{c2}^{\alpha} \right]}_{EU_{N}^{\alpha}}$$

where S_H and S_N are the shares of the population that are Hispanic and non-Hispanic, respectively, in that neighborhood. Similarly to above, we expect PEP to increase p_H , and thus decrease the total expected utility of committing crime for both types of offenders. We therefore expect that the policy will deter some criminal offenders from committing crime against *both* types of victims.

B.2 Additional Deterrence Effects

So far, I have considered two scenarios, which suggest that the number of victimizations against Hispanic individuals will decrease and that this decline will be greater than the decrease in the number of victimizations against non-Hispanic victims. I also consider here the possibility that PEP might have had an additional deterrence effect on offenders via an improved allocation of

⁵⁵ I also assume that $U_{c1}^A = U_{c1}^U$ (i.e., offenders get the same payoff from committing crime if they are not punished, regardless of their type) and $U_{c2}^A > U_{c2}^U$ (i.e., authorized offenders have a higher payoff from committing crime if they are punished since they do not face the possibility of deportation).

⁵⁶ If EU_H^{α} decreases, but $(EU_H^{\alpha})' > EU_N^{\alpha}$, then we expect offenders with relatively high outside options to be deterred from crime altogether, so that the number of crimes against Hispanic victims decreases (and the number of crimes against non-Hispanic offenders remains unchanged). If EU_H^{α} decreases such that $(EU_H^{\alpha})' = EU_N^{\alpha}$, then we might expect some offenders to become indifferent between committing crimes against Hispanic and non-Hispanic individuals. In this scenario, we would expect the number of crimes against Hispanic victims to still decrease overall, but might expect the number of crimes against non-Hispanic victims to rise slightly.

police resources. It is plausible that increased reporting by Hispanic individuals improved law enforcement's effectiveness (e.g., in the distribution of police officers across the city). If so, then the probability of being punished likely increased for all offenders, and we again can expect that the policy will deter both types of offenders from committing crime against both types of victims.

One final possibility is that the introduction of PEP improved immigrants' labor market or safety net participation (Alsan and Yang 2018, East et al. 2018). In such a case, then we might think that PEP increased U_{nc} , and might have therefore deterred some unauthorized immigrants from committing economically motivated crimes. We might therefore expect the policy to have an additional effect, deterring unauthorized offenders from committing crime against both types of victims.

B.3 Differing Predictions for Low-Level Offenses

Finally, I note that the predictions up until this point have applied to the likelihood that offenders will be deterred from committing *serious* crimes. However, it is worth acknowledging that PEP's focus on detaining serious criminals might have also decreased the likelihood of deportation for low-level offenders. In other words, PEP might have increased an unauthorized offender's payoff from committing a low-level offense, U_{c2}^U ; if the change in U_{c2}^U outweighed the change in p_H , such that the expected utility of committing crime, EU^U , increased for low-level offenses, then we might expect to see an increase in the overall number of low-level offenses committed. Analogously, for crimes in which the offender knows the victim type, if the change in U_{c2}^U outweighs the change in p_H such that EU_H^U increases for low-level offenses, then an increase in reported crime by Hispanic victims might partially be the result of unauthorized offenders committing more low-level offenses against them. However, an increase in U_{c2}^U would also increase EU_N^U , suggesting that we might also expect to see an increase in reported crime by non-Hispanic victims. Overall, unlike with serious crimes, PEP's priorities might have altered the payoff for committing low-level offenses, and we thus might expect to see an increase in the amount of less-serious offenses reported by Hispanic and non-Hispanic victims.