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Enforcement and Immigrant Location Choice

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Abstract: This paper investigates the effect of local immigration enforcement regimes on the migration decisions of the foreign born. Specifically, the analysis uses individual level American Community Survey data to examine the effect of recent 287(g) agreements which allow state and local law enforcement agencies to enforce Federal immigration law. The results suggest that one type of 287(g) agreement – the controversial local “task force” model emphasizing street enforcement – nearly doubles the propensity for the foreign-born to relocate within the United States. The largest effects are observed among foreign-born citizens and college educated non-citizens, suggesting that aggressive enforcement policies may be missing their intended targets. No similar effect is found for the native born. After the extreme case of Maricopa County is excluded, there is no evidence that local enforcement causes the foreign-born to exit the United States or deters their entry from other countries. Rather, 287(g) task force agreements encourage immigrants to move to a new Census division or region within the United States.

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I. Introduction

The recent recession stemmed the tide of immigration into the United States, but the estimated number of foreign born is around 38 million, representing more than 12% of the population. Approximately 11 million immigrants are undocumented (Hoefer, Rytina, and Baker, 2012). Policy-makers have wrestled with the issue of undocumented immigration, and policy responses have varied substantially across time and across local areas within the United States. In the past decade, there has been a marked devolution of immigration enforcement to local governments, further exacerbating local differences in policy regimes. Nevertheless, little is known about how immigrants respond to local enforcement policies.

A key impetus for aggressive immigration enforcement is to reduce the number of undocumented immigrants in a local area; conversely, localities opting for less aggressive enforcement often do so in part to attract and retain the foreign born.¹ Much of the existing work on immigrant location choice focuses on immigrant ethnic networks (for example, Bauer, Epstein, and Gang, 2005) and local economic conditions (for example, Borjas, 2001, and Cadena and Kovak, 2013). While these factors are important determinants of immigrant location, they do not speak to the impact of enforcement policy on location decisions of the foreign born. Empirical evidence on the degree to which immigrant location decisions respond to the policy climate is limited.

Understanding immigrant location choice is of broader interest as well. Immigrants play an important role in local labor markets, both because they constitute a substantial portion of the workforce (15.8 percent in 2010)² and because they are a key driver of workforce growth. Furthermore, location decisions of immigrants respond more to local labor market conditions than those of native born workers and help to equilibrate differences across labor markets within the United States (Borjas, 2001, and Cadena and Kovak, 2013).

¹ For example, see Preston, Julia, "Ailing Midwest Cities Extend a Welcoming Hand to Immigrants," *New York Times*, October 7, 2013, <http://nyti.ms/15QzhvV>.

² <http://www.bls.gov/news.release/forbrn.nr0.htm>

The analysis presented here focuses on the understudied role of local immigration enforcement policy in determining the location choice of immigrants. In particular, the analysis explores the recent devolution of enforcement to local law enforcement that has occurred through section 287(g) of the 1996 Immigration and Nationality Act. Starting in 2002, almost eighty state and local law enforcement agencies signed 287(g) agreements with the Federal government, which allow these agencies to enforce Federal immigration law. Because enforcement decisions are made at a local level, they may influence immigrant choices over where to settle within the United States.

Even though portions of the 287(g) program have been phased out, understanding the impacts of local enforcement on immigrants' behavior is critically important. The effect of immigration-related policies on residential choice is of particular interest to local policy-makers. If regions seek to boost labor force growth or change the local skill mix by changing the foreign-born population, it is important to understand what policies facilitate or discourage immigrant inflows. Conversely, as states and local law enforcement agencies consider adopting immigration-related policies, it is important to know what implications these policies have for the composition of the local labor force. Enforcement activity in other parts of the country may also have direct implications for projected foreign-born inflows to areas with less aggressive enforcement activity. These impacts will be of particular interest to employers who rely on foreign-born labor. More broadly, with discussions of internal enforcement policy at the forefront of the national debate, understanding how immigrants respond to aggressive enforcement regimes is a key input to sensible decision-making.

This paper uses data from the American Community Survey to examine migration responses to local enforcement agreements. First, an aggregate analysis offers a bird's eye view of migration. One can estimate cross-national outflows from an area by comparing numbers of immigrants in a local area in a given year, the number of immigrants remaining in the United States in the following year who indicate that they lived in the local area in the previous year. There is no strong evidence that cross-border migration flows are affected by local enforcement, but limited data means that results are inconclusive.

Data analyzed at the individual level for those who reside in the U.S. at least two consecutive years offer more detail and elucidate two patterns. First, immigrant migration decisions respond mainly to the (recently ended) task force model of 287(g) enforcement. Second, immigrants most responsive to task force enforcement appear to be likely to be documented – they are citizens and college educated non-citizens. Relocation in response to task force enforcement is evident only among likely documented minorities.

The results have policy implications at both the local and Federal levels. The Obama administration ended all task force agreements at the end of 2012 and is developing alternative models of enforcement. These include the Secure Communities program, which more closely resembles the jail enforcement 287(g) model, and the Criminal Alien Program, which has a mission that partially overlaps that of the task force model. These programs are on track to achieve near universal adoption across the country, but their exact form is still evolving. Furthermore, local governments will continue to exercise discretion in the implementation of these Federal policies. Understanding how enforcement decisions are likely to affect immigrant location choices is a key input into developing effective policy.

II. Previous Literature

There is a rich literature examining immigrant location choice within the United States. Analysts are particularly interested in location choice because it is central to understanding how immigration affects the labor market outcomes of the native-born within the U.S. A number of papers have exploited the geographic distribution of immigrants over time to identify wage impacts of immigration, for example. Because immigrants seek destinations with good labor market conditions, the analyses typically exploit exogenous variation in the geographic distribution. For example, many previous papers have used variations of the supply-push instrument pioneered by Card (2001) which uses the interaction of initial country-of-origin shares in a local area and national trends in immigrant inflows from those countries-of-origin.

Borjas (2006) has argued that immigrant inflows lead to native outflows from a local area, so that the wage impacts of immigration are diffused across the country. While a full discussion of the debate is beyond the scope of this paper, understanding internal migration decisions of immigrants is a key input to the understanding of the national impacts of immigration.

Immigrant location decisions are also of interest in their own right. For example, immigrant location choices are believed to equilibrate wages across local labor markets within the U.S. (Borjas, 2001, and Cadena and Kovak, 2013). Immigrant location decisions affect a wide range of other outcomes such as native residential location decisions (Wozniak and Murray, 2012), local rents (Saiz, 2003, and Saiz, 2007), native female labor supply (Cortes and Tesada, 2011), firm production decisions (Lewis, 2005), and school segregation (Cascio and Lewis, 2012). A number of previous papers have examined the impacts of immigrant concentration in particular areas (Bertrand *et al.*, 2003, Funkhouser, 2000, Jaeger, 2007, and Edin *et al.*, 2003). Researchers have also explored the impact of the safety net on immigrant location choice (Borjas and Hilton, 1996, Borjas, 1999, Dodson, 2001, and Buckley, 1996).

In contrast, the literature on the impacts of immigration enforcement is relatively new. At the national level, Ortega and Peri (2013) show that immigration restrictions do affect cross-country migration flows whereas Orrenius and Zavodny (2003) find no evidence that the 1986 amnesty for undocumented immigrants affected long run migration flows. There are also several papers exploring the impacts of local enforcement on immigrant labor market outcomes. For examples, see Davila and Pagan (1997), Bansak (2005), Orrenius and Zavodny (2009), and Bohn and Santillano (2012).³ Watson (2014) documents impacts of enforcement on Medicaid participation among children of non-citizens.

³ Davila and Pagan (1997) find evidence that monitoring of selected firms had impacts on employment, wages, and industry choice of immigrants. Bansak (2005) also finds that the 1986 Immigration Reform and Control Act adversely affected wages and employment for Mexican workers, and Orrenius and Zavodny (2009) find similar impacts as the result of recent enforcement policies.

Several recent papers have examined effects of local enforcement on migration using aggregate data. Bohn, Lofstrom, and Raphael (forthcoming) document declines in the foreign-born population in Arizona following restrictive state legislation. Kostandini, Mykerezi, and Escalante (2012) focus on the agricultural sector and find that local 287(g) enforcement reduces immigrant population, changed farm inputs, and reduced farm profits in affected counties. O’Neil (2013) finds no systematic relationship between 287(g) implementation and Hispanic or foreign born population growth. The current analysis builds on existing studies by considering individual level migration decisions, allowing for a more nuanced understanding of the relationship between enforcement policy and immigrant location choice.

III. Recent Enforcement Policy

In recent years, there has been both a diminished number of undocumented immigrants residing in the United States (there has been an estimated 8% decline in the unauthorized population since 2007)⁴ and a policy shift away from non-criminal apprehensions. At the same time, there has been a devolution in enforcement of immigration law to *local* entities. Section 287(g) of the 1996 Illegal Immigration Reform and Immigrant Responsibility Act offered the opportunity for local law enforcement officers to enforce Federal immigration law after receiving training from U.S Immigration and Customs Enforcement (ICE); prior to the Act local law enforcement did not have jurisdiction over immigration-related matters.⁵ The 287(g) provision was largely ignored until the events of September 11th 2001 refocused national attention on immigration policy (Lacayo, 2010), and starting in 2002 states and localities began to pursue 287(g) agreements. It took some time for the practice to become widespread, but as of 2011 (the end of the sample period for this analysis), there were 68 local law enforcement agencies in 23 states that were currently in one or more agreements with ICE to enable local enforcement. Most of 287(g) agreements were initiated in 2007 or later, as shown in Figure 1. A primary determinant of applying to the 287(g) program is short-term growth in the local

⁴ <http://www.pewhispanic.org/2011/02/01/ii-current-estimates-and-trends/>

⁵ More generally, the 200-page 1996 Act expanded resources for enforcement, changed deportation procedures, revamped employer sanctions, and made a variety of changes to the legal immigration process.

foreign-born population (Shahani and Greene, 2009), whereas a substantial long-standing foreign born population promotes integrative or inclusive policies (Boushey and Luedtke, 2011).

The 287(g) program is controversial because it allows state and local law enforcement entities to apply to the Federal government to play a role in enforcement of immigration law, which has traditionally been the purview of Federal officers. Agencies in the 287(g) program receive Federal training and are then allowed to perform enforcement functions. In areas with local “task force” 287(g) agreements, officers are permitted to investigate immigration violations in the field and to ask individuals on the street for proof of legal presence if they have reasonable cause to suspect a violation. Other areas have “jail enforcement” agreements which facilitate the investigation of legal status of those arrested for other crimes. Some agencies have combined task force and jail agreements; in those cases they are typically implemented at the same time. The correlation across types of agreements is around 0.1.

Detractors argue that 287(g) encourages street harassment of minorities, while proponents view it as an effective tool in enforcing immigration law and encouraging “self-deportation.” The Obama administration ended all task force agreements associated with the 287(g) program at the end of 2012, so these programs are no longer in effect. Other ICE programs enabling local enforcement such as the Secure Communities Program and the Criminal Alien Program are poised to take their place. Understanding how immigrants respond to different enforcement regimes is an important input into the effective design of new policies.

Despite the decline of 287(g) task force agreements, there has been a recent wave of state and local legislation targeting immigrants, most prominently illustrated by the far-reaching Arizona legislation (known as SB 1070) passed in April 2010. In 2012, the U.S. Supreme Court upheld one key portion of the law allowing police to check the immigration status of those they detain. “Copy-cat” state legislative activity has been reported in 26 states (<http://www.nilc.org/state->

[immenfleg-2012.html](#)) and five states passed similar legislation in 2011.⁶ There are also numerous anti-immigrant bills at the local levels. Though the effects of the recent state legislation are not yet known, the 287(g) program offers some insight into the likely effects of aggressive sub-national enforcement regimes.

More generally, states and localities make many policy decisions related to immigrants. States differ on the extent to which they offer safety net benefits to undocumented and legal immigrants. For example, about half of states exclude legal immigrants from welfare and Medicaid benefits for their first five years in the United States. Active policy discussions at the state level include whether undocumented students should pay in-state college tuition rates, whether undocumented immigrants should be allowed to obtain driver's licenses, and whether employers need to use electronic immigration status verification systems (E-Verify). On the other hand, many localities have issued policy statements that they will not pursue enforcement actions under certain conditions; these jurisdictions have been informally dubbed "sanctuary cities."⁷ There is little evidence on how immigrants weigh the complex local policy environment in their location decisions.

In sum, relatively little attention has been paid to the local enforcement regime and how it affects where the foreign-born live. As noted above, recent papers on the subject (Kostandini et al., 2012, and O'Neil, 2013) have mixed findings. This paper uses individual level data to analyze how the 287(g) program affects year-to-year migration flows within the United States.

⁶ Alabama, Georgia, Indiana, South Carolina, and Utah passed similar laws in 2011. According to the national conference of state legislatures, "[t]he laws typically include provisions that require law enforcement to attempt to determine the immigration status of a person involved in a lawful stop; allow state residents to sue state and local agencies for noncompliance with immigration enforcement; require E-Verify; and make it a state violation for failure to carry an alien registration document" (<http://www.ncsl.org/issues-research/immig/omnibus-immigration-legislation.aspx>). The laws have been wholly or partly enjoined pending legal challenges.

⁷ The designation "sanctuary city" is unofficial and there is disagreement over what types of policy regimes should qualify.

IV. Data and Methods

The primary data source used in the analysis is the American Community Survey (ACS) for years 2005-2011 provided by the Integrated Public Use Microdata Series (Ruggles *et al.*, 2010). The ACS is a large, nationally representative survey run by the Census Bureau. Importantly, the ACS collects information on birthplace, citizenship, and residence in the year prior to the survey. The ACS attempts to capture undocumented immigrants in its survey frame and the ACS is a primary source used in calculations of the undocumented population. The undercount of undocumented is believed to be less than ten percent.⁸

The ACS data are used to estimate aggregate international outflows from a local area by comparing the estimated population in local area a in year t to the number of U.S. residents in year $t+1$ who report having lived in area a in the prior year. Because both numbers are based on small sample estimates, there is a fair amount of sampling error associated with this approach and outflow estimates may be negative. It is also possible to estimate international inflows to a local area by observing residents of local area a in year $t+1$ who report having lived outside the U.S. in year t . Thus, aggregate international flows to and from a local area can be estimated.

In addition, it is possible to observe individual level one-year migration decisions for a sample of immigrants living in the United States for two consecutive years.⁹ I consider migration decisions over the prior year of individuals surveyed in years 2006-2011 and use 2005 data to control for initial characteristics of the local area. Because the ACS is relatively new, it has not been used very often to examine sub-state migration patterns.¹⁰ However, the rich nature of the dataset allows one to explore heterogeneity and nuances in a way that is not possible using aggregate data.

⁸ <http://fivethirtyeight.com/datalab/how-do-we-know-how-many-undocumented-immigrants-there-are/>

⁹ “Immigrant” as defined here includes all those born outside the 50 United States and Washington, D.C. who were not a citizen at birth. “Native” includes all those born within the 50 United States and Washington, D.C. Individuals with citizenship at birth born in outlying areas (including Puerto Rico) are excluded. The results are not sensitive to their classification.

¹⁰ Wozniak and Murray (2012) were among the first to use it for this purpose.

The publicly available Census/ACS provides a set of geographic units called Migration Public Use Microdata areas. MigPUMAs are consistently identified over the sample period 2005-2011, do not cross state lines, and fully cover the United States. I examine the migration decisions of those sample members living in those MigPUMAs in the initial year (i.e. the year prior to when they are observed in the ACS) that are estimated to have at least 750 foreign-born residents in each sample year. The analysis therefore relies on a balanced panel of 822 MigPUMAs. About 1 percent of the foreign-born sample is excluded due to the exclusion of local areas with few immigrants. These areas are shown in Figure 2, with 287(g) areas shaded.

287(g) agreement data is collected by examining current and historical agreements posted on the ICE website,¹¹ screenshots of the website from earlier periods, published reports including Lacayo (2010) and Vaughan and Edwards (2009), and news reports. These sources were used to construct start and end dates for all 287(g) agreements that existed at any time; in six cases end dates were not known to the exact month and were approximated based on available information. All task force agreements were ended at the end of 2012, but this date does not overlap with my sample period.

Enforcement agreements can cover local police jurisdictions or states. Given that Kostandini *et al.* find differential effects of local versus state agreements, I separate them in the analysis, and the baseline analysis considers the local agreements only. Furthermore, local task force agreements and local jail enforcement agreements are analyzed separately because they have different features (as described above) and may generate differing migration responses.

To create an index of local 287(g) agreement intensity, the average number of local agreements faced by a given resident of a local area is calculated.¹² In many cases an agreement might cover only a portion of a local geographic area, so the value of the index for the local area would reflect an average of values of one for the covered population and values of zero for the

¹¹ [http://www.ice.gov/287\(g\)](http://www.ice.gov/287(g)) contains a list of current agreements and some historical documents.

¹² Local areas are combinations of Census public use microdata areas and may include several cities or counties. Local law enforcement agencies typically operate at the County, City, or Town level and are fully enclosed within a single local area. For example, if 25% of the overall population in a local area resides in City X, and City X is the only part of the local area that has an agreement, then local area coverage is 0.25.

non-covered population. Furthermore, individuals might be covered by two local agreements if their county police force and their city police force each have an agreement, for example. If an agreement was not in effect for the full year, the value of the index is the fraction of covered months over the year. For example, if all local task force agreements in local area a in year t are indexed by f , all local jail agreements in local area a in year t are indexed by j , all statewide agreements are indexed by s , and individuals living in the local area are indexed by i :

$$TaskForceIndex_{at} = 1/n \sum_{i=1}^n \sum_{f=1}^F \frac{1}{12} MonthsCoveredByTaskForceAgreement_{iaft}$$

$$JailEnforcementIndex_{at} = 1/n \sum_{i=1}^n \sum_{j=1}^J \frac{1}{12} MonthsCoveredByJailEnfAgreement_{iajt}$$

The statewide agreement index variable is similar in that it reflects the average number of statewide agreements faced by a given resident of a local area. This variable takes a value of zero, one, or two except when the agreement(s) are in effect for only part of the year:

$$StatewideIndex_{ast} = \sum_{s=1}^S \frac{1}{12} MonthsCoveredByStatewideAgreement_{ast}$$

The analysis is composed of three parts. First, I aggregate ACS data by year and initial local area, and estimate cross-border exit decisions for the population initially residing in the area. By comparing the population in the ACS who report the local area as their place of residence in the prior year to the population residing there in the prior ACS year, it is possible to construct exit rates from the United States and migration to an area from abroad.¹³ Because the ACS is a sample, it is possible to estimate negative migration rates – i.e. in some cases there are more people in year t reporting that they lived in a given area in $t-1$ than there are people counted in

¹³ For example, one might estimate that there are 10,000 immigrants in Local Area X in 2006 using 2006 ACS data. Using 2007 ACS data, one can then estimate the number of people living in the United States in 2007 who report having lived in Local Area X in 2006. If that number is 9900, the estimated out-migration rate from the United States would be 1 percent.

the area in $t-1$. These are entered into the analysis without adjustment.¹⁴ Death and incarceration are indistinguishable from exiting the United States in the data; I restrict the sample to those ages 18 to 49 to minimize the impact of death on the estimates. The institutional population is not fully sampled in the 2005 ACS, so the analysis is restricted to the non-institutional population. Separate analyses (not shown) indicate that there is no significant relationship between institutionalization and 287(g) agreements.

The aggregate portion of the analysis also uses aggregated individual-level year-to-year migration flows to construct internal migration statistics. For example, one can observe the fraction of individuals living in area a in time t who subsequently move to a different local area, state, Census division, or Census region by time $t+1$ as a function of local characteristics in time t . The denominator here can be the local area population estimated using the year t ACS data or the local area population estimated using migration history in the year $t+1$ ACS data. The latter increases precision and is used to estimate internal migration conditional on remaining in the United States.

The empirical model is as follows:

$$FractionMoved_{at} = B1TaskForceCoverage_{at} + B2JailEnforcementCoverage_{at} + X_{at} \alpha + \partial_t + \varphi_a + e_{at}$$

The key coefficients indicate the effect of enforcement on the fraction of the population in local area a in year t that moved by the following year. A vector of controls includes the metropolitan area unemployment rate for ages 18 to 64 in the initial year; this is an important control because the sample time frame coincides with the great recession. An additional control for predicted immigrant population in the metropolitan area is included; this a supply-push-style index based on national country-of-origin trends interacted with initial country-of-origin shares.¹⁵ I also control for the fraction of the immigrant population arriving in the last

¹⁴ Lleras-Muney (2005) faces a similar issue in the context of synthetic cohort mortality rates. She notes that using the estimated rates does not affect the consistency of the estimates.

¹⁵ Initial shares are calculated using 2000 data. The Census 2000 rather than ACS 2005 dataset is used because the larger sample size allows for a more accurate assessment of immigrant populations across groups. For cases in

five years, the fraction of the immigrant population that are citizens, and the fraction of the immigrant population with a college degree because these variables may affect migration patterns.

Regressions include local area (MigPUMA) fixed effects to account for permanent characteristics of locations that may affect migration and year dummies to account for national migration trends. Some specifications interact year dummies with Census division dummies to account for differential migration trends over time within Census divisions. Thus, the implicit comparison areas for 287(g) adopters are all local areas within the division and year.

To create a comparison group which is more directly comparable than all other local areas in the division, I select a set of control MigPUMAs using an approach in the spirit of case-control matching. In particular, I run a cross-sectional regression predicting whether a local area will ever have any local 287(g) agreement over the sample period as a function of whether it is in a border state, the fraction of the population that arrived to the United States in the most recent five years as of 2005, the fraction of the foreign-born that were non-citizens in 2005, and a dummy for Census division. This regression is used to predict a propensity of 287(g) adoption for all local areas. Then, for each local area that does in fact adopt a 287(g) agreement during the sample period, a matched non-287(g) comparison area is chosen. In particular, the matched comparison is the non-287(g) local area within the division with the most similar propensity score. In a few cases, two 287(g) areas use the same matched local area. The matched comparison analyses assign a dummy to each case-control group and interacts the dummy with year. Therefore, areas with local 287(g) agreements are compared each year to matched areas without such agreements. All local areas are included in the analyses to improve precision in estimating control variables.

Aggregate regressions are weighted by initial year immigrant population and standard errors are clustered at the metropolitan area level (or the MigPUMA level if the MigPUMA is non-

which the MigPUMA is not part of a metropolitan area, the unemployment rate and predicted immigrant population are calculated for the MigPUMA.

metropolitan) to account for serially and spatially correlated shocks. As an additional outcome, migrant inflows are also examined.

Panel A of Table 1 reports summary statistics for the 4,932 local area-years in the aggregate analysis. The average out-migration from the United States is about 0.7 percent and the migration rate across divisions is about 1.9 percent conditional on staying in the United States. The average task force coverage is 2 percent and the average jail enforcement coverage is 17 percent, suggesting a low rate of exposure to the policy overall.

The second part of the analysis exploits the individual level micro-data which allows one to observe migration decisions for individuals who were living within the United States for two consecutive years. Again, the sample is restricted to non-institutionalized adults ages 18 to 49 to focus on the individual level migration decision among those most likely to be making such a decision. The empirical model is similar to that above except that the analysis is at the individual level and allows for individual level controls. The linear probability model is as follows:

$$\begin{aligned} Moved_{iat} = & B1TaskForceIndex_{at} + B2JailEnforcementIndex_{at} + \\ & B3StatewideIndex_{at} + X_{iat} \alpha + \partial_t + \varphi_a + e_{iat} \end{aligned}$$

As before, most analyses incorporate division*year fixed effects or matched pair*year fixed effects. In addition to the local-area controls used in the aggregate analysis, the individual models also control for whether the immigrant arrived in the last five years, gender, presence of own school age children in the household, educational attainment in four categories (less than high school, high school, some college, college grad or more), citizenship status, age in six categories, and country of birth in 22 categories.

The summary statistics for the individual level data are shown in Table 1b. The table also shows means for “treatment” and “control” areas in the matched area analyses. The control areas

appear to have more state-level enforcement and higher rates of recent arrivals and non-citizens.

V. Results

A. Aggregate Analysis of International Out-Migration

Table 2 shows the results of the aggregate analysis of cross-border out-migration based on the five one-year intervals starting with 2006-2007 and ending with 2010-2011. The unit of observation is the local area-year, where local areas are defined as MigPUMAs, as explained above. The advantages of the aggregate analyses are that (1) they most closely follow previous work and (2) they allow for estimation of exits from the United States in a way that is not possible in the individual-level migration data.

The analysis focuses on two types of local 287(g) agreements- task force and jail enforcement. Statewide 287(g) agreements of either type generally do not result in many arrests and are not the focus of this study, but are included as a state-level control in some specifications. The first column includes year dummies and local area fixed effects with no additional controls. In this specification, task force coverage is associated with marginally significant increases in the out-migration rate relative to areas without task force coverage. A similar statistically significant result is apparent if one adds additional controls and division*year effects. However, the estimated coefficient is considerably smaller and marginally significant if one omits the outlier of the local area encompassing Maricopa County.

To further investigate the relationship, column IV relies on matched pair*year fixed effects. That is, rates of out-migration in areas with local 287(g) enforcement are compared with matched similar areas in the same division without 287(g). In this specification, there is no statistically significant relationship with enforcement. This non-result is robust to alternative using the matched pair specifications, including controlling for state-level variables, alternative definitions of local enforcement, alternative definitions of unemployment, and dropping Maricopa County (available upon request). It should be noted, however, that standard errors

Other correlates of international exits include having a high level of predicted immigrant supply in the area, a higher fraction of immigrants arrived in the last five years, a higher fraction of immigrants that are non-citizens, and a higher fraction of immigrants without a college degree. There is no statistically significant relationship between local labor market conditions and international outflows.¹⁶

Table 3 shows aggregate analyses of internal migration among those in the U.S. for two consecutive years. Because the same outcome is investigated at the individual level below, the table focuses on the key coefficients only. Results are presented separately for the sample members most likely to be undocumented, defined here as non-citizens without a college degree. In addition, patterns are investigated for those who are more likely to be documented-citizens and non-citizens with a college degree. Some demographers impute documented status in more sophisticated ways using information on occupation, cohort of arrival, etc. The admittedly crude measure of documented status used here avoids the potential confounding effect of local labor market circumstances.

Panel A shows that there is no significant relationship between local task force 287(g) agreements and the migration of the likely undocumented. There is a suggestion that the undocumented move out of state when there is jail enforcement in column II, but further investigation (not shown) suggests this finding is sensitive to specification choice.

The results are different in Panel B, which investigates the internal migration of the likely documented, defined here as citizens and non-citizens with a college degree. This group has a higher rate of divisional and regional moves when task force coverage is high in the local area. Jail enforcement has a negative relationship with internal migration of the likely documented which is statistically significant in some specifications.

In Panels C and D, no similar out-migration is seen for non-Hispanic white natives or natives of minority races/ethnicities. If anything, natives may be slightly less likely to leave an area with

¹⁶ It is important to note that this specification does not allow one to investigate how outflows respond to national economic conditions. Here it appears that having worse labor market conditions than other areas within the division in a given year does not significantly drive international exits.

more aggressive enforcement. This pattern suggests that unobserved economic conditions in the MigPUMA are unlikely to be responsible for the observed exits from local areas associated with task force agreements.

B. Individual Analysis of Out-Migration

The aggregate analysis above suggests that the undocumented foreign-born may exit the U.S. in response to 287(g), but this finding is sensitive to specification and to the inclusion of the outlier of Maricopa County. The results on international exits are fragile and do not offer strong support for the idea that 287(g) generally causes out-migration.

The undocumented do not appear to migrate to other parts of the United States in response to 287(g). Rather, a different group – foreign-born citizens and others likely to be legal residents – leave the local area when task force agreements are adopted. This surprising result suggests that the policies may be missing their intended targets and warrants further examination. The individual analysis allows for individual-level controls and for exploration of heterogeneous treatment effects. Because it relies on retroactive questions of ACS respondents' migration history, the sample is limited to those living in the U.S. for at least two consecutive years.

Table 4 details the moves to a different Census division for those more likely to be undocumented, defined here as non-citizens without a college degree. Among this group, those in the U.S. for a shorter time period, those with more education, those without school-aged children, those that are younger and those that are male are more likely to relocate. There is no evidence that the undocumented leave local areas in response to 287(g) task force agreements. Some specifications suggest that undocumented immigrants leave areas with jail enforcement, but this result is fragile.

Internal migration of the undocumented – especially the least-skilled non-citizens - appears to be particularly responsive to labor market conditions. This finding is consistent with Cadena and Kovak (2013). E-verify (not shown) also has a marginally significant impact on the probability of relocating, in line with the notion that job access is a primary determinant of location for undocumented immigrants.

In Table 5, internal migration is examined among those more likely to be documented, including foreign born citizens and non-citizens with a college degree. There is a robust positive relationship between task force coverage and relocation to another division. The preferred specification suggests that full task force coverage raises the probability of relocating to another division by 1.8 percentage points, roughly doubling the propensity for migration.

It is note-worthy that those choosing to relocate in response to task force coverage are racial and ethnic minorities, as shown in columns IV and V. Indeed, non-Hispanic whites are somewhat less likely to relocate under a task force enforcement regime. This is consistent with the notion that these individuals are relocating to avoid the street harassment associated with the task force model. College graduates also appear to be more responsive to task force adoption, perhaps because they are more mobile in general.

The positive relationship between task force coverage and out-migration of the likely undocumented is robust to adding state-level controls, alternative measures of unemployment, and dropping the Maricopa county group (results available upon request).

C. Aggregate Inflows

Are immigrants deterred from settling in local areas due to enforcement activity? This question is investigated using aggregated counts of immigrant inflows from abroad or from other parts of the U.S., normalized by the initial total population in the local area.

As shown in Table 6, there is a reduction in undocumented inflows from abroad associated with task force coverage in both specifications in columns I and II. However, this finding is driven by the inclusion of Maricopa County (not shown). Outside of Maricopa, there is no robust evidence of a link between 287(g) and international inflows. Internal inflows for this group do not appear to have a relationship with local enforcement.

Table 6 also examines inflows of likely documented. Attraction to the area is positively associated with task force enforcement. Combined with earlier results, the likely documented group is both more likely to enter and more likely to exit a local area when it has higher task

force coverage. The results suggest that task force agreements act as a “push” to prompt relocations from an area but do not affect “pull” by deterring new arrivals.

The results presented in Table 6 imply that all groups (including natives) other than the likely undocumented are more likely to move to an area with task force coverage. It is possible that there is an unobserved factor driving these inflows. Further investigation of inflows will be pursued in future versions of this paper.

VI. Magnitude of the Impacts

Task force 287(g) agreements were not widely implemented widely across the United States, so their impacts are not expected to be very large. At the peak of the policy, only 3.9 percent of the U.S. immigrant population was exposed. The implied partial equilibrium impact of these agreements can be determined using the estimated regional migration coefficient, the baseline immigrant population, and the task force coverage across local areas. This exercise suggests that there were an extra 8,500 relocations of 18-to-49 year-olds to other Census divisions in the peak year 2009 due to task force agreements. The cumulative effect over the six year sample period is 29,000. Given baseline annual divisional migration of this group around 230,000, 287(g)-induced migration is small. There were not major distributional shifts of the foreign-born workforce across the United States as the result of 287(g) enforcement.

Task force agreements were curtailed at the end of 2012, but since 2010 states have used 287(g) as a model for legislative initiatives designed to bolster enforcement below the Federal level. The impacts of these laws are yet to be seen, but the most extreme case would be one in which the effects of Arizona SB 1070 and similar bills in five other states resembled the impact of a local task force initiative. Flows induced by aggressive enforcement tactics in these states could be large enough to be noticeable in certain areas.

VII. Conclusion

This analysis investigates the impact of local immigration enforcement on migration choice. The results suggest that 287(g) task force agreements do not cause out-migration from the United States except in extreme cases. Instead, task force agreements cause relocations across

states, divisions, and regions within the United States. Importantly for policy-makers, the effects are concentrated among more educated non-citizens. These individuals are more likely to be documented (though their legal status is not observable in the data) and are likely productive workers in the local economy. Thus, the task-force enforcement regimes may be missing their intended targets.

The overall magnitude of migration induced by the task force policies is modest due to the relative small scale of the 287(g) program and the fact that only a small fraction of the foreign born relocate each year. As a result, any one region is unlikely to receive a large number of immigrants as the result of strict enforcement elsewhere. Regional policy makers need not fear that a weak enforcement regime will lead to major demographic changes in their area. Nevertheless, enforcement policy could be one part of a policy effort to deter highly skilled immigrants from or attract them to a local area.

From the perspective of local areas adopting task force policies, the outflows were partially offset by additional inflows of likely documented immigrants. Nevertheless, the finding that likely documented immigrants responded to enforcement may be a cause of concern. Further, the fact that minorities and college educated immigrants were most responsive may suggest that the task force policy creates a hostile environment for immigrants who otherwise contribute skills and human capital to an area.

As the country considers immigration reform, it is important to consider the effect of enforcement action beyond its impact on the number of undocumented residents in the country. Even though the task force model itself has been eliminated, widespread implementation of enforcement regimes like the task force model could drive a redistribution of immigrants within the United States. It is enforcement involving street harassment that appears to affect internal migration decisions. Current Federal immigration policy is moving to expand the Criminal Aliens Program and Secure Communities Program. Though both programs focus on individuals charged with a crime, both are criticized for incentivizing street harassment by local law enforcement authorities. Policy-makers seeking to retain skilled immigrants should consider their enforcement regimes accordingly.

More broadly, the results suggest that, in addition to economic opportunity and social networks, the local policy environment influences location choice among the foreign-born within the United States. The distribution of the foreign-born in the United States is likely to gradually evolve as the result of local enforcement policy, with highly skilled immigrants concentrating in areas that eschew aggressive enforcement policies.

VIII. References

- Bansak, Cynthia, 2005. "The Differential Wage Impact of the Immigration Reform and Control Act on Latino Ethnic Subgroups," *Social Science Quarterly*, 86(1).
- Bauer, Thomas, Gil S. Epstein, and Ira N. Gang, 2005. "Enclaves, language, and the location choice of migrants," *Journal of Population Economics*, 18(4).
- Bertrand, Marianne, Erzo F. P. Luttmer and Sendhil Mullainathan, 2000. "Network Effects And Welfare Cultures," *Quarterly Journal of Economics*, 115(3).
- Bohn, Sarah, Magnus Loftstrom, and Stephen Raphael, forthcoming. "Did the 2007 Legal Arizona Workers Act Reduce the States Unauthorized Immigrant Population?," *Review of Economics and Statistics*.
- Bohn, Sarah, and Robert Santillano, 2012. "Does Local Immigration Enforcement Impact Employment and Wages? Evidence from the 287(g) Program," unpublished manuscript.
- Borjas George J., 1999. "Immigration and Welfare Magnets," *Journal of labor economics*, 17(4), 607-637.
- Borjas, George J., 2001. "Does Immigration Grease the Wheels of the Labor Market?," *Brookings Papers on Economic Activity*, 2001(1), 69-119.
- Borjas, George J., 2006. "Native Internal Migration and the Labor Market Impact of Immigration," *Journal of Human Resources*, 41(2).
- Borjas, George J., and Lynette Hilton, 1996. "Immigration and the Welfare State: Immigrant Participation in Means-Tested Entitlement Programs," *The Quarterly Journal of Economics*, 111(2).
- Boushey, Graeme, and Adam Luedtke, 2011. "Immigrants across the U.S. Federal Laboratory: Explaining State-Level Innovation in Immigration Policy," *State Politics and Policy Quarterly*, 11(4).
- Buckley, F.H., 1996. "The Political Economy of Immigration Policies," *International Review of Law and Economics*, 16.
- Cadena, Brian C., and Brian Kovak, 2013. "Immigration, Internal Migration, and Local Labor Market Adjustment During the Great Recession," unpublished manuscript.
- Card, David, 2001. "Immigrant inflows, native outflows, and the local labor market impacts of higher immigration," *Journal of Labor Economics*, 19.

- Cascio, Elizabeth U., and Ethan G. Lewis, 2012. "Cracks in the Melting Pot: Immigration, School Choice, and Segregation," *American Economic Journal: Economic Policy*, 4(3).
- Cortes, Patricia, and Jose Tessada, 2011. "Low-Skilled Immigration and the Labor Supply of Highly Skilled Women," *American Economic Journal: Applied Economics* 3.
- Davila, Alberto, and Jose A. Pagan, "The Effect of Selective INS Monitoring Strategies on the Industrial Employment Choice and Earnings of Recent Migrants," *Economic Inquiry*, 35(1), 1997.
- Dodson, Marvin E., 2001. "Welfare Generosity and Location Choices among new United States Immigrants," *International Review of Law and Economics*, 21.
- Edin, Per-Anders, Peter Fredriksson, and Olof Aslund, 2003. "Ethnic Enclaves and the Economic Success of Immigrants – Evidence from a Natural Experiment," *Quarterly Journal of Economics*, 118(1).
- Funkhouser, Edward, 2000. "Changes in the Geographic Concentration and Location of Residence of Immigrants," *International Migration Review*, 34(2).
- Hoefler, Michael, Nancy Rytina, and Bryan Baker, 2012. "Estimates of the Unauthorized Immigrant Population Residing in The United States: January 2011," Department of Homeland Security Office of Immigration Statistics Report.
- Jaeger, David A. 2007. *Green cards and the location choices of immigrants in the United States, 1971–2000*. Vol. 27. Emerald Group Publishing Limited.
- Kostandini, Genti, Elton Mykerezi, and Cezar Escalante, 2012. "The Impact of immigration Enforcement on the Farming Sector," unpublished manuscript.
- Lacayo, A. Elena, 2010. "The Impact of Section 287(g) of the Immigration and Nationality Act on the Latino Community," *National Council of La Raza Issue Brief* 21.
- Lewis, Ethan, 2005. "Immigration, Skill Mix, and the Choice of Technique," *Federal Reserve Bank of Philadelphia Working Paper* 05-8, 2005.
- Lleras-Muney, A. , 2005. "The relationship between education and adult mortality in the United States," *The Review of Economic Studies*, 72(1).

- O'Neil, Kevin, 2013. "Immigration Enforcement by Local Police under 287(g) and Growth of Unauthorized Immigrant and Other Populations," *University of Cape Town Working Paper*.
- Orreinus, Pia M. and Madeline Zavodny, 2003. "Do Amnesty Programs Reduce Undocumented Immigration? Evidence from IRCA," *Demography*, 40(3).
- Orrenius, Pia M., and Madeline Zavodny, 2009. "The Effects of Tougher Enforcement on the Job Prospects of Recent Latin American Immigrants," *Journal of Policy Analysis and Management*, 28(2).
- Ortega, Francesc, and Giovanni Peri, 2013. "The Effect of Income and Immigration Policies on International Migration," *Migration Studies*, 1(1).
- Ruggles, Steven, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek, 2010. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota.
- Saiz, Albert, 2003. "Room in the Kitchen for the Melting Pot: Immigration and Rental Prices," *Review of Economics and Statistics*, 85(3).
- Saiz, Albert, 2007. "Immigration and Housing Rents in American Cities," *Journal of Urban Economics*, 61(2).
- Shahani, Aarti, and Judith Greene, 2009. *Local Democracy on ICE: Why State and Local Governments Have No Business in Federal Immigration Law Enforcement* (Brooklyn, NY: Justice Strategies, 2009), <http://www.justicestrategies.org/sites/default/files/JS-Democracy-On-Ice.pdf>
- Vaughan, Jessica M., and James R. Edwards, Jr., 2009. "The 287(g) Program: Protecting Home Towns and Homeland," *Center for Immigration Studies Background*.
- Watson, Tara, forthcoming. "Inside the Refrigerator: Immigration Enforcement and Chilling in Immigrant Medicaid Participation," *American Economic Journal: Economic Policy*.
- Wozniak, Abigail, and Thomas J. Murray, 2012. "Timing is Everything: Short Run Population Impacts of Immigration in U.S. Cities," *Journal of Urban Economics*, 72(1).

Figure 1. Number of 287g Agreements 2000-2011

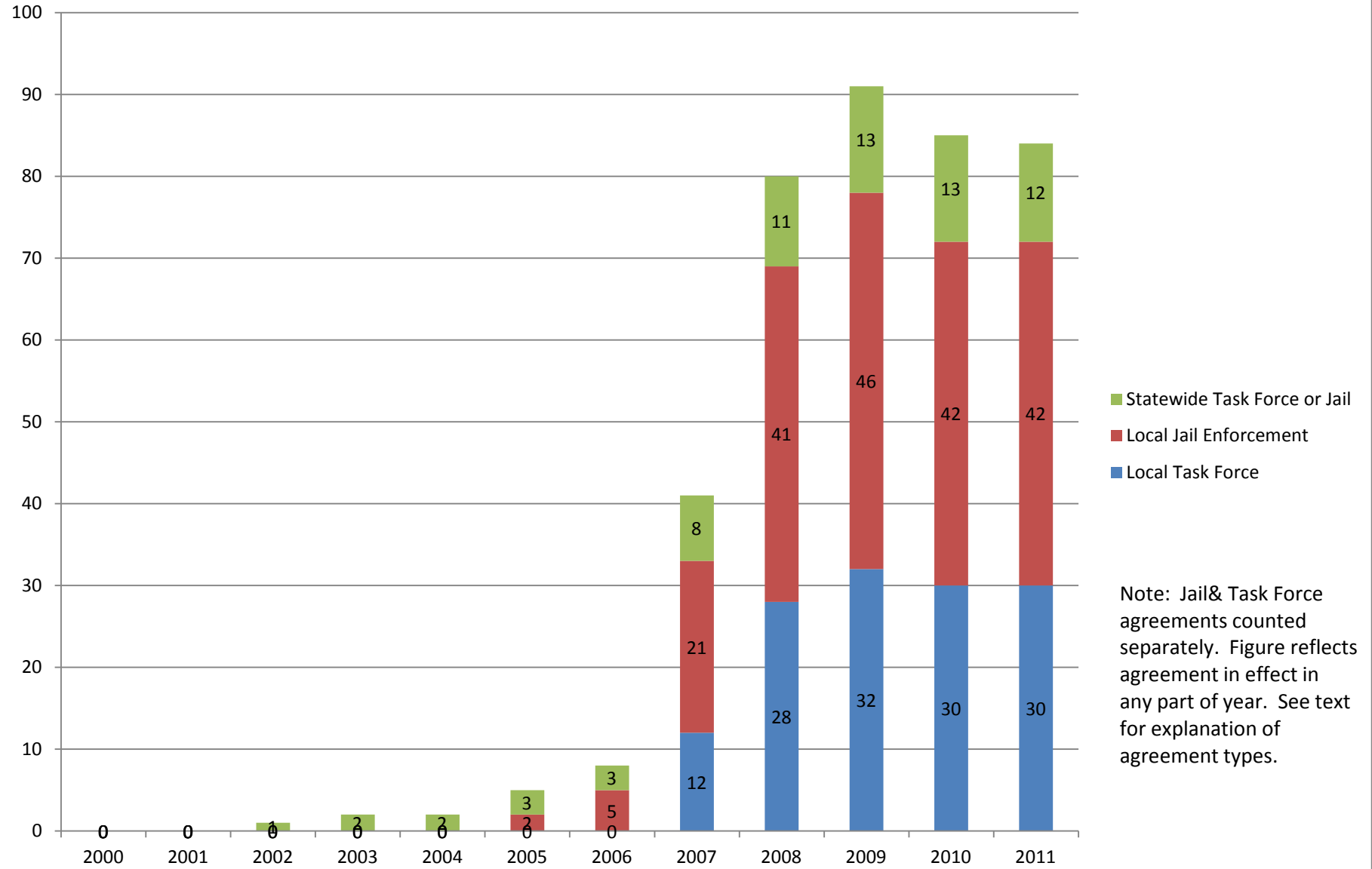


Figure 2. Map of Local Areas

Task Force, Jail Enforcement, and Both Shown in Pink, Yellow, and Dark Blue respectively.

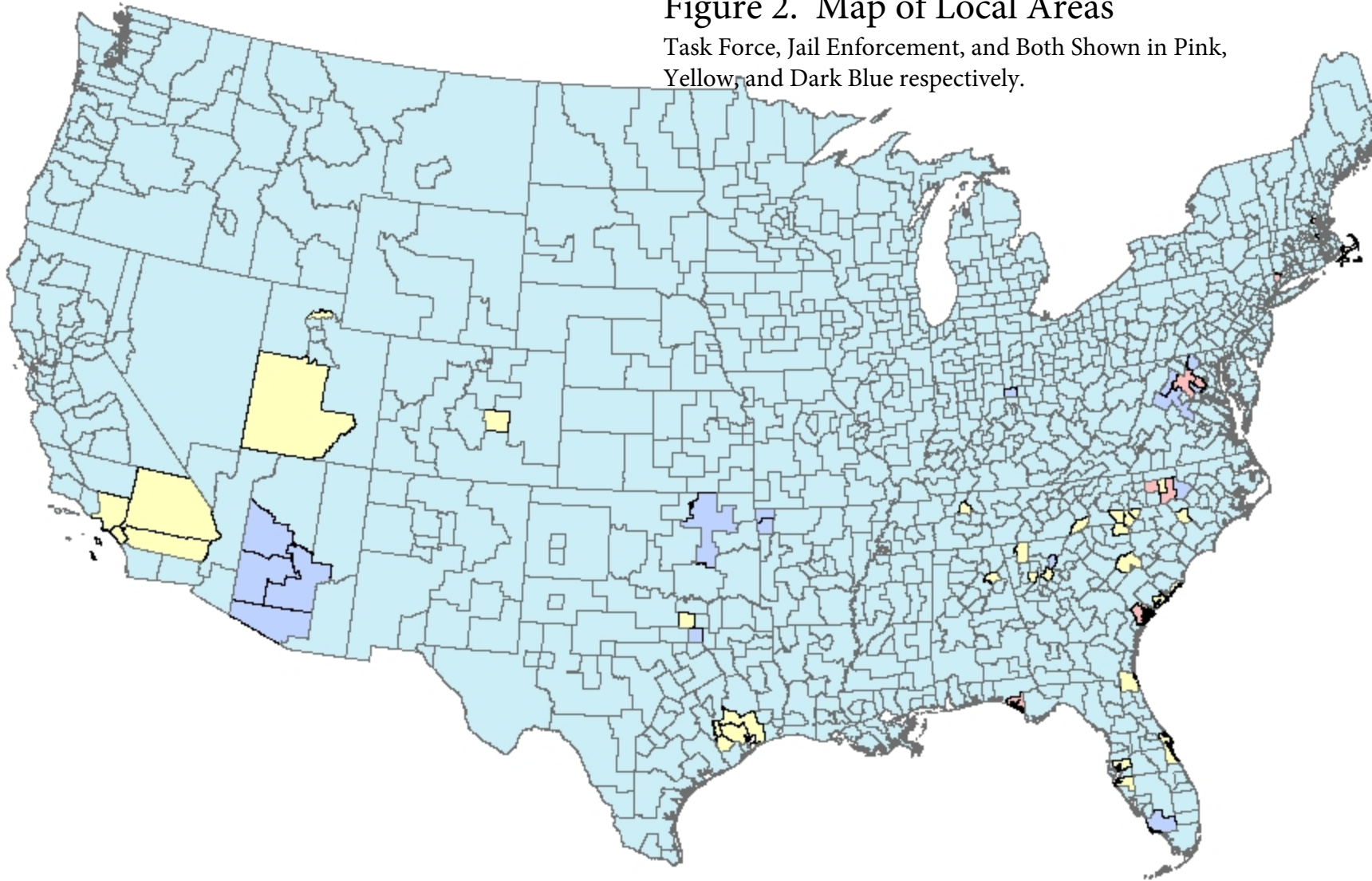


Table 1. Summary Statistics

Panel A. Summary Statistics for Aggregate Analysis (Weighted by Immigrant Population, N=4932)

	Mean	Std. Dev.	Min	Max
Immigrants Exiting U.S./Initial Immigrants	0.007	0.134	-3.148	0.806
Fraction Immigrants Moved State	0.025	0.027	0.000	0.686
Fraction Immigrants Moved Division	0.019	0.022	0.000	0.686
Fraction Immigrants Moved Region	0.014	0.018	0.000	0.535
Fraction Likely Documented Moved State	0.029	0.034	0.000	0.864
Fraction Likely Documented Moved Division	0.022	0.028	0.000	0.848
Fraction Likely Documented Moved Region	0.017	0.023	0.000	0.711
Fraction Likely Undocumented Moved State	0.021	0.033	0.000	1.000
Fraction Likely Undocumented Moved Division	0.016	0.028	0.000	0.889
Fraction Likely Undocumented Moved Region	0.011	0.023	0.000	0.889
Fraction Native Non-Hispanic White Moved State	0.043	0.022	0.000	0.235
Fraction Native Non-Hispanic White Moved Division	0.032	0.017	0.000	0.184
Fraction Native Non-Hispanic White Moved Region	0.024	0.014	0.000	0.171
Fraction Native Minority Moved State	0.031	0.025	0.000	0.507
Fraction Native Minority Moved Division	0.022	0.019	0.000	0.378
Fraction Native Minority Moved Region	0.016	0.016	0.000	0.335
Immigrant Inflow from Outside U.S. / Initial Pop	0.008	0.005	0.000	0.088
Likely Documented Immigrant Inflow from Outside U.S. /Initial Pop	0.005	0.004	0.000	0.088
Likely Undocumented Immigrant Inflow from Outside U.S. /Initial Pop	0.004	0.003	0.000	0.048
Likely Documented Immigrant Inflow from Within U.S. /Initial Pop	0.007	0.005	0.000	0.056
Likely Undocumented Immigrant Inflow from Within U.S. /Initial Pop	0.005	0.004	0.000	0.067
Local Task Force Agreement Coverage	0.022	0.152	0.000	1.838
Local Jail Enforcement Agreement Coverage	0.172	0.370	0.000	1.130
Statewide Agreement Coverage	0.175	0.411	0.000	2.000
E-Verify	0.067	0.251	0.000	1.000
Metro Area 18-64 Unemployment Rate	0.079	0.026	0.014	0.212
Metro Area Immigrant 18-49 Unemployment Rate				
Predicted Immigrant Population Relative to 2000	0.198	0.043	-0.071	0.319
Fraction Immigrants Non-Citizens	0.658	0.092	0.146	1.000
Fraction Immigrants Arriving Last 5 Years	0.214	0.077	0.000	0.961
Fraction Immigrants College Grads	0.255	0.122	0.000	0.911

Table 1. Summary Statistics (continued)

Panel B. Means for Individual Analysis of Immigrants (Weighted by ACS Survey Weights)

Sample is 18-to-49 year-old non-institutionalized foreign born in U.S. for two consecutive years

	Full Sample Mean (N=1,068,773)	Mean in "Treatment" Areas (N=315,782)	Mean in "Control" Areas (N=52,499)
Moved State	0.025	0.018	0.031
Moved Division	0.019	0.014	0.023
Moved Region	0.014	0.009	0.015
Local Task Force Agreement Coverage	0.021	0.073	0.000
Local Jail Enforcement Agreement Coverage	0.170	0.584	0.000
Statewide Agreement Coverage	0.174	0.160	0.281
E-Verify	0.067	0.091	0.179
Metro Area 18-64 Unemployment Rate	0.079	0.078	0.078
Metro Area Immigrant 18-49 Unemployment Rate	0.073	0.069	0.076
Predicted Immigrant Population Relative to 2000	0.198	0.220	0.208
Fraction Immigrants Non-Citizens	0.657	0.684	0.732
Fraction Immigrants Arriving Last 5 Years	0.214	0.193	0.244
Fraction Immigrants College Grads	0.255	0.211	0.225
Arrived to U.S. Last Five Years	0.181	0.163	0.204
Male	0.517	0.525	0.525
High School Graduate Exactly	0.241	0.236	0.240
Some College Exactly	0.208	0.194	0.183
College Grad or More	0.253	0.209	0.220
Own School-Age Children in Household	0.399	0.413	0.401
Non-Hispanic White	0.146	0.102	0.123
Citizen	0.356	0.326	0.284
Likely Undocumented	0.515	0.571	0.589

Table 2. Local 287(g) and Exits from the U.S. (N=4932)

Dependent Variable: Estimated Immigrant Exits From U.S. Divided By Initial Immigrant Population in Local Area

	I	II	III	IV	V
Local Task Force Coverage	0.05311+ (0.02942)	0.04851* (0.01933)	0.02854+ (0.01634)	-0.03045 (0.02341)	-0.02543 (0.02217)
Local Jail Enforcement Coverage	-0.00470 (0.01445)	-0.00118 (0.01268)	-0.00293 (0.01324)	0.02017 (0.02354)	0.02681 (0.02405)
Metro Area 18-64 Unemployment Rate		0.05707 (0.10319)	0.10566 (0.21807)	-0.01117 (0.10354)	-0.10727 (0.22017)
Predicted Foreign Born in Metro Area		0.51759+ (0.29851)	0.52959+ (0.30419)	0.51775+ (0.27793)	0.52225+ (0.27167)
Fraction Foreign Born Non-Citizen		0.22107** (0.05829)	0.22032** (0.05833)	0.20306** (0.06260)	0.20283** (0.06275)
Fraction Foreign Born Arrived Last Five Years		0.18048** (0.05325)	0.18689** (0.05314)	0.19199** (0.05562)	0.19072** (0.05562)
Fraction Foreign Born College Grad		-0.28908** (0.07028)	-0.29848** (0.06993)	-0.30946** (0.07653)	-0.31003** (0.07644)
Local Area Fixed Effects	yes	yes	yes	yes	yes
Year Dummies	yes				
Census Division*Year Dummies		yes			
Matched Area*Year Dummies				yes	yes
Maricopa County Included?	yes	yes	no	yes	no

Note: Standard errors clustered on metro area reported in parentheses.

Table 3. Internal Migration Conditional on Living in U.S. Two Consecutive Years (N=4932)

	Fraction Moved Out of State		Fraction Moved Out of Division		Fraction Moved Out of Region	
	Division*Yr	Matched Area*Yr	Division*Yr	Matched Area*Yr	Division*Yr	Matched Area*Yr
A. Likely Undocumented Foreign Born						
Local Task Force Coverage	-0.00099 (0.00331)	-0.00020 (0.00483)	-0.00272 (0.00289)	0.00088 (0.00424)	-0.00264 (0.00216)	-0.00257 (0.00404)
Local Jail Enforcement Coverage	0.00156 (0.00211)	0.01025* (0.00443)	0.00152 (0.00166)	0.00623 (0.00428)	0.00147 (0.00145)	0.00365 (0.00393)
B. Likely Documented Foreign Born						
Local Task Force Coverage	0.00570 (0.00364)	0.01027 (0.00911)	0.00873** (0.00289)	0.01915** (0.00727)	0.00755** (0.00230)	0.01897** (0.00727)
Local Jail Enforcement Coverage	-0.00064 (0.00260)	-0.00547 (0.00757)	-0.00391* (0.00179)	-0.00913 (0.00699)	-0.00285+ (0.00164)	-0.01318* (0.00646)
C. Non-Hispanic White Natives						
Local Task Force Coverage	-0.00284 (0.00204)	-0.00131 (0.00344)	-0.00272 (0.00204)	-0.00660+ (0.00344)	-0.00279* (0.00132)	-0.00170 (0.00418)
Local Jail Enforcement Coverage	0.00229 (0.00176)	-0.00884 (0.00614)	0.00161 (0.00183)	-0.00450 (0.00603)	0.00148 (0.00126)	-0.00551 (0.00695)
D. Minority Natives						
Local Task Force Coverage	-0.00580* (0.00272)	-0.00245 (0.00429)	-0.00228 (0.00231)	0.00446 (0.00289)	-0.00329+ (0.00181)	0.00101 (0.00280)
Local Jail Enforcement Coverage	0.00174 (0.00244)	0.00553 (0.00463)	0.00039 (0.00146)	0.00288 (0.00364)	0.00118 (0.00118)	0.00203 (0.00340)

Note: Standard errors clustered on metro area reported in parentheses.

Table 4. Divisional Migration Among Likely Unocumented Immigrants

	I	II	III	IV Non-Hispanic Whites	V Minorities	VI No HS Degree	VII HS Degree+	VIII
Local Task Force Coverage	0.00204 (0.00268)	-0.00248 (0.00281)	0.00050 (0.00415)	-0.01414 (0.01290)	0.00140 (0.00422)	0.00141 (0.00619)	0.00161 (0.00384)	-0.00075 (0.00474)
Local Jail Enforcement Coverage	0.00162 (0.00189)	0.00141 (0.00139)	0.00625+ (0.00367)	0.05989* (0.02896)	0.00413 (0.00358)	0.00483 (0.00460)	0.00698 (0.00597)	0.00681+ (0.00378)
Metro Area 18-64 Unemployment Rate		0.04407 (0.03254)	0.06536* (0.03159)	0.03436 (0.13369)	0.06757* (0.03227)	0.09116* (0.04188)	0.04386 (0.04192)	0.06598* (0.03172)
Predicted Foreign Born in Metro Area		-0.05202 (0.04631)	-0.04903 (0.03729)	0.07961 (0.10759)	-0.05701 (0.04039)	-0.08426 (0.05254)	-0.02242 (0.04610)	-0.04909 (0.03729)
Fraction Foreign Born Non-Citizen		-0.00126 (0.00882)	-0.00204 (0.00932)	-0.02017 (0.02216)	-0.00065 (0.00997)	0.00220 (0.01247)	-0.00659 (0.01262)	-0.00192 (0.00933)
Fraction Foreign Born Arrived Last Five Years		0.00913 (0.00873)	0.01261 (0.00914)	0.00867 (0.02361)	0.01292 (0.00960)	0.01941+ (0.01173)	0.00421 (0.01239)	0.01249 (0.00915)
Fraction Foreign Born College Grad		-0.00621 (0.01058)	-0.00043 (0.01042)	-0.00654 (0.03094)	-0.00111 (0.01055)	0.00609 (0.01521)	-0.00544 (0.01363)	-0.00042 (0.01042)
Arrived Last Five Years		0.00495** (0.00069)	0.00495** (0.00069)	0.00558** (0.00210)	0.00476** (0.00071)	0.00332** (0.00099)	0.00644** (0.00091)	0.00506** (0.00070)
Male		0.00078+ (0.00040)	0.00078+ (0.00040)	0.00091 (0.00151)	0.00083* (0.00042)	0.00125** (0.00046)	0.00051 (0.00061)	0.00079+ (0.00041)
High School Degree Exactly		0.00034 (0.00055)	0.00031 (0.00055)	0.00127 (0.00226)	0.00032 (0.00055)		-0.00135+ (0.00071)	0.00030 (0.00057)
Some College Exactly		0.00187* (0.00087)	0.00185* (0.00087)	0.00493* (0.00222)	0.00131 (0.00093)			0.00184* (0.00089)
Own School-Aged Kids		-0.00475** (0.00070)	-0.00473** (0.00070)	-0.00781** (0.00191)	-0.00443** (0.00067)	-0.00425** (0.00087)	-0.00538** (0.00081)	-0.00486** (0.00072)
Age Group Dummies		yes	yes	yes	yes	yes	yes	yes
Country of Origin Group Dummies		yes	yes	yes	yes	yes	yes	yes
Local Area Dummies	yes	yes	yes	yes	yes	yes	yes	yes
Year Dummies	yes							
Census Division*Year Dummies		yes						
Matched Area*Year Dummies			yes	yes	yes	yes	yes	yes
Maricopa County Included?	yes	yes	yes	yes	yes	yes	yes	no
N	501916	501916	501916	48689	453227	236646	265270	489934
R-squared	0.016	0.019	0.021	0.069	0.024	0.039	0.021	0.021

Note: Standard errors clustered on metro area reported in parentheses.

Table 5. Divisional Migration Among Likely Documented Immigrants

	I	II	III	IV Non-Hispanic Whites	V Minorities	VI College Grads	VII Non-College Grads	VIII
Local Task Force Coverage	0.00676** (0.00197)	0.00891** (0.00271)	0.01813** (0.00454)	-0.01634+ (0.00988)	0.02515** (0.00543)	0.02652** (0.00814)	0.00749 (0.00574)	0.01545** (0.00336)
Local Jail Enforcement Coverage	-0.00142 (0.00170)	-0.00293+ (0.00172)	-0.00502 (0.00585)	0.01921 (0.01673)	-0.00893 (0.00610)	0.00479 (0.00999)	-0.01228 (0.00775)	-0.00178 (0.00539)
Metro Area 18-64 Unemployment Rate		0.02387 (0.03905)	0.04082 (0.03678)	-0.00719 (0.09188)	0.05699 (0.03993)	0.06752 (0.06102)	0.01275 (0.03834)	0.04075 (0.03684)
Predicted Foreign Born in Metro Area		-0.07857+ (0.04536)	-0.06137 (0.03926)	-0.02993 (0.07730)	-0.06607 (0.04239)	-0.08892 (0.06477)	-0.02625 (0.04716)	-0.06108 (0.03930)
Fraction Foreign Born Non-Citizen		-0.00570 (0.00939)	-0.00021 (0.00967)	-0.01905 (0.01901)	0.00783 (0.01099)	0.00014 (0.01567)	-0.00430 (0.01163)	-0.00005 (0.00967)
Fraction Foreign Born Arrived Last Five Years		-0.00705 (0.01010)	-0.01192 (0.01005)	-0.01585 (0.01593)	-0.01115 (0.01205)	-0.00924 (0.01563)	-0.00858 (0.01217)	-0.01196 (0.01006)
Fraction Foreign Born College Grad		0.01248 (0.01104)	0.01157 (0.01160)	0.02159 (0.01704)	0.00869 (0.01366)	0.02656 (0.01640)	-0.00662 (0.01236)	0.01175 (0.01159)
Arrived Last Five Years		0.01331** (0.00134)	0.01330** (0.00134)	0.00931** (0.00321)	0.01431** (0.00141)	0.01221** (0.00149)	0.00387+ (0.00226)	0.01306** (0.00134)
Male		0.00226** (0.00044)	0.00225** (0.00044)	0.00234* (0.00104)	0.00229** (0.00050)	0.00432** (0.00068)	0.00032 (0.00053)	0.00213** (0.00043)
High School Degree Exactly		0.00147+ (0.00083)	0.00149+ (0.00084)	0.00427* (0.00215)	0.00138+ (0.00076)		0.00263** (0.00075)	0.00144+ (0.00085)
Some College Exactly		0.00152 (0.00104)	0.00156 (0.00105)	0.00403+ (0.00215)	0.00133 (0.00109)		0.00326** (0.00105)	0.00139 (0.00103)
College Grad or More		0.00756** (0.00171)	0.00765** (0.00172)	0.01334** (0.00291)	0.00640** (0.00164)			0.00757** (0.00173)
Own School-Aged Kids		-0.00850** (0.00088)	-0.00849** (0.00088)	-0.00859** (0.00146)	-0.00833** (0.00098)	-0.01185** (0.00135)	-0.00460** (0.00069)	-0.00849** (0.00089)
Citizen		-0.00919** (0.00094)	-0.00916** (0.00094)	-0.00307* (0.00138)	-0.01105** (0.00125)	-0.00718** (0.00095)	0.00000 (0.00000)	-0.00921** (0.00094)
Age Group Dummies		yes	yes	yes	yes	yes	yes	yes
Country of Origin Group Dummies		yes	yes	yes	yes	yes	yes	yes
Local Area Dummies	yes	yes	yes	yes	yes	yes	yes	yes
Year Dummies	yes							
Census Division*Year Dummies		yes						
Matched Area*Year Dummies			yes	yes	yes	yes	yes	yes
Maricopa County Included?	yes	yes	yes	yes	yes	yes	yes	no
N	566857	566857	566857	122213	444644	305577	261280	559457
R-squared	0.015	0.027	0.028	0.037	0.032	0.035	0.023	0.028

Note: Standard errors clustered on metro area reported in parentheses.

Table 6. Inflows from Outside and Within the U.S. (N=4932)

		Inflows from Outside the U.S./Population		Inflows from Within the U.S./Population	
		Division*Yr	Matched Area*Yr	Division*Yr	Matched Area*Yr
A. Likely Undocumented Foreign Born					
	Local Task Force Coverage	-0.00181** (0.00058)	-0.00164* (0.00075)	0.00115 (0.00119)	-0.00097 (0.00150)
	Local Jail Enforcement Coverage	-0.00054 (0.00044)	-0.00003 (0.00090)	-0.00176 (0.00113)	0.00224 (0.00260)
B. Likely Documented Foreign Born					
	Local Task Force Coverage	-0.00041 (0.00048)	0.00009 (0.00059)	0.00243* (0.00097)	0.00415** (0.00122)
	Local Jail Enforcement Coverage	0.00049 (0.00039)	0.00065+ (0.00036)	-0.00164* (0.00071)	-0.00276+ (0.00163)
C. Non-Hispanic White Natives					
	Local Task Force Coverage			0.00094 (0.00356)	0.00769* (0.00320)
	Local Jail Enforcement Coverage			-0.00148 (0.00165)	-0.00677 (0.00454)
D. Minority Natives					
	Local Task Force Coverage			0.00156 (0.00456)	0.00970** (0.00358)
	Local Jail Enforcement Coverage			-0.00203 (0.00225)	-0.01134+ (0.00601)

Note: Standard errors clustered on metro area reported in parentheses.