Immigration Enforcement and Health Insurance Choices: Evidence from Secure Communities

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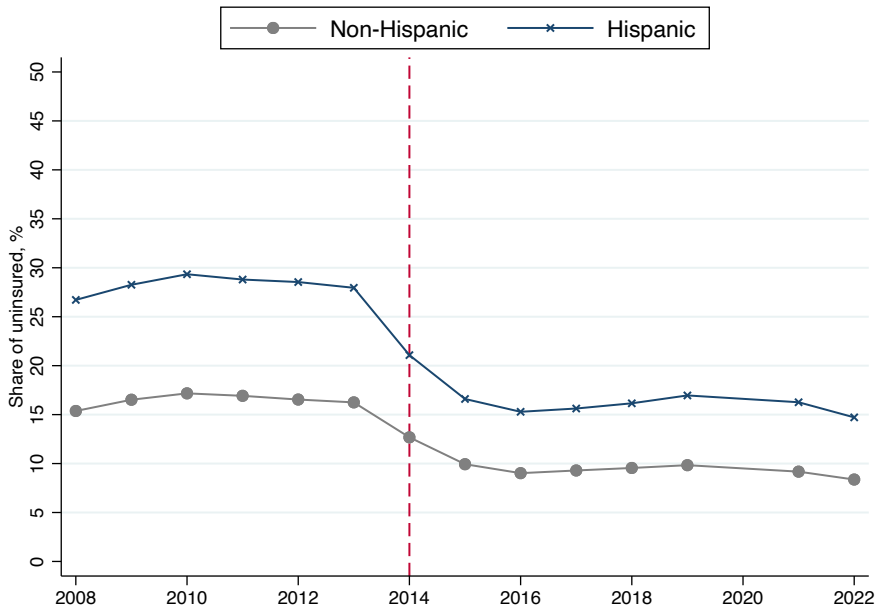
Motivation

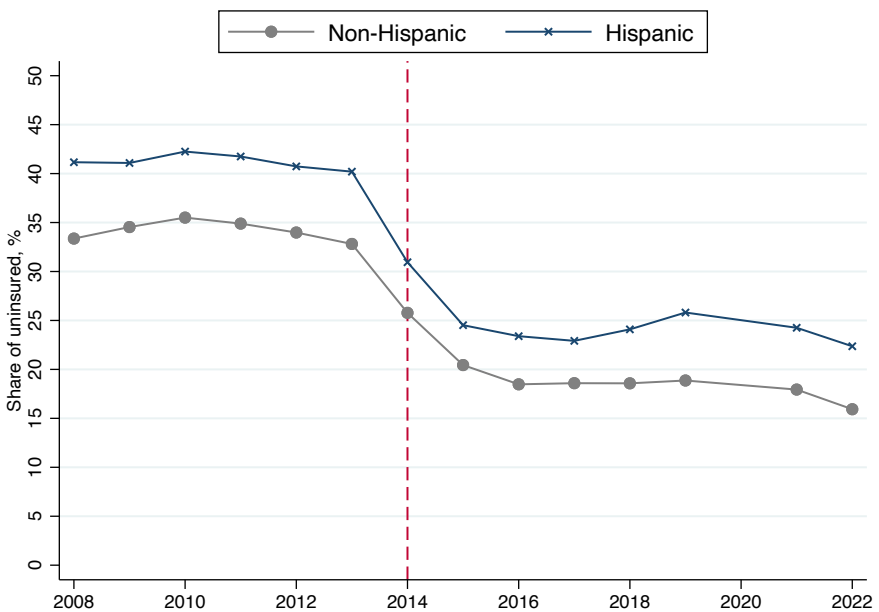
- The past decades' surge in migrants fleeing to the United States has intensified the country's immigration enforcement.
- Large-scale deportation generates fear and insecurity not just among undocumented immigrants but also co-ethnic citizens (Lopez et al., 2018).
- If fear of deportation is not limited to undocumented immigrants, can immigration enforcement influence other government objectives?
- Government objectives: reduce uninsured rates, improve healthcare access, and ensure equitable enrollment in health programs.

Hispanics have higher uninsured rate compared to Non-Hispanics

All income level



FPL $\leq$ 138



Data Source: Individuals 20-64 years old, excluding non-citizens, employed in government and military industry or institutionalized. ACS 2020 data excluded. Source: Author calculation from ACS 2008-2022

This paper

- **This paper:** Does non-citizens' deportation influence co-ethnic citizens participation in health insurance take up rate?
  - whether immigration enforcement affects participation at Medicaid, employer-sponsored, directly purchased, any insurance plans.
- Hispanic U.S. citizens are eligible for government programs but showed decreased take up rate due to immigration policies:
  - Alsan and Yang (2021), Watsan (2014), Kandula et.al (2004), Marton et.al (2016)
- To estimate the effect, we leverage federal immigration enforcement program - **Secure Communities (SC)**

Secure Communities: federal immigration enforcement program

Goal: remove illegal immigrants who committed crime

- county-by-county activation between 2008-2013
- gradually activated by all counties
- terminated in 2014
- required collaboration between local law enforcement agencies and Immigration Custom Enforcement Program (ICE)
- detained individuals' fingerprints sent to FBI and Department of Homeland Security to track immigration history

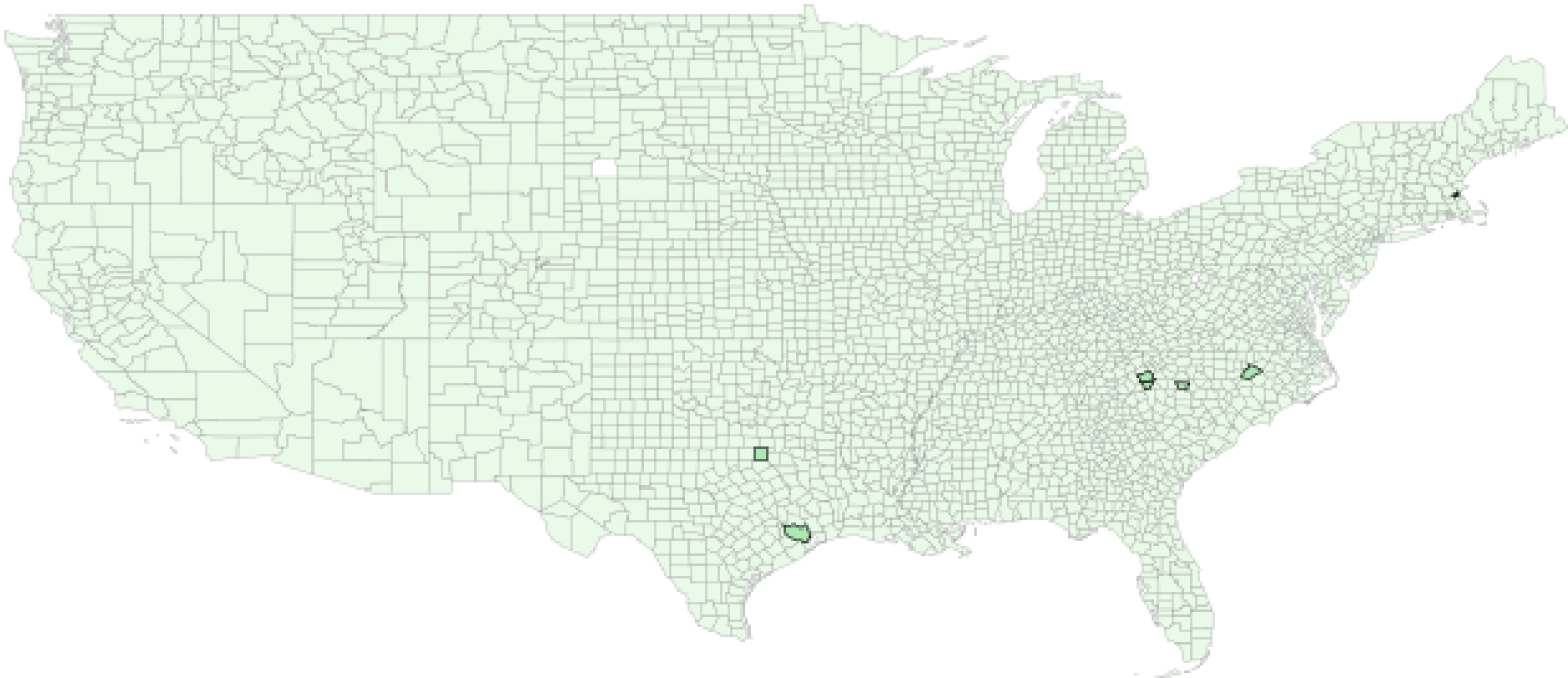
Secure Communities' outcome

- Over 450,000 immigrants were deported
- Demographics of deportees:
  - 62.6% were from Mexico
  - 23% were from Central American countries
  - 95.6% were males[1]
- Deportation by crime type:
  - 60.8% detained for nonviolent crime
  - 20.6% committed no crime
  - 18.5% were caught for violent crime[1]

[1] source: TRAC Immigration.

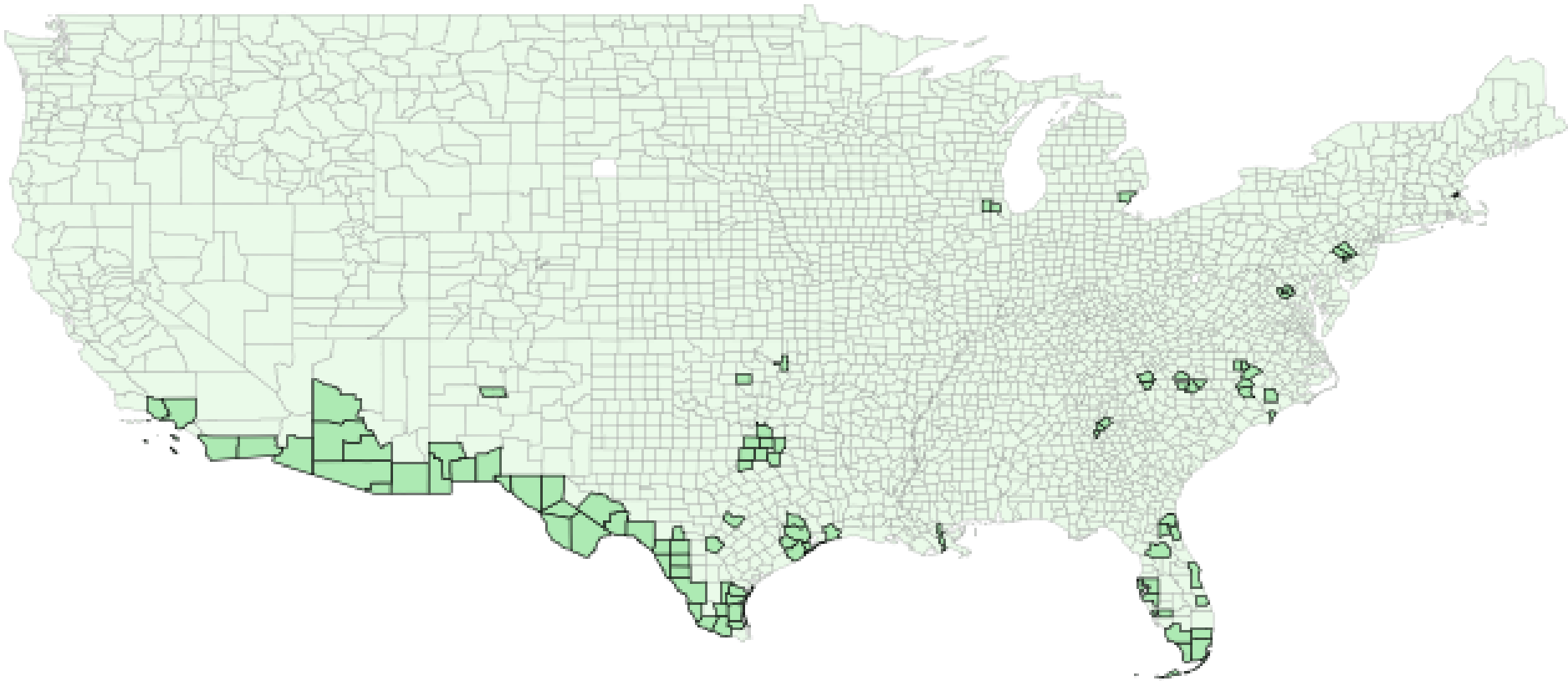
Secure Communities' activation across counties

2008 2009 2010 2011 2012 2013



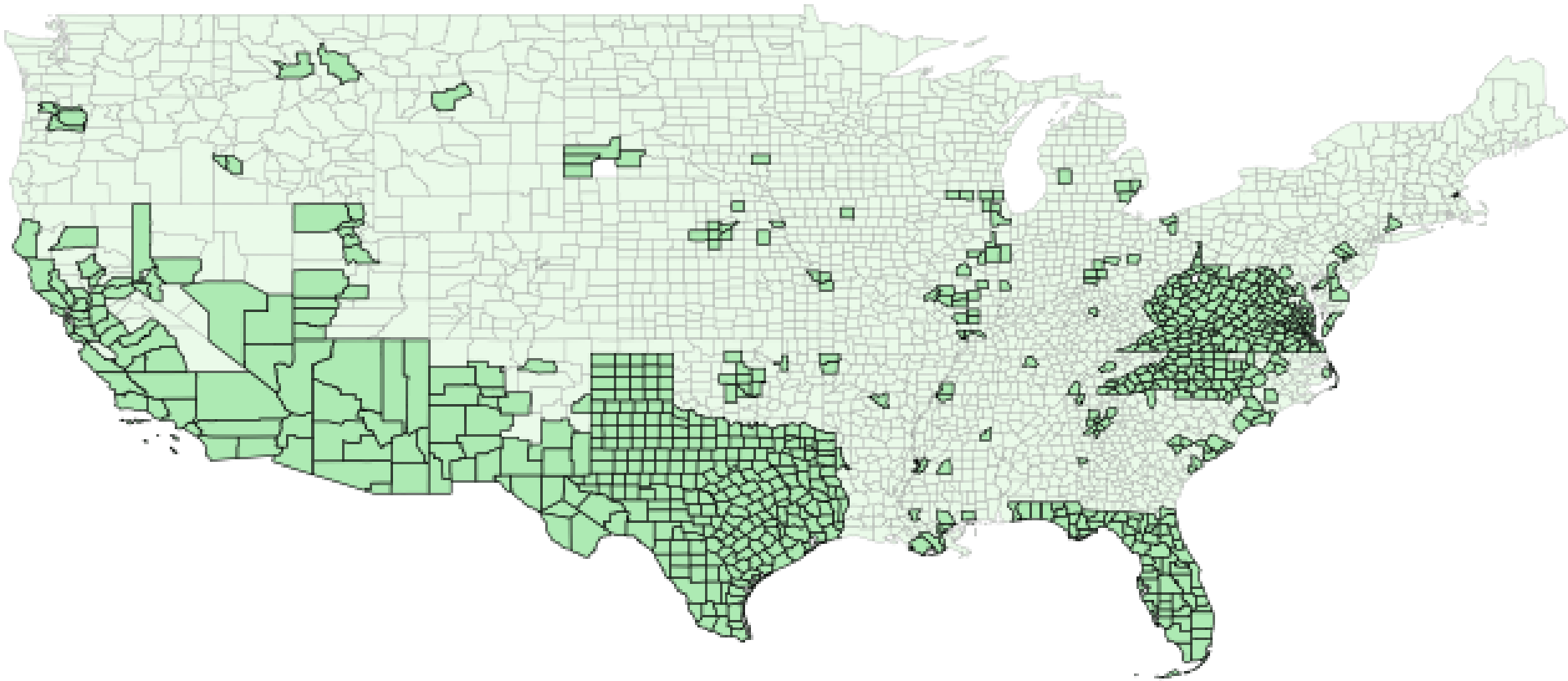
Secure Communities' activation across counties

2008 2009 2010 2011 2012 2013



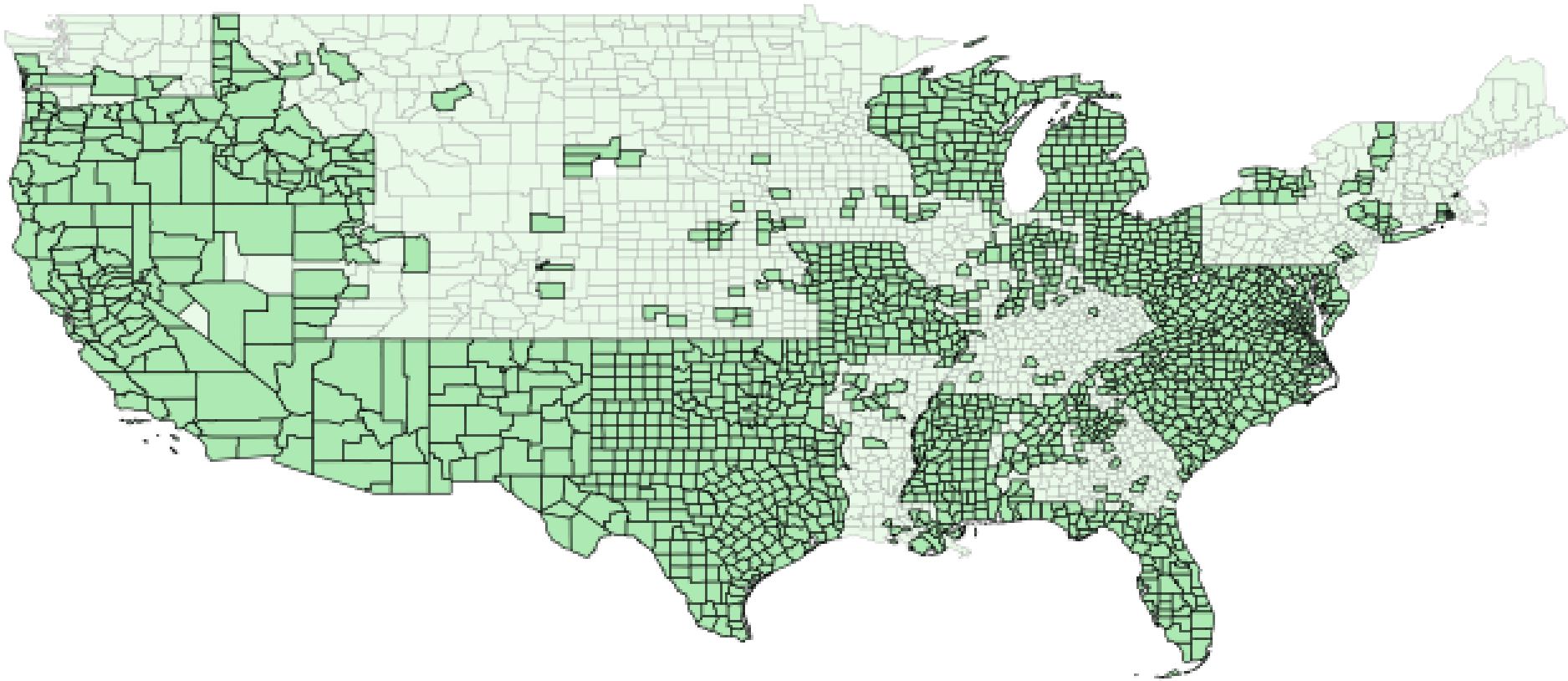
Secure Communities' activation across counties

2008 2009 **2010** 2011 2012 2013



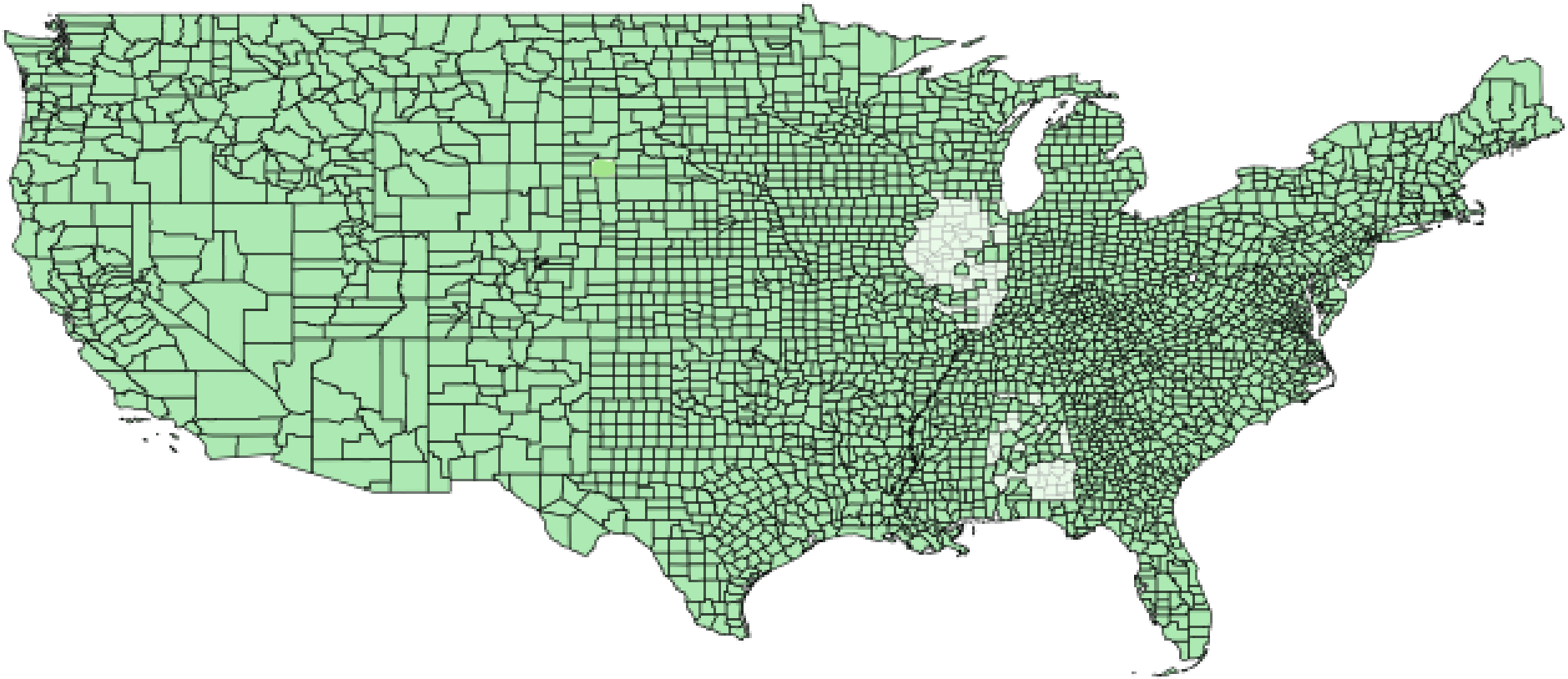
Secure Communities' activation across counties

2008 2009 2010 **2011** 2012 2013



Secure Communities' activation across counties

2008 2009 2010 2011 **2012** 2013



Secure Communities' activation across counties

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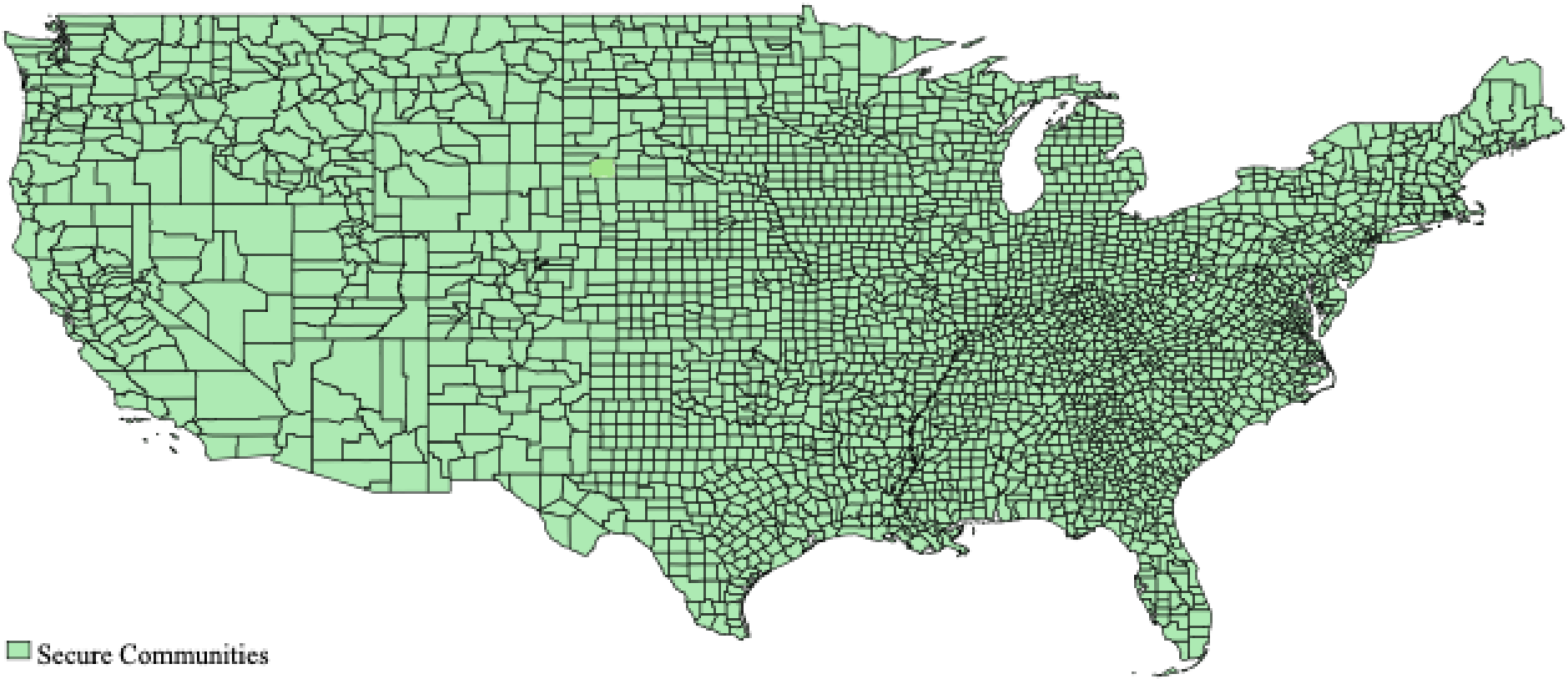


Overview

- **Research question:** Did SC impact health insurance enrollment by Hispanic U.S. citizens?
- **Approach:** Exploit spatial and temporal rollout of SC and differential impact on Hispanics U.S. citizens in a triple-differences framework
  - **Preview of results:** 6.9% decrease in the likelihood of having Medicaid plan
  - 8.5% increase in the likelihood of being uninsured
- **Mechanism:**
  - effect is muted in sanctuary cities
  - effect is stronger in Hispanic and non-citizen populated areas

Literature and contribution

- **Participation at social safety net programs.** Hispanic population's incomplete benefit take up rate (Bitler, 2012; Watson, 2014; Alsan and Yang, 2019)
- **Anti-immigration legislation and social benefit participation.** Impacts of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), the 2005 Deficit Reduction Act (DRA) (Borjas, 2003; Kandula et.al., 2004; Sommers, 2010; Marton et.al, 2016; Angus and DeVoe, 2010)
- **Spillover effect of Secure Communities.** Impact of SC on Hispanic U.S. citizens' social program participation, work conditions, elderly living arrangement, labor market outcome of U.S. citizens (Alsan and Yang, 2019; Grittner and Johnson, 2021, East et al., 2018; East and Velasquez, 2021; Almuhaisen et.al., 2024, Toshmatova, 2023)

Contribution. Impact of SC on health insurance take-up rate among Hispanic adult U.S. citizens.

Data sources and outcomes

The American Community Survey (ACS), 2008-2015

- demographic characteristics of Hispanic and non-Hispanic U.S. citizens
- geographic unit: Public Use Microdata Area (PUMA) characteristics

Freedom of Information Act Library: SC and 287g activation timing

Samples:

- 20-64 years old and income at or below of 138% of the Federal Poverty Level (FPL)
- PUMAs activated SC in 2011-2014

Four outcomes of interest.

1. uninsured
2. Medicaid
3. directly-purchased insurance
4. employer-sponsored insurance

▸ Summary statistics

PUMA-level population weighted continuous treatment variable: example

PUMA 634 in New York state consists of four counties

Clinton County	Essex County	Franklin County	Hamilton County
Population in 2011 =81,851 weight=0.46	Population in 2011=39,479 weight=0.22	Population in 2011=51,572 weight=0.29	Population in 2011=4,831 weight=0.027

- Clinton and Essex counties activated SC in 2011
- Franklin and Hamilton counties activated SC in 2012
- SC in 2011=0.46+0.22=0.68
- SC in 2012=1

▸ PUMA activation ▸ Number of PUMAs

Empirical approach: triple-differences model

$$Y_{ipt} = \beta_1 (SC_{pt} \times I^h_{ipt}) + \beta_2 SC_{pt} + X'_{ipt}\delta + Z'_{pt}\gamma + \mu_p + \theta_t + \phi_{st} + \zeta_{hs} + \eta_{ht} + \varepsilon_{ipt} \quad (1)$$

- β_1: effect of SC on Hispanics' health insurance decision relative to non-Hispanics
- Y_{ipt}: one of the four outcomes of interest
- SC_{pt}: ranges between 0 and 1
- X'_{ipt}: age, age squared, female, marital status, education, black, and number of children
- Z'_{pt}: if 287(g) is active, Bartik style measures of labor demand
- μ_p PUMA fixed effect, θ_t year fixed effect, ϕ_{st} state-by-year fixed effect, ζ_{hs} Hispanic-by-state fixed effect, η_{ht} Hispanic-by-year fixed effect, standard errors clustered at PUMA level

▸ identification

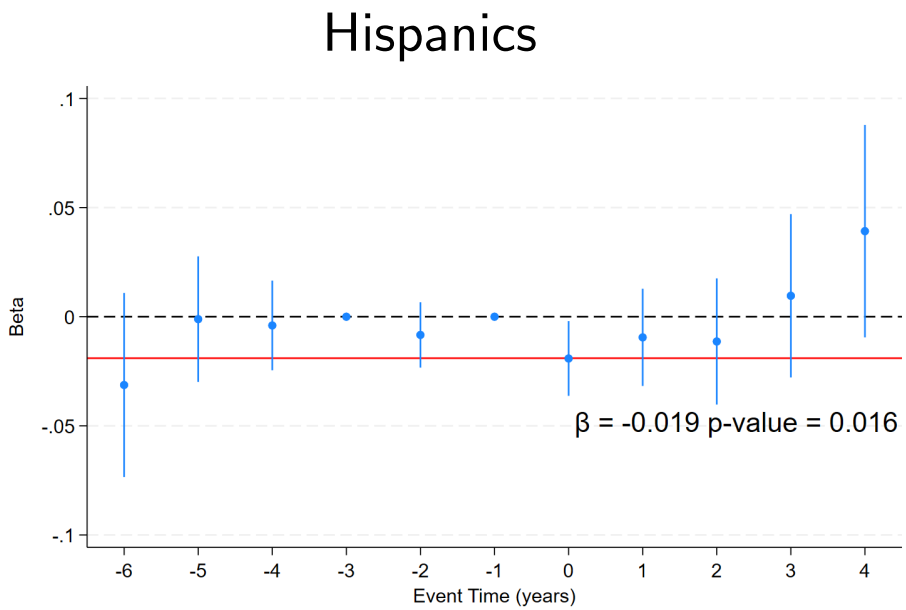
Event-studies: health insurance choice trend around SC's adoption

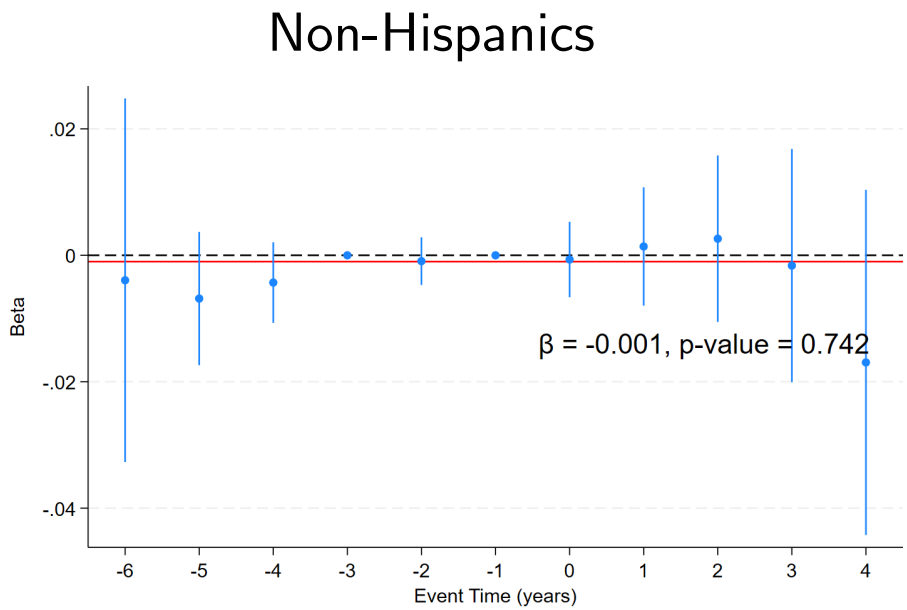
$$Y_{ipt} = \sum_{k\neq -1, k\neq -3} \beta_1^k (SC_{pt} \times I_{ipt}^h) + \sum_{k\neq -1, k\neq -3} \beta_2^k SC_{pt} + X'_{ipt}\delta + Z'_{pt}\gamma + \mu_p \quad (2)$$

$$+ \theta_t + \phi_{st} + \zeta_{hs} + \eta_{ht} + \varepsilon_{ipt}$$

- SC is converted to binary
- No systematic differences in health insurance choices between Hispanics and non-Hispanics prior to SC across PUMAs

Decreased incidence of Medicaid enrollment among Hispanics, FPL $\leq$ 138

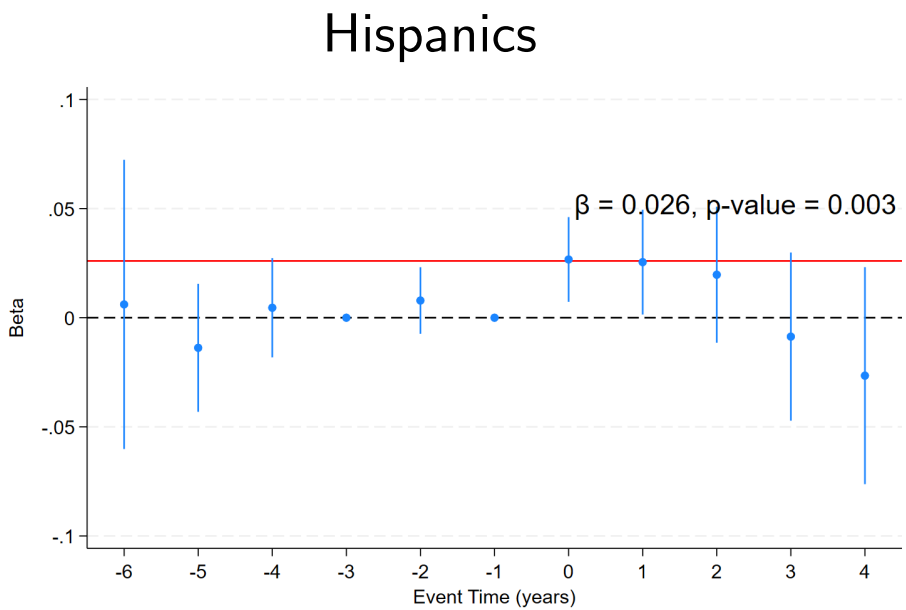


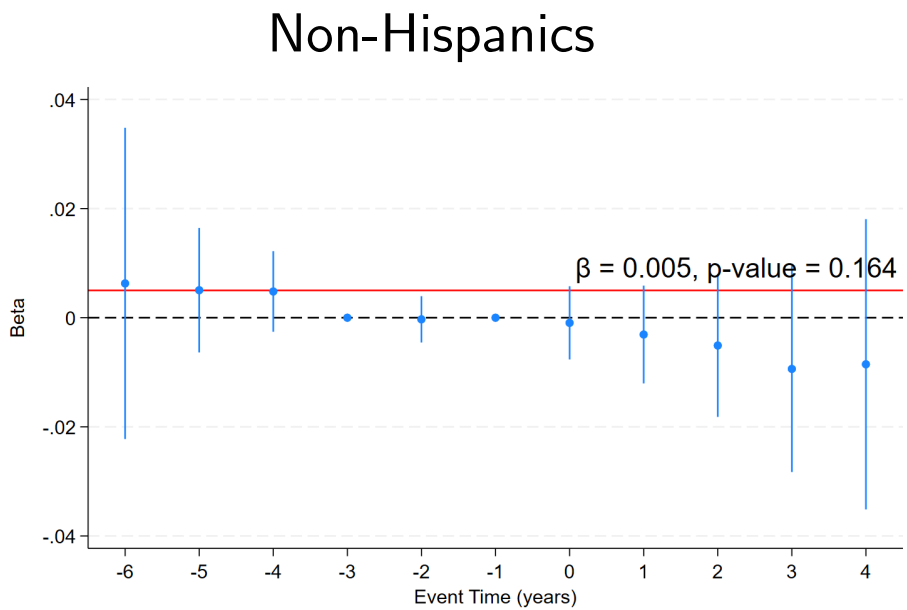


ACS 2008-2015 and limited to U.S. citizens aged 20-64 years old and whose household incomes are at or below 138% of FPL. The regressions include PUMA fixed effect, year fixed effect, state-by-year fixed effect, race-by-state fixed effect, race-by-year fixed effect, vector of demographic controls, controls for presence of 287(g) programs, Bartik-style measures of labor demand, and standard errors are clustered at the PUMA level. Results are weighted using ACS person-level weights.

▸ FPL$\leq$200 ▸ DDD results

Increased incidence of uninsured among Hispanics, FPL $\leq$ 138





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▸ FPL$\leq$200

Effect of SC is muted in sanctuary cities, FPL $\leq$ 138

	No insurance	Medicaid
SC x Hispanic	0.024***	-0.018**
	(0.009)	(0.008)
Secure Communities	0.005	-0.001
	(0.003)	(0.004)
SC x Hispanic x Sanctuary	0.013*	-0.008
	(0.007)	(0.008)
Mean Y	0.31	0.28
P-Value SC x Hispanic x Sanctuary	0.09	0.30
% Effect	4.13	-2.94
N	1450604	1450604

▸ Network

Conclusions

Secure Communities impacted the health insurance take up rate among low-income Hispanic U.S. citizens:

- decreased Medicaid enrollment
- increased rate of uninsured

Suggestive evidence that findings are driven by fear:

- negligible effect in sanctuary cities
- stronger effect in Hispanic and non-citizen populated areas

Future work:

- explore alternative DD estimators (Callaway and Sant'anna (2021))

Thank you for your time!

Appendix

Comparison groups characteristics in 2008

	Non-Hispanic	Hispanic
Female	0.515	0.513
College education	0.285	0.153
Married	0.550	0.464
Age (years)	42.25	38.51
FPL	337.7	285.7
Receive SSI or Supplemental SI	0.0734	0.0625
Receive Public Assistance	0.0145	0.0257
Receive retirement income	0.0528	0.0288
Below 138% FPL	0.155	0.219
Below 200% FPL	0.242	0.350
Any Insurance	0.853	0.760
Medicaid	0.0567	0.108
Directly Purchased	0.0705	0.0371
ESI	0.679	0.573
Medicare	0.0385	0.0324

back to data

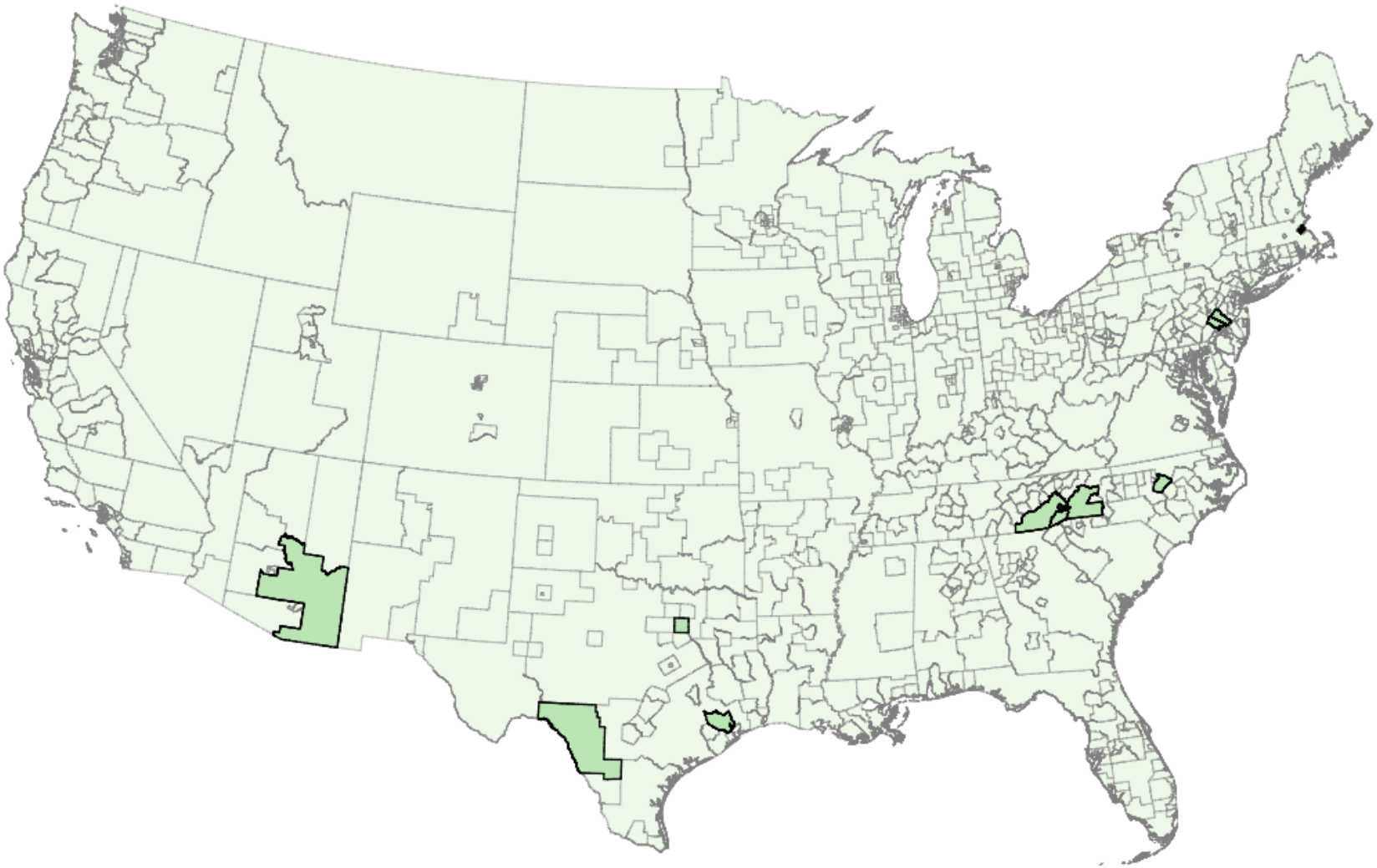
PUMAs activation by year

Year	Number of activated	Number of cumulatively activated
2011	331	331
2012	249	580
2013	307	887
2014	29	916

back to example

Secure Communities' activation across PUMAs

2009 2010 2011 2012 2013 2014



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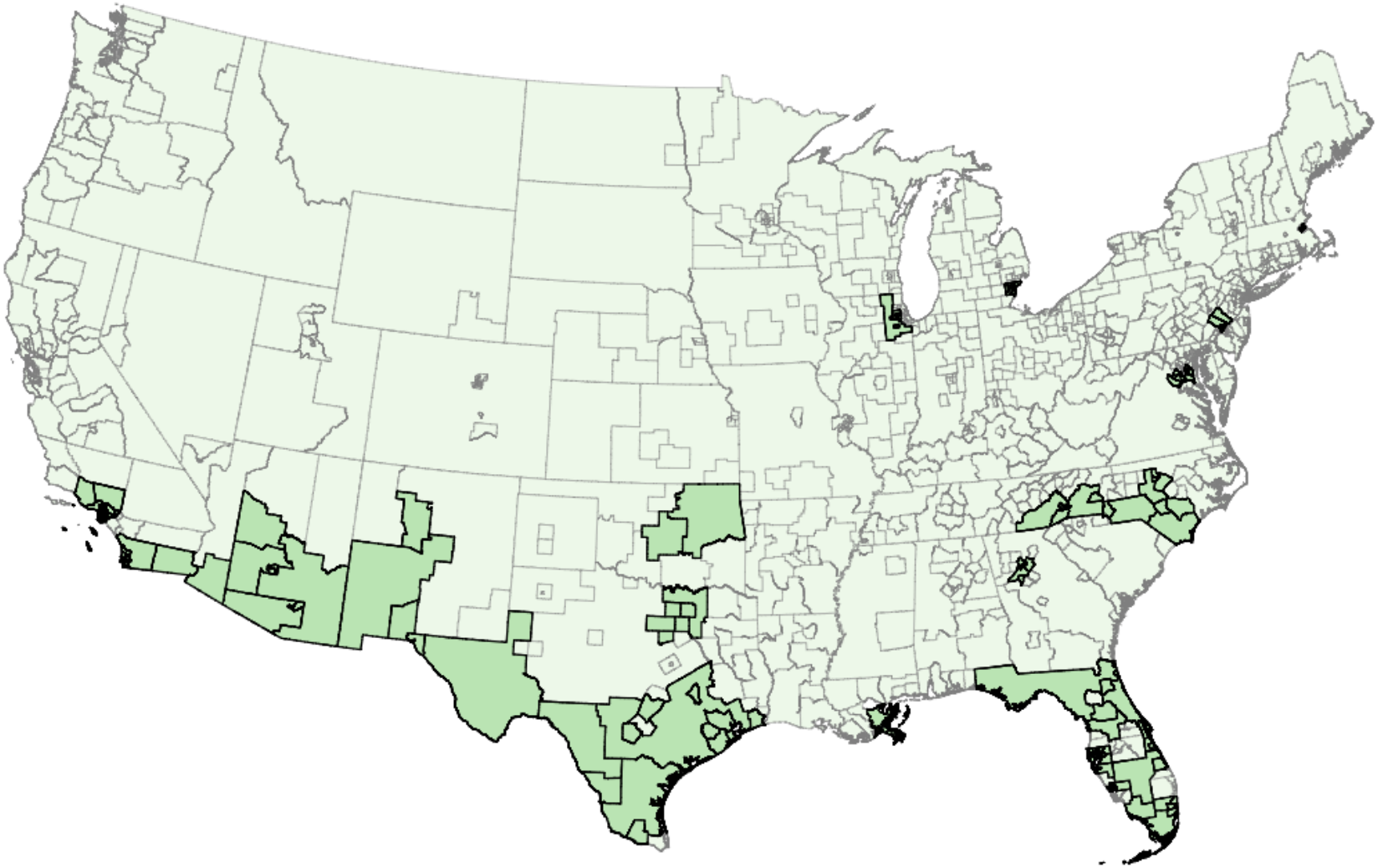

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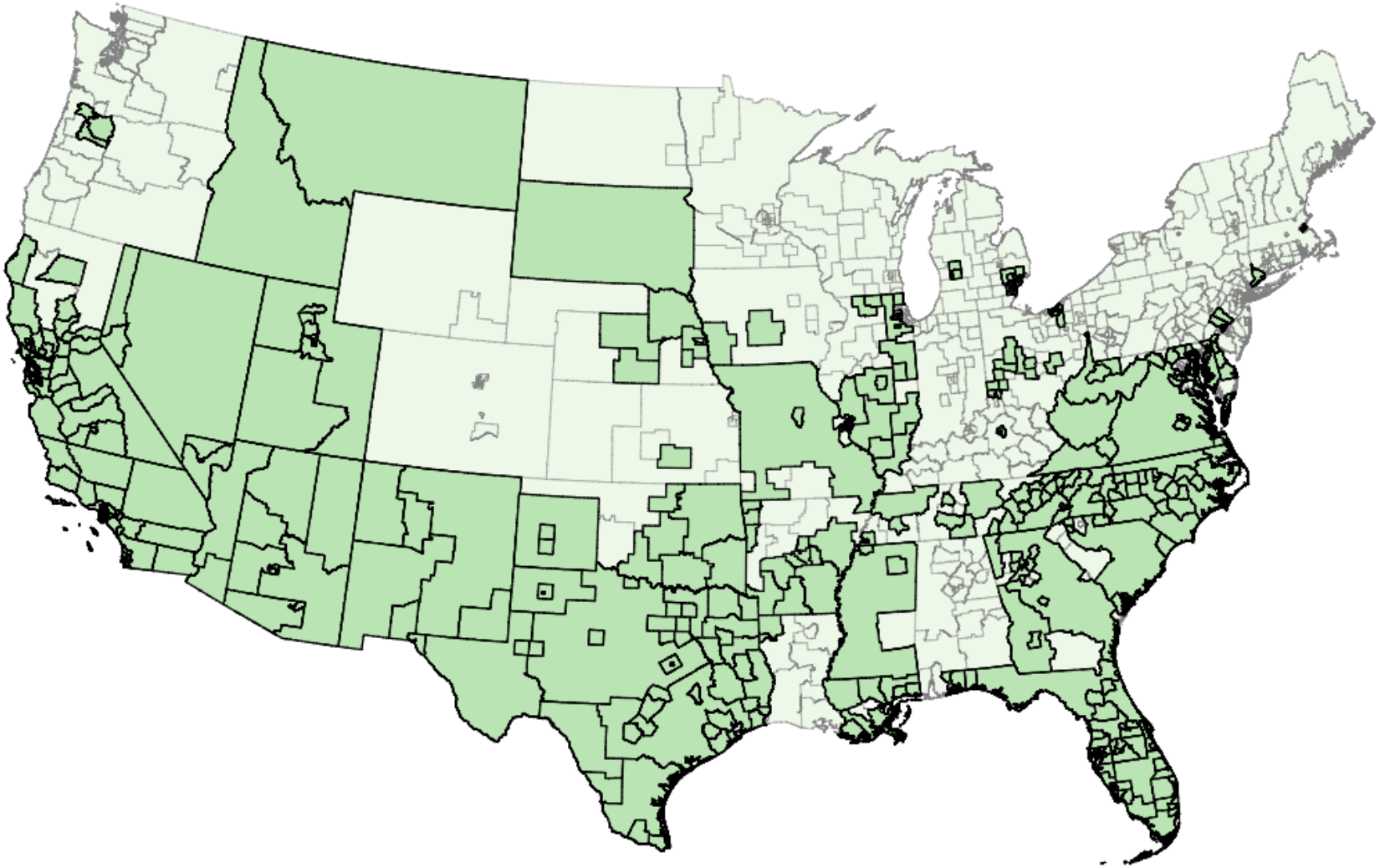

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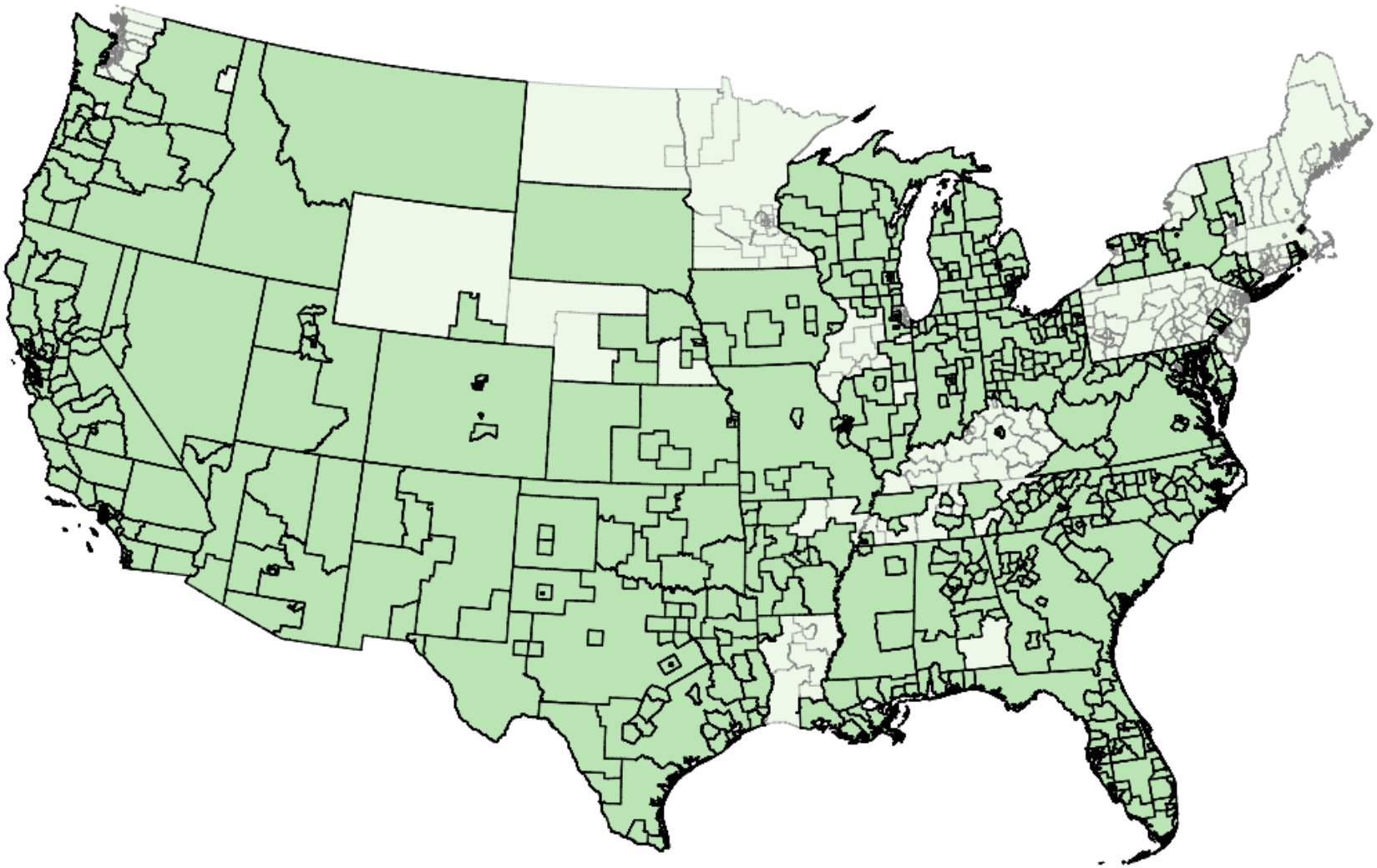
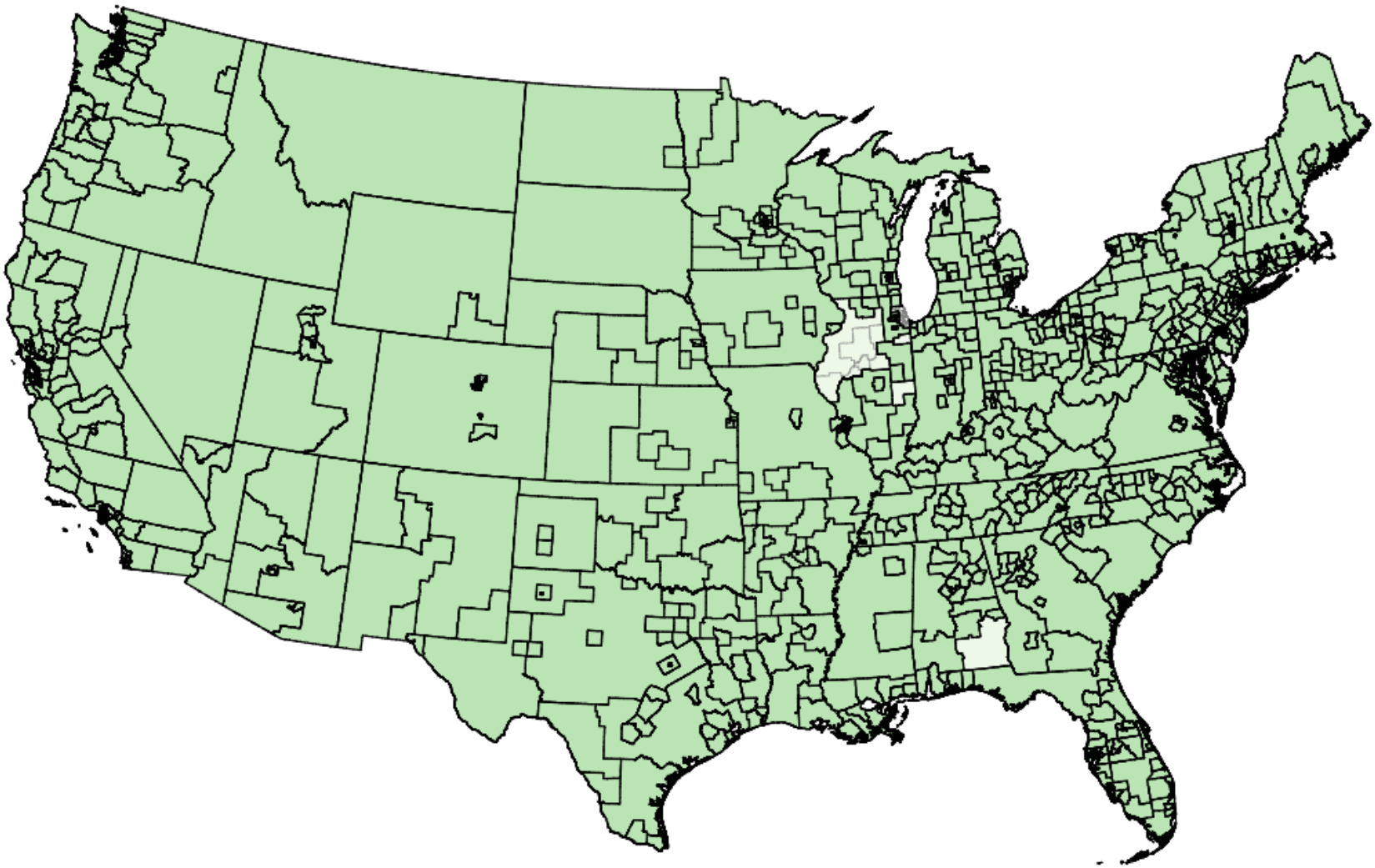


Secure Communities' activation across PUMAs

2009 2010 2011 2012 **2013** 2014



Secure Communities' activation across PUMAs

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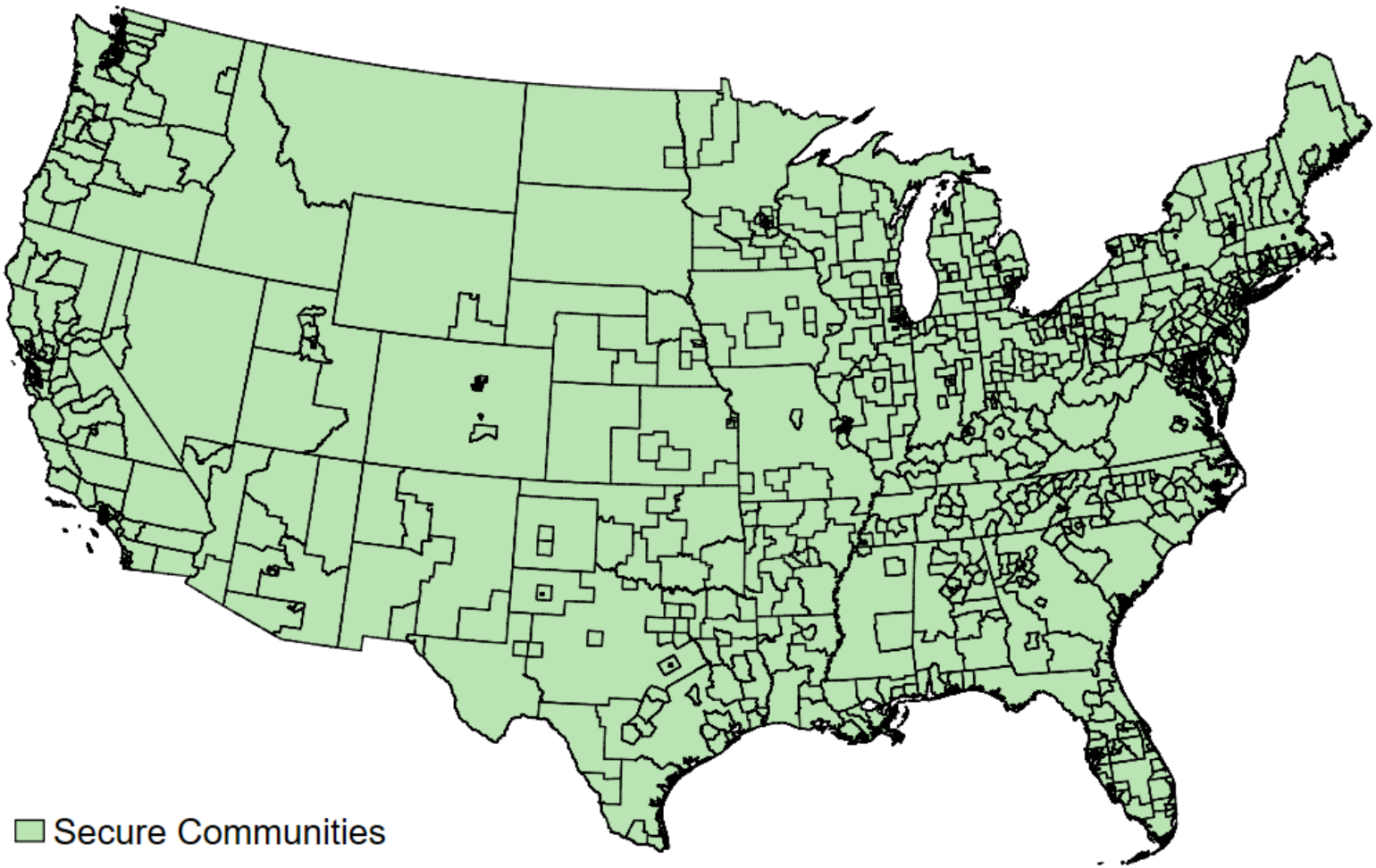


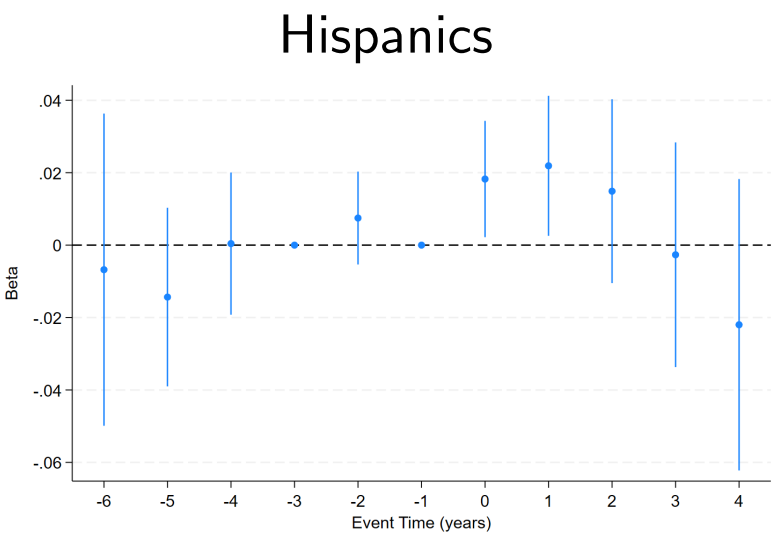
example

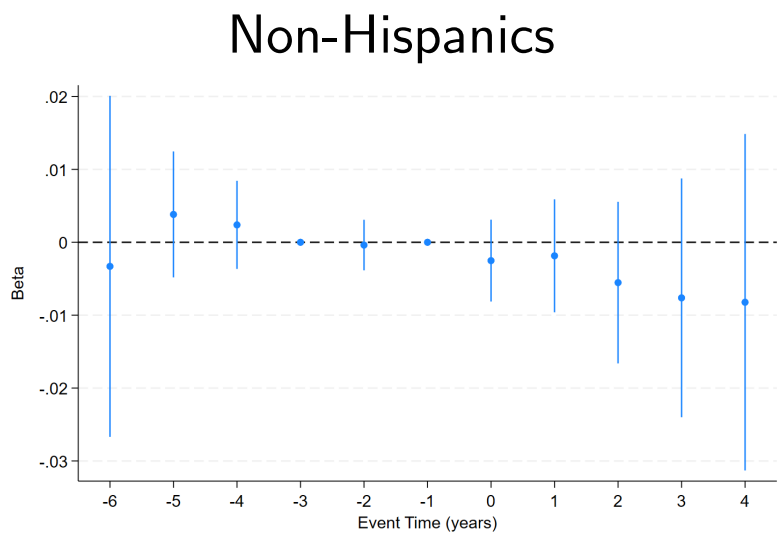
Triple-differences: increased incidence of uninsured and decreased Medicaid enrollment

	No insurance	Medicaid	Direct purchase	Employer spons
A. FPL≤ 138				
SC x Hispanic	0.026***	-0.019**	-0.003	0.006
	(0.009)	(0.008)	(0.004)	(0.008)
SC	0.005	-0.001	-0.001	-0.002
	(0.003)	(0.004)	(0.002)	(0.003)
% Effect	8.45	-6.90	-3.86	2.67
N	1450604	1450604	1450604	1450604
B. FPL≤ 200				
SC x Hispanic	0.018***	-0.019***	-0.001	0.007
	(0.007)	(0.007)	(0.003)	(0.006)
SC	0.003	0.000	-0.002	-0.001
	(0.003)	(0.003)	(0.001)	(0.002)
% Effect	6.13	-8.26	-1.98	2.37
N	2309055	2309055	2309055	2309055

▸ Back to event study ▸ Robustness ▸ By gender

Increased incidence of uninsured among Hispanics, FPL $\leq$ 200





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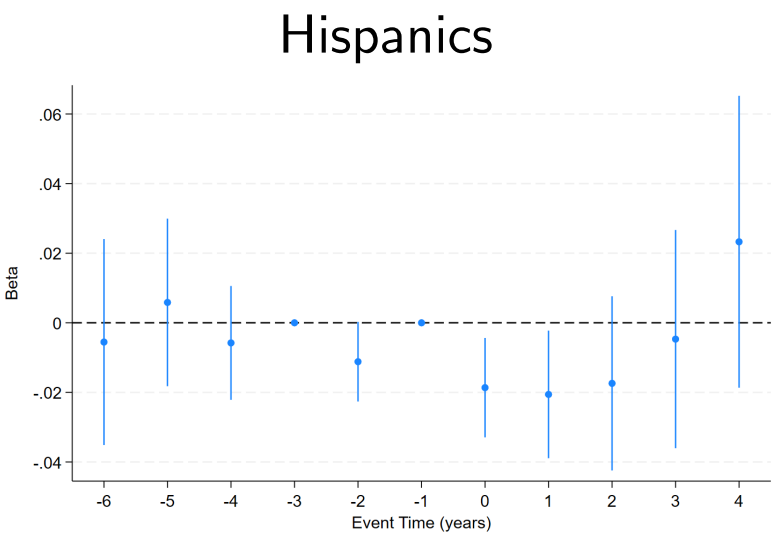
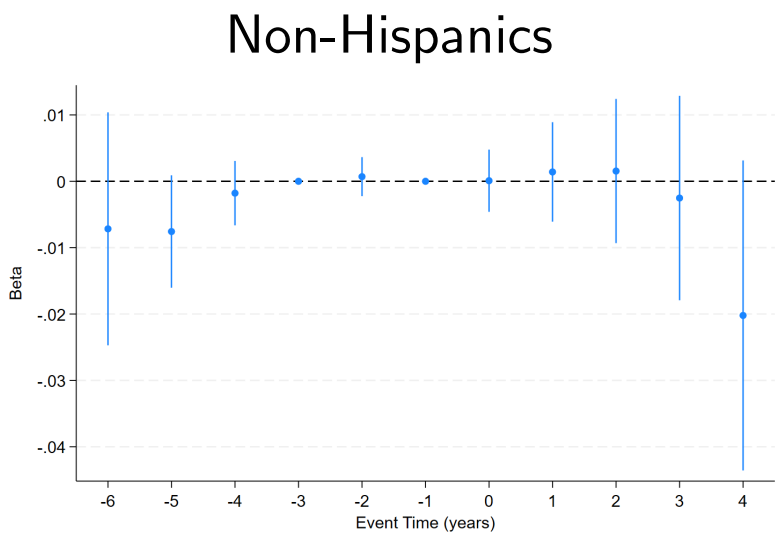
▸ Event studies

Decreased incidence of Medicaid enrollment among Hispanics, FPL $\leq$ 200





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▸ Event studies

Threats to identification

- Policy's implementation
  - mandatory for all counties
  - timing regulated by federal government
  - PUMA pre-policy characteristics do not predict the timing of SC
- Parallel trend assumption:
  - event-studies model
- No anticipation effect:
  - fast implementation across counties
- Several robustness checks back to approach

Robustness check

	No insurance	Medicaid	Direct purchase	Employer spons
A. FPL>200				
SC x Hispanic	0.000	-0.003	0.001	0.000
	(0.005)	(0.003)	(0.002)	(0.005)
SC	0.002**	0.000	-0.001	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
% Effect	0.28	-9.75	1.61	0.05
N	7090838	7090838	7090838	7090838
B. Omit NY, MA, and IL				
SC x Hispanic	0.024*	-0.018*	-0.003	0.010
	(0.013)	(0.010)	(0.004)	(0.010)
SC	0.004	-0.001	-0.001	-0.002
	(0.004)	(0.004)	(0.002)	(0.003)
% Effect	7.37	-7.08	-4.52	4.36
N	1259949	1259949	1259949	1259949

▸ Robustness

Results by gender, FPL $\leq$ 138

	No insurance	Medicaid	Direct purchase	Employer spons
A. Male sample				
SC x Hispanic	0.026**	-0.030***	0.004	0.006
	(0.012)	(0.011)	(0.005)	(0.011)
SC	0.006	-0.001	-0.002	-0.003
	(0.005)	(0.004)	(0.002)	(0.004)
% Effect	7.50	-13.55	5.02	2.78
N	620294	620294	620294	620294
B.Female sample				
SC x Hispanic	0.025**	-0.011	-0.007	0.006
	(0.010)	(0.009)	(0.005)	(0.008)
SC	0.004	-0.001	-0.001	-0.001
	(0.004)	(0.004)	(0.002)	(0.003)
% Effect	9.07	-3.41	-10.51	2.55
N	830310	830310	830310	830310

Back to results

Effect of SC is stronger in Hispanic and non-citizen populated PUMAs

	Baseline		non-citizens ≥5%		Hispanics ≥5%	
	No insurance	Medicaid	No insurance	Medicaid	No insurance	Medicaid
SC x Hisp	0.026***	-0.019**	0.028***	-0.026***	0.035***	-0.022**
	(0.009)	(0.008)	(0.010)	(0.009)	(0.010)	(0.009)
SC	0.005	-0.001	0.006	0.002	0.002	0.002
	(0.003)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
Mean Y	0.31	0.28	0.29	0.30	0.29	0.30
P-Value SC x Hisp	0.00	0.02	0.00	0.01	0.00	0.01
% Effect	8.45	-6.9	9.93	-8.74	11.95	-7.26
N	1450604	1450604	567695	567695	616570	616570

▸ Sanctuary