

How Place and Poverty Intersect

Geographic Barriers and Low SNAP Take-up

Marianne Bitler, UC Davis & NBER

Jason Cook, University of Utah

Sonya R. Porter, US Census Bureau

Disclaimer

Any opinions and conclusions expressed herein are those of the authors and do not reflect the views of the U.S. Census Bureau. The statistical summaries reported in this paper have been cleared by the Census Bureau's Disclosure Review Board release authorization number CBDRB-FY21-CES014- 049. All results have been reviewed to ensure that no confidential information is disclosed.

Motivation

- US somewhat unique within advanced economies in design of safety net. System very federalized with various levels of government running programs.
- People apply to many programs and rules not harmonized and application is not automatic as in much of the developed world \Rightarrow low take-up is more of issue in US than other places (Currie, 2006; Currie and Gahvari, 2008).
- Social program take-up: Hot topic in public econ, yet understudied.
 - Emphasis on understanding role of barriers to accessing safety net.
- Barriers impact both **take-up** (how many people enroll) and **targeting** (what types of people enroll).

SNAP

- Backbone of US safety net.
- Only US safety net program available to nearly all low-income households.
- Many potential barriers to access and rich literature studying these barriers.

Literature

- Studies have explored **take-up** and **targeting** effects of SNAP policies/interventions
 - Information interventions (Daponte, Sanders, & Taylor, 1999; Finkelstein and Notowidigdo, 2019)
 - Application help (Schanzenbach, 2001; Finkelstein and Notowidigdo, 2019)
 - Certification rules and recertification interviews (Kabbani and Wilde, 2003; Homonoff and Somerville, 2021, Unrath, 2021)
 - Simplified reporting requirements (Gray, 2018; Hanratty, 2006)
 - Automated application process (Wu, 2021)
- No evidence for improvements in both take-up and targeting

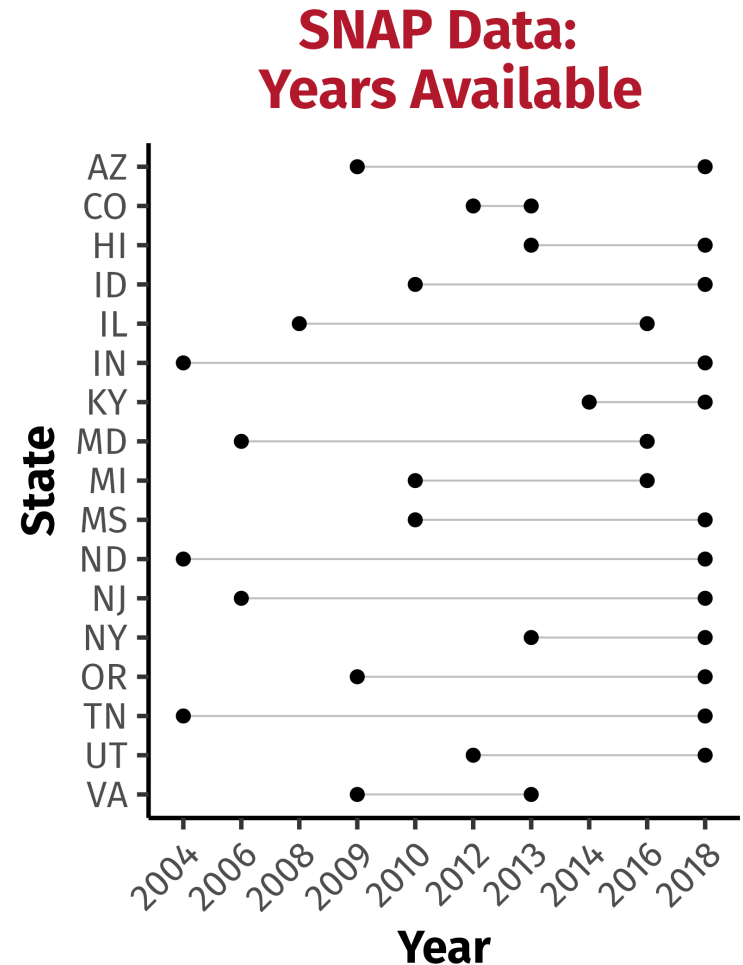
Institutional Background & Data

Role of SNAP Offices

- Provide in-person assistance navigating application process.
- **Application prevalence:** **in-person** > online > fax > email > phone.
 - SNAP offices report that typically 80% of applications are in person.
- Typically provide resources to connect SNAP applicants to other assistance programs (e.g., HUD, TANF, Medicaid/Medicare, LEAP, WIC).
- Some offices allow **direct applications to other programs** (typically TANF, but also sometimes HUD and Medicaid).
- Some offices even help find jobs, daycare, and housing.

Data

- SNAP Administrative Data
- Master Address File
- MAFARF
- HUD Administrative Data
- ACS
- Collected 243 SNAP office closings and 336 openings.



Measuring Access to SNAP Offices

- We count number of SNAP recipients in administrative records residing within given distance to each SNAP office in each year.
- In the case of overlap, we assign case to the closest office (i.e., "No Overlap").
- Most analyses focus on SNAP cases within **1 mile of the SNAP Office**.
 - Roughly **25th percentile** of distance distribution for both rural and urban counties.

Empirical Design

Empirical Design

Preferred Specification - Two-way Fixed Effects

$$y_{it} = \sum_{\tau, \tau \neq 1} \beta_{\tau} 1(t - E_i = \tau) + \gamma_i + \theta_t + \epsilon_{it}$$

- i – SNAP office
- t – calendar year
- E_i – year of opening/closing
- Panel design hinges on exogenous timing of openings/closings.
 - Unobserved determinants of SNAP participation not differentially trending across office types.

Results

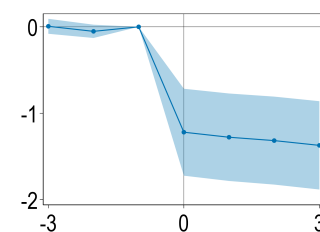
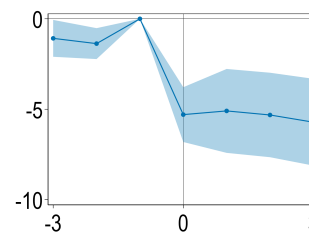
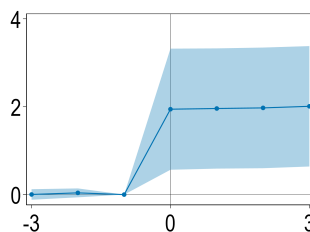
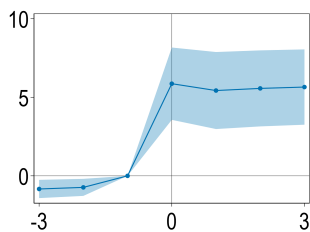
Mean Distance to Office (Miles)

- **Goal:** Measure how travel distances are impacted by SNAP office openings/closings.
- Use the Census Master Address file (MAFX); a static file of all known residential locations in US.
- Measure average travel distance from every MAFX address within 1 of SNAP Office during years leading up to and following opening/closing.

Mean Distance to Office (Miles)

	Closing Rural	Closing Urban	Opening Rural	Opening Urban
Distance	0-1	0-1	0-1	0-1
Model	TWFE	TWFE	TWFE	TWFE
Avg. Estimate	5.63*** (1.16)	1.97*** (0.70)	-5.35*** (1.03)	-1.30*** (0.26)
Baseline Y	.56	.63	5.3	1.6

Event Study



Data Source: SNAP Administrative Data - various states and years; Census Master Address File (MAFX).

Mean Distance to Office (Miles)

- **Rural Counties:** Open/closings change average distance by 5 miles.
- **Urban Counties:** Open/closings change average distance by 1-2 miles.
- **Key Takeaway:** Distances change enough to move from office being walkable to requiring transit to access.

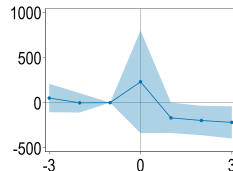
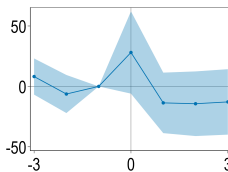
Next, we explore impact of SNAP office closings and openings on total counts of new SNAP clients living within a mile radius.

of New SNAP Clients

Office Closings

	Closing Rural	Closing Urban
Distance	0-1	0-1
Model	TWFE	TWFE
Avg. Estimate	-3.17 (12.6)	-88.0 (62.5)
Baseline Y	224	1,020

Event Study



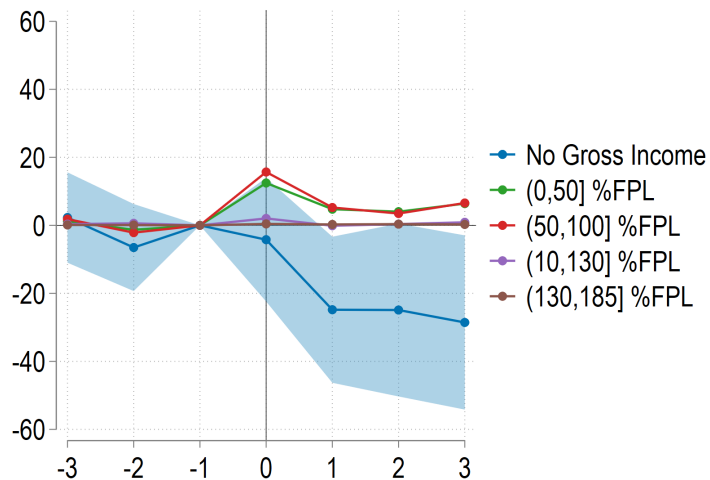
- **Rural & Urban Counties:** Temporary spike during closing year.
- **Urban Counties:** 3 years after closing, roughly 90 fewer clients (8.8% decrease relative to baseline).

Data Source: SNAP Administrative Data - various states and years.

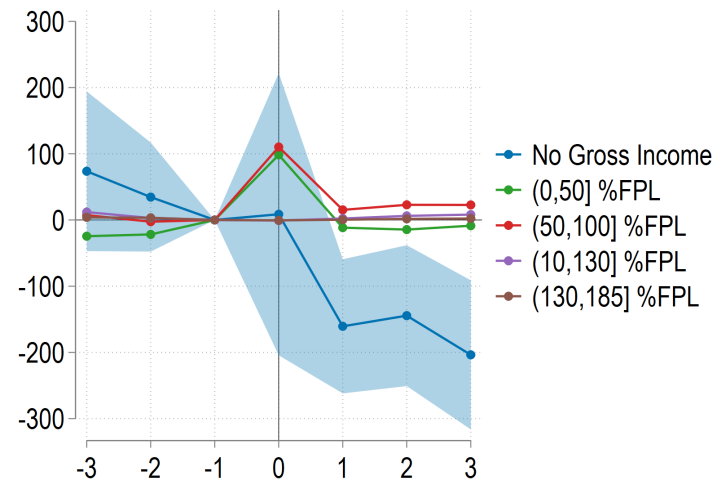
of New SNAP Clients

Heterogeneity by Gross Income

Closing, Rural



Closing, Urban



Data Source: SNAP Administrative Data - various states and years.

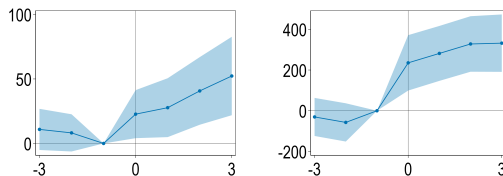
- **Puzzle:** Temporary spike driven by cases with gross income $\in (0, 100]$ %FPL.
- Participation falls for clients with no gross income.

of New SNAP Clients

Office Openings

	Opening Rural	Opening Urban
Distance	0-1	0-1
Model	TWFE	TWFE
Avg. Estimate	35.9*** (11.9)	294.2*** (60.7)
Baseline Y	153	466

Event Study



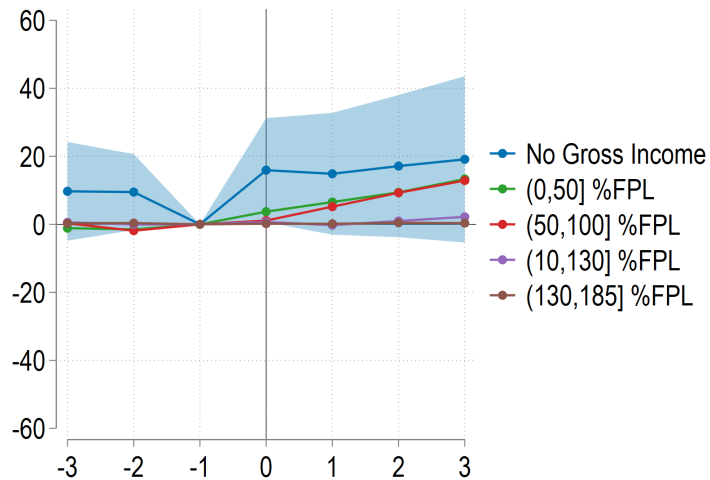
- **Rural & Urban Counties:** Large, immediate impacts that increase with time.
- By **three years** after opening:
 - **Rural Counties:** 53 additional SNAP clients (35% increase).
 - **Urban Counties:** 332 additional SNAP clients (71% increase).

Data Source: SNAP Administrative Data - various states and years.

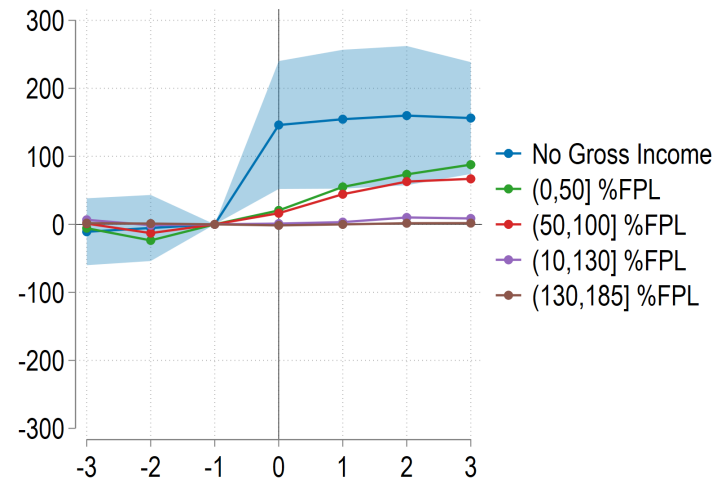
of New SNAP Clients

Heterogeneity by Gross Income

Opening, Rural



Opening, Urban



Data Source: SNAP Administrative Data - various states and years.

- Biggest participation impacts for cases without gross income.
- **Evidence of improved targeting.**

Conclusion

- Access to SNAP offices **substantially increases program participation.**
- Particularly important for families without income (i.e., **improved targeting**).
- Interesting because many states are fully online with active help phone lines.
- Face-to-face assistance may provide additional aid overcoming transaction costs (Wu, 2021)
- Policy implications to increase in-person assistance for applications.
 - Similar to mobile WIC clinics

References

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