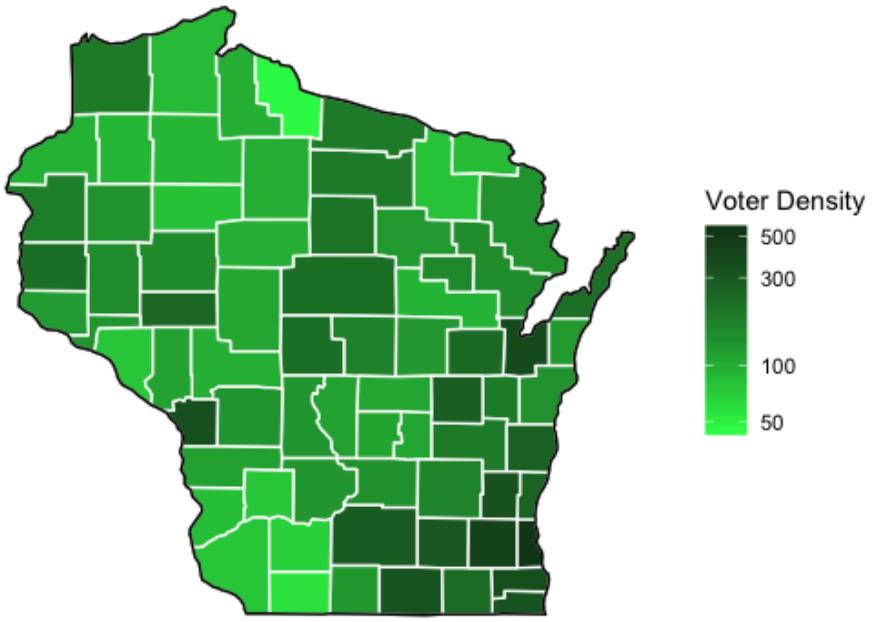
A Appendix

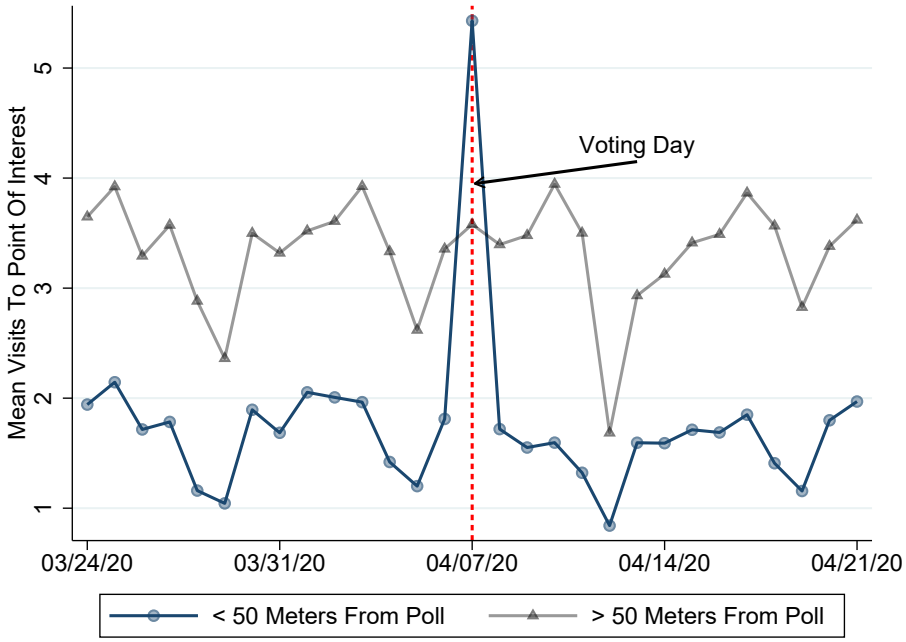
Figure A1: Average Voter Density by County



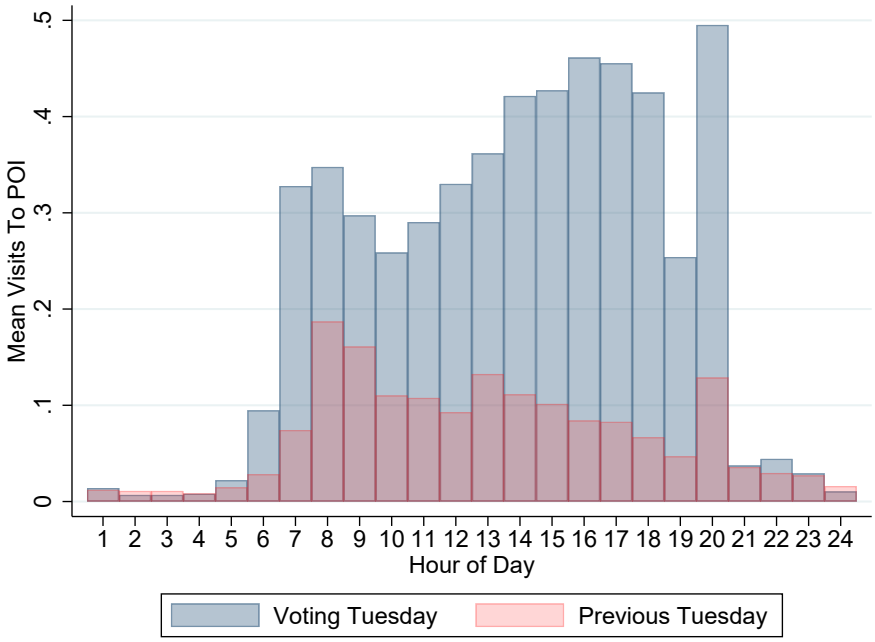
Notes: Voting data provided by the Wisconsin Elections Commission. Created using Kahle and Wickham (2013).

Figure A2: The Impact Of In-Person Voting On Visits To Points Of Interest

(a) Average Visits To POIs By Distance From Voting Location



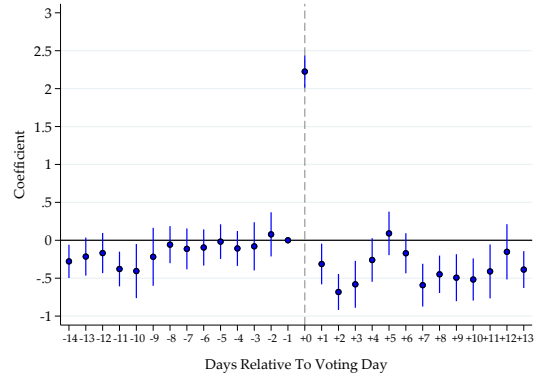
(b) Voters Per Location And Excess Visitation



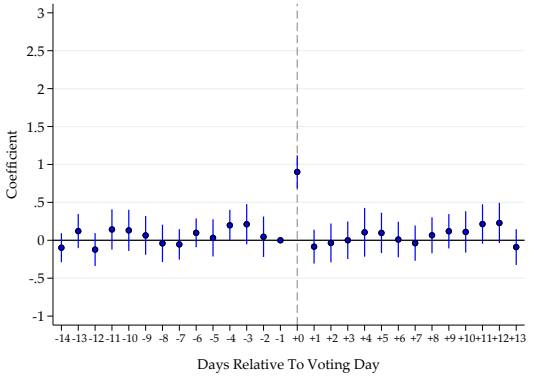
Notes: Subfigure (a) displays mean visits to approximately 79,000 points of interest (POIs) in Wisconsin for the fourteen days before and after April 7th. Subfigure (b) displays mean visits by hour for April 7th (Voting Tuesday) and the previous Tuesday. Data are from SafeGraph Core Places and Weekly Patterns, which use GPS pings from smartphones to track devices that enter a point of interest. POIs consist of restaurants, religious institutions, schools, and other commonly visited locations.

Figure A3: Event Studies of Relationship Between In-Person Voting and Visits to POIs near Polls

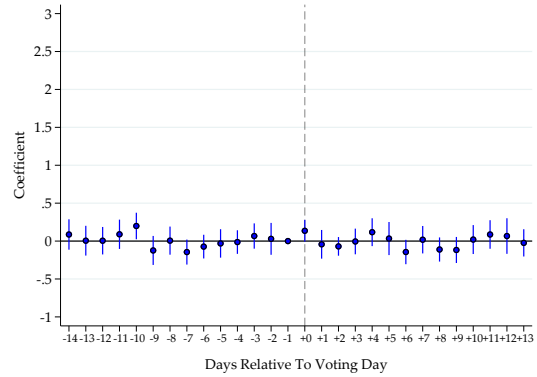
(a) Near: < .05 KM



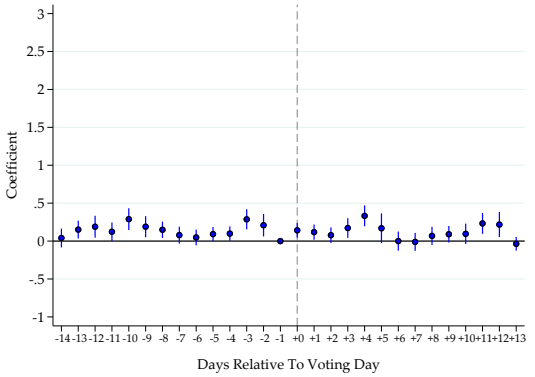
(b) Near: .05 - .10 KM



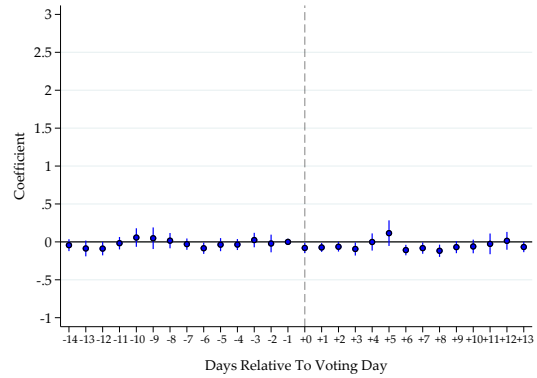
(c) Near: .10 - .20 KM



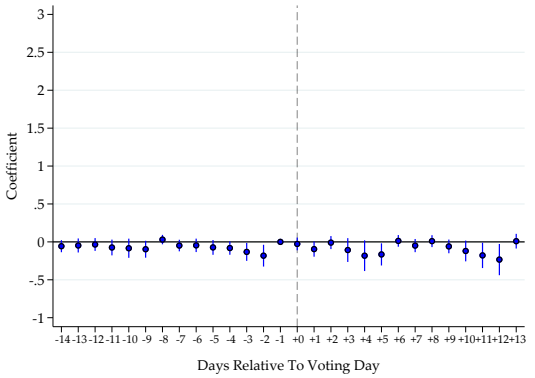
(d) Near: .20 - .40 KM



(e) Near: .40 - 1 KM



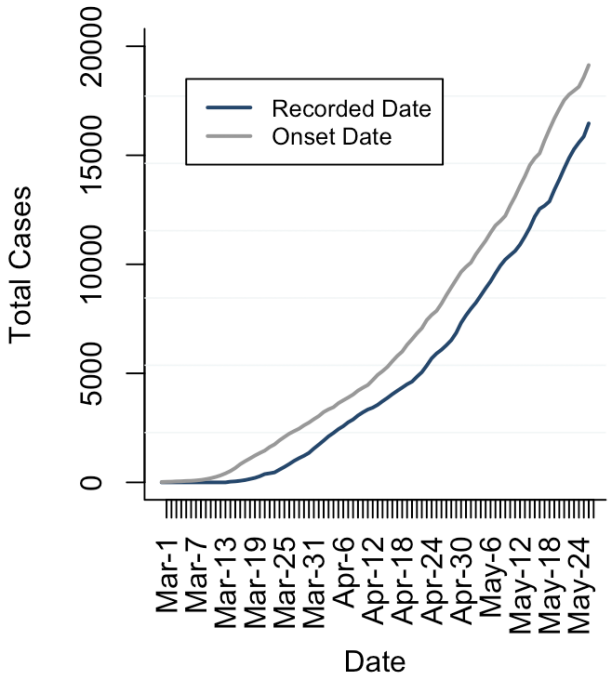
(f) Near: 1 - 2 KM



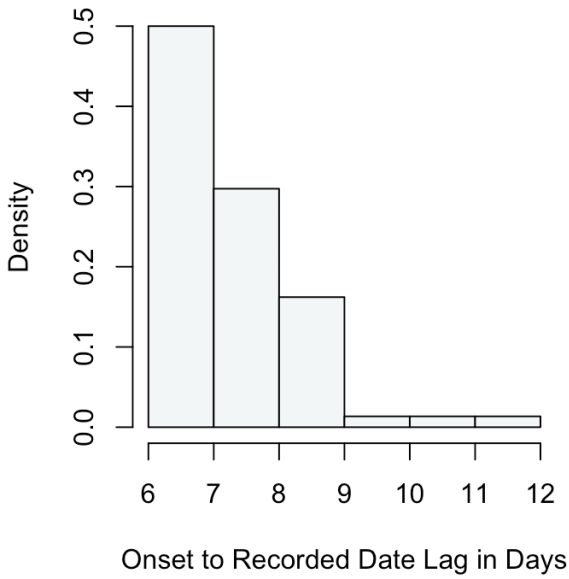
Notes: Figures plot estimates and 95% confidence intervals from event study specifications, with POI fixed effects and day-of-panel fixed effects, that compare visits to POIs near versus far from voting polls. The dependent variable is $Ln(visits_{pt} + 0.001)$, the natural log (+ 0.001, to account for zeroes) of visits to POI p on date t. Each figure presents estimates from a separate regression where treatment (whether a POI is within x kilometers of a voting poll) is defined by the distance in the caption. POIs that are closer to polls than the treatment range, x, are removed from the samples of (b)-(f) to prevent contamination of the control group. Standard errors are clustered at the county level. Data are from SafeGraph Core Places and Weekly Patterns. Results are robust to using a FE Poisson model. Event study estimates clearly show a marked increase in foot traffic to POIs near voting polls, with effects that dissipate quickly as "near" is defined more loosely.

Figure A4: Recorded & Onset Cases

(a) Total Cases by Recorded and Onset Date



(b) Lag Distribution



Notes: For the number of positive cases on a given date, we count the number of days one must go back until the number of onset cases is at least as large. Panel (b) then plots the distribution of these values. Data provided by the Wisconsin Department of Health Services.

Table A1: Relationship between COVID-19 Cases and In-Person Voting per Polling Location Excluding SafeGraph County Social Distancing Measures

	Positive Test Rate: Frac Logit	Positive Test Rate: OLS	Total Cases Per Hundred	New Cases Per Hundred
IPV/Loc × Week -1	3.276	0.188	-0.018	0.003
	(2.436)	(0.125)	(0.019)	(0.015)
IPV/Loc × Week 1	6.343**	0.276*	0.043*	0.027
	(3.059)	(0.150)	(0.024)	(0.024)
IPV/Loc × Week 2	11.809***	0.432**	0.195**	0.131
	(3.623)	(0.197)	(0.095)	(0.088)
IPV/Loc × Week 3	10.554***	0.433***	0.396**	0.189**
	(2.877)	(0.147)	(0.159)	(0.087)
IPV/Loc × Week 4	6.542**	0.227	0.513**	0.149*
	(2.964)	(0.138)	(0.203)	(0.080)
IPV/Loc × Week 5	9.500***	0.288**	0.638***	0.121**
	(3.070)	(0.127)	(0.221)	(0.050)
N	504	504	504	504
Time Fixed Effects	Y	Y	Y	Y
Absentee Votes	Y	Y	Y	Y
Controls for Tests			Y	Y
County Fixed Effects		Y	Y	Y

Notes: The data sources and models are identical to the respective models in Table 2 Columns (2) and (4) and Table 3 Columns (2) and (4).

Table A2: Relationship between COVID-19 Cases and In-Person Voting per Polling Location Including County Population Density Evolution Controls

	Positive Test Rate: Frac Logit	Positive Test Rate: OLS	Total Cases Per Hundred	New Cases Per Hundred
IVL × Week -1	3.622	0.205	-0.024	0.004
	(2.488)	(0.135)	(0.024)	(0.016)
	[0.1788]			
IVL × Week 1	6.986**	0.309*	0.051	0.036
	(3.036)	(0.165)	(0.035)	(0.026)
	[0.3022]			
IVL × Week 2	12.211***	0.498**	0.262**	0.156*
	(3.434)	(0.206)	(0.113)	(0.093)
	[0.4408]			
IVL × Week 3	11.068***	0.466***	0.467***	0.208**
	(2.788)	(0.156)	(0.170)	(0.090)
	[0.4367]			
IVL × Week 4	6.469**	0.239*	0.611***	0.163*
	(2.942)	(0.139)	(0.206)	(0.082)
	[0.2591]			
IVL × Week 5	9.625***	0.259*	0.683***	0.114**
	(2.683)	(0.131)	(0.210)	(0.051)
	[0.3292]			
N	504	504	504	504
Time Fixed Effects	Y	Y	Y	Y
Demographic Controls	Y			
Social Distancing Controls	Y	Y	Y	Y
Pop. Dens × Week Controls	Y	Y	Y	Y
Controls for Tests			Y	Y
Fixed Effects		Y	Y	Y

Notes: The data sources and models are identical to the respective models in Table 2 Columns (2) and (4) and Table 3 Columns (2) and (4).

Data Acknowledgment

We are grateful to SafeGraph for providing Social Distancing Metrics and patterns data.

"SafeGraph, a data company that aggregates anonymized location data from numerous applications in order to provide insights about physical places. To enhance privacy, SafeGraph excludes census block group information if fewer than five devices visited an establishment in a month from a given census block group."