

Online Appendix: Can Violent Protest Change Local Policy Support? Evidence from the Aftermath of the  
1992 Los Angeles Riot

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**Tests for Similar Trends in Distance Relationship Prior to the Riot**

As an additional robustness check, we look to see if similar relationships between distance and support for public schools can be found prior to the riot. We use pairs of parallel ballot initiatives in which both votes occur *prior* to the riots. In both the 1986 and 1990 general elections in California, there were ballot initiatives proposing bonds for public schools and higher education.

Initiative	Year	Title	Dollar Amount	Result
53	1986	Public School Construction Bonds	\$800M	Pass
54	1986	Bonds for Higher Education Facilities	\$400 M	Pass
143	1990	Public School Construction Bonds	\$800 M	Fail
146	1990	Bonds for Higher Education	\$450 M	Pass

Table 1: Two pairs of parallel ballot initiatives were placed before voters in 1986 and 1990, all prior to the  
Los Angeles Riots.

We construct the same difference-in-differences estimator as before, using different ballot initiatives:

$$\text{EdDiffPlacebo}_i = (\text{PubSchool}_{1990i} - \text{PubSchool}_{1986i}) - (\text{HigherED}_{1990i} - \text{HigherED}_{1986i})$$

We expect that since there is no event prior and proximate to the 1990 general election to affect the salience of distance from that particular location, a regression of distance from Florence and Normandie on  $\text{EdDiffPlacebo}$  will be zero or negative, as compared to the positive effect we expected from the true test.

As shown in table 2, the relationship between  $\text{EdDiffPlacebo}$  and distance from the future location of the riot is, for white voters, smaller and in the opposite direction of the what we observed in Table 2. This

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	(1)	(2)
Distance	0.013* (0.001)	-0.047* (0.004)
Distance <sup>2</sup>		0.014* (0.001)
Constant	0.067* (0.002)	0.111* (0.003)
N	2,560	2,560
R <sup>2</sup>	0.04	0.09

Table 2: OLS regression of `EdDiffPlacebo` and distance from Florence and Normandie, measured in units of 10 kilometers. Standard errors are in parentheses. \* represents  $p < .05$ .

final test suggests that, in the absence of the riots, white voting behavior may have been markedly different as a function of distance from Florence and Normandie.

### Survey Data Analysis

Table 3 is the covariate balance on white LACSS respondents before and after the riot.

Table 4 is the covariate balance on white LACSS respondents before and after the riot.

In Table 5 we show regressions on support for spending on “improving our nation’s education system”. The independent variable of interest is being asked either before or after the verdict. Both excluding (column 1) and including demographic controls (column 2), this coefficient is near zero. As shown in columns 3 and 4, we see no evidence for changes in ideology either.

### Distribution of Voters Registering Before and After the Riot

Figures 1–4 are kernel-density maps of the distribution of white and African American registrants before and after the riot.

### Voter File Matchign and Attrition

In matching the 1992 and 2005 voterfiles, we first match exactly on first name, last name, and date of birth. Then, among the remaining women only, we match on first name, middle name, and date of birth. This second merge is designed to capture women who changed their last names, and in practice matches few additional registrants. Because we only examine a California file, we necessarily cannot find voters who left the state. We also lose voters who change their name due to marriage. Other voters die, or move and then do not re-register, and are subsequently removed from the voter file due to inactivity.

	Before riot	After riot	Difference	p value
High School	0.91	0.90	-0.01	0.61
Attended College	0.66	0.72	0.06	0.20
Income < 30k	0.54	0.46	-0.08	0.13
Female	0.67	0.57	-0.10	0.04
Homeowner	0.38	0.50	0.12	0.01
Married	0.34	0.32	-0.02	0.67
Unemployed	0.03	0.04	0.01	0.63
Age	44.91	43.48	-1.43	0.41
Conservative	0.15	0.11	-0.04	0.25
Democrat	0.73	0.72	-0.01	0.85
Republican	0.01	0.05	0.03	0.04
Independent	0.17	0.16	-0.02	0.68
Distance from Florence/Normandie	3092	3125	33	0.91

Table 3: Covariate balance in LACSS sample, African American Respondents. All values represent proportions, except for age (years) and distance (meters). P values generated by T-test for difference of means ( $n = 426$ ). An omnibus balance test provides some evidence that we cannot reject the null hypothesis that the data are balanced ( $p=0.132$ ,  $\chi^2$  test statistic with 16 degrees of freedom = 22.4).

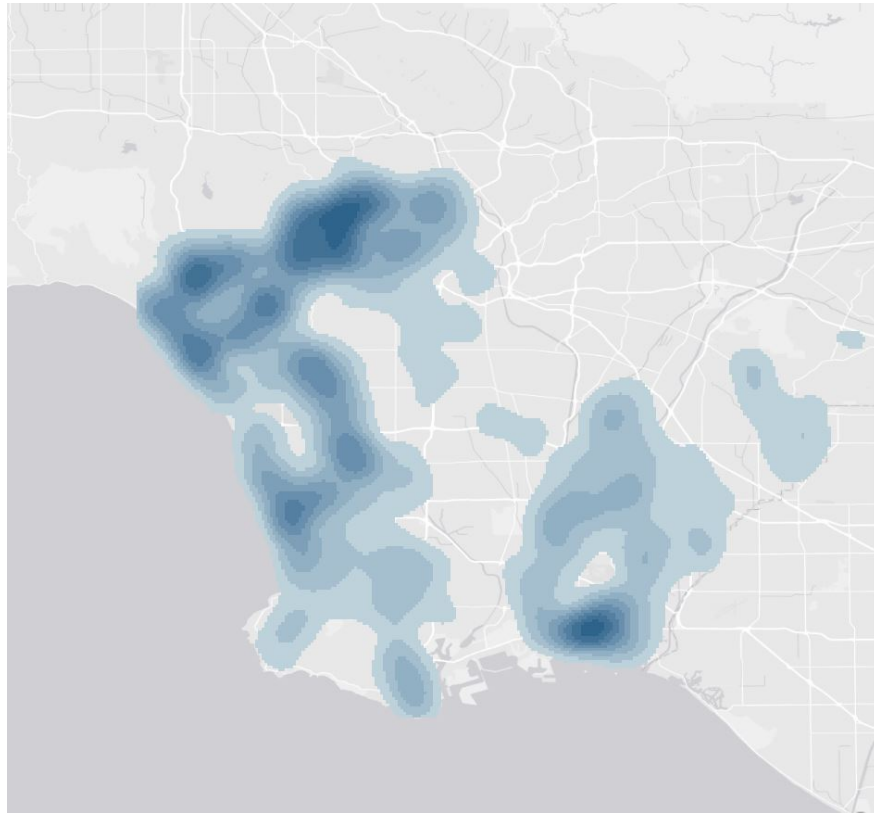


Figure 1: Kernel density map of whites who registered to vote in the 5 weekdays prior to the riot.

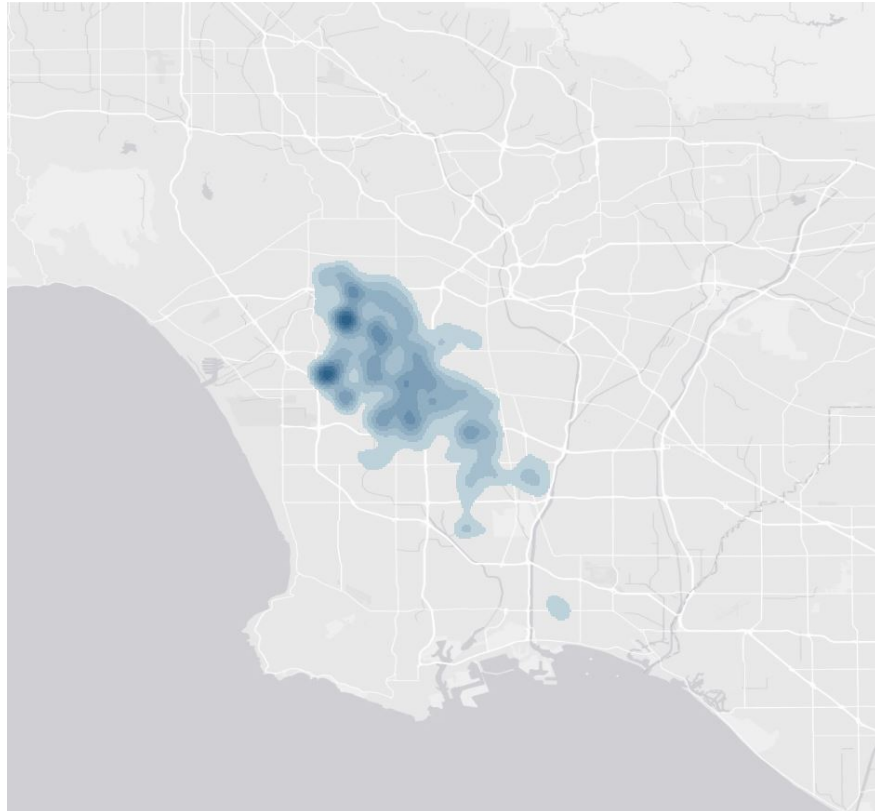


Figure 2: Kernel density map of African Americans who registered to vote in the 5 weekdays prior to the riot.

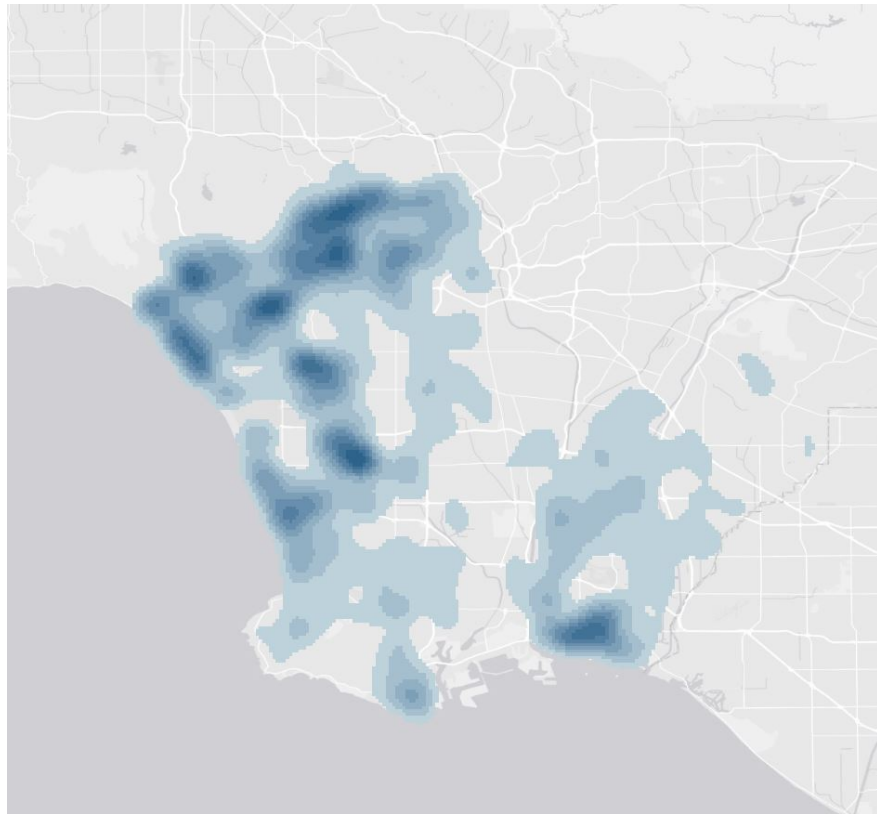


Figure 3: Kernel density map of whites who registered to vote in the 5 weekdays following the riot.

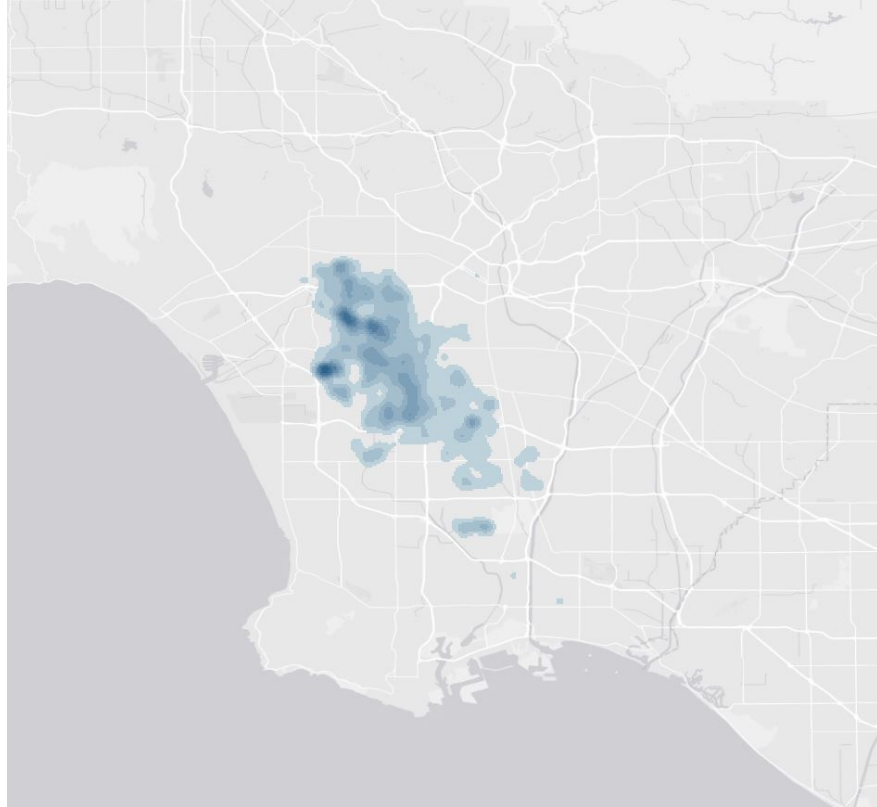


Figure 4: Kernel density map of African Americans who registered to vote in the 5 weekdays following the riot.

	Before riot	After riot	Difference	p value
High School Grad	0.92	0.95	0.03	0.45
Attended College	0.84	0.82	-0.02	0.76
Income < 30k	0.35	0.36	0.01	0.85
Female	0.46	0.55	0.09	0.25
Homeowner	0.48	0.64	0.15	0.04
Married	0.38	0.49	0.11	0.17
unemployed	0.02	0.05	0.03	0.35
Age	44.43	50.30	5.87	0.03
Conservative	0.17	0.21	0.04	0.47
Democrat	0.40	0.40	-0.00	0.95
Republican	0.25	0.26	0.02	0.82
Independent	0.24	0.28	0.04	0.56
Distance (km)	11320	8893	-2427	0.00

Table 4: Covariate balance in LACSS sample, white Respondents. All values represent proportions, except for age (years) and distance (meters). P values generated by T-test for difference of means (n = 185). In an omnibus balance test we reject the null hypothesis that the data are balanced (p=0.002,  $\chi^2$  test statistic with 16 degrees of freedom = 37.2)

Here we detail calculations used to estimate the percentage of the 1992 Voter File we expect to be able to identify in 2005. In all cases, we aim to produce conservative estimates which will underestimate the number of people we expect to have attritted. Overall, we expect more than 9,600 individuals from our 1992 sample of 30,166 to have attritted (see below). In step 1, we match exactly on first name, last name, and date of birth. In this stage, we locate 19,165 individuals. In the second stage, we merge the remainder on first name, middle name, and date of birth among women only. Here, we locate an additional 1,920 individuals, bringing our merged total to 15,244. While we estimate that about 3,314 women in our original sample will have changed their names due to marriage, we are only able to locate 1,920.

We tried several different alternate merge schemes, including matching last names from 1992 to “previous last name” from the 2005 file along with first name and date of birth, but this produced no matches. Additionally, we tried a fuzzy merge where we merged within a set Levenshtein distance from a merge identifier consisting of first name, last name, date of birth, and imputed race, but this produced an excess of false-positive matches.

In order to assess the performance of our matching exercise, we estimate the total amount of expected attrition from the voter file due to (1) name changes at marriage, (2) death, and (3) migration.

**Marriage** To calculate marriage, we use statistics on marriage rates by age among women as of year 2000. Since marriage rates have been decreasing, we believe this should produce an underestimate of the true number of married women who have changed their names.

	Spending too little on education		More conservative	
	(1)	(2)	(3)	(4)
After verdict	-0.00 (0.04)	0.02 (0.04)	0.00 (0.09)	-0.03 (0.10)
Constant	2.89* (0.03)	2.83* (0.08)	1.80* (0.07)	1.61* (0.21)
Controls?	No	Yes	No	Yes
N	418	380	272	248
R <sup>2</sup>	0.00	0.08	0.00	0.03

Table 5: OLS regression of measures of attitude change on an indicator for whether respondents were surveyed after the Rodney King verdict. African American LACSS respondents only. “After Verdict” is an indicator variable for whether respondents were interviewed before or after the announcement of the verdict in the trial of the police officers. The dependent variable in Columns 1 and 2 is support for education spending, as measured by the degree to which respondents agree that too little is spent to improve education (respondents indicated whether we are “spending too much”, “spending the right amount” or “spending too little” on “improving the nation’s educational system”). The dependent variable in Columns 3 and 4 is ideology, “Would you consider yourself as a... Liberal, Conservative, Moderate, or don’t you consider yourself that way?” Sample size decrease in the latter columns is due to respondents who claimed to not consider themselves that way. Control variables include respondent age, home ownership, marital status, gender, education, income, and distance from Florence and Normandie.

Standard errors are in parentheses. \* represents  $p < .05$ .



Using date of birth from the voter file, we calculate the age of everyone in the sample in year 1992. The Bureau of Labor Statistics provides marriage probabilities binned by age: 25% of women under the age of 25 are married; 53% between 26 and 35; 81% between 36 and 45; and 86% of women aged 46 and over. Using this formula, we calculate the number of women married in 1992, and the number of the unmarried women who would become married by 2005, and subtract those numbers. Finally, I multiply this difference by 0.85, corresponding to the 15% of women who do not change their name at all after marriage. This totals to 2,457 women whom we estimate changed their last names. While in theory we may be able to find these women in the second stage of our merge, in practice our voter file often excludes middle name, resulting in failed merges for this stage.

**Death** According to the CDC, the yearly mortality rate for African Americans is 733 per 100,000; for white and Hispanic people, it is 350 per 100,000 (CDC, 2016). Using our imputed race values, and accounting for yearly compound reductions in population, we estimate a sample attrition of 824 people.

**Migration** Out-migration from California as averaged 500,000 per year since 1990 (Perry et al., 2016). Out-migration has disproportionately happened from urban areas; we assume that this out-migration has happened equally across the state, which should produce an underestimate of our sample decay.

California contained approximately 31 million people in 1990. We multiply  $31,0166 * (500,000 / 31,000,000) * 13 = 6,325$  individuals from our sample who we expect to have left California, and thus to no longer appear on the voter rolls.

**Total** Summing these components, we estimate attrition of 9,606 individuals between 1992 and 2005, of whom 2,457 are potentially identifiable using voter file variables which involve previous registration names. Aside from this, there are additional reasons why people may be invalidated from voting, including felony convictions, incarceration, and mental illness. Finally, while more than 7,000 voters became *ineligible* to vote due to death or outmigration, it is an open question as to how many changed their address and failed to re-register, or were purged from voter rolls due to inactivity. Overall, we expect that our merging procedure has approximately captured a sufficient sample of the registrants from our 1992 population who were still registered in 2005.

### **Long-term Participation of Riot Registrants**

In Tables 7 and 6 we regress registration before and after the riot on participation in the 2004 General and Primary elections, respectively.

	White		African American	
	(1)	(2)	(3)	(4)
(Intercept)	0.94*	0.92*	0.91*	0.88*
	(0.01)	(0.01)	(0.02)	(0.04)
Registered Post-Riot	0.00	0.00	0.01	0.02
	(0.01)	(0.02)	(0.01)	(0.02)
Controls	No	Yes	No	Yes
<i>N</i>	6,887	3,294	3,471	1,526
<i>R</i> <sup>2</sup>	0.00	0.00	0.00	0.01

Table 6: Turnout in 2004 General Election for those registering immediately before and immediately after the riot. OLS regression on voter turnout. Registered post-riot is a dummy variable indicating those who registered before and after the riot. Controls include Age, Gender, Party ID. Standard errors are in parentheses. \* represents  $p < .05$ .

	White		African American	
	(1)	(2)	(3)	(4)
(Intercept)	0.24*	0.20*	0.23*	0.28*
	(0.01)	(0.02)	(0.03)	(0.05)
Registered Post-Riot	-0.01	-0.02	0.00	-0.04
	(0.01)	(0.02)	(0.02)	(0.03)
Controls	No	Yes	No	Yes
<i>N</i>	6,887	3,294	3,471	1,526
<i>R</i> <sup>2</sup>	0.00	0.00	0.00	0.01

Table 7: Turnout in 2004 Primary Election for those registering immediately before and immediately after the riot. OLS regression on voter turnout. \* represents  $p < .05$ .

## References

CDC. 2016. “Health of Black or African American non-Hispanic Population.”.

**URL:** *<http://www.cdc.gov/nchs/fastats/black-health.htm>*

Perry, F. Noel, Sarah Henry, Marcia E. Perry and Stephanie Leonard. 2016. “California Migration: A Comparative Perspective.”.

**URL:** *<http://next10.org/sites/next10.org/files/california-migration.pdf>*