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

Riot

Ryan D. Enos<sup>\*</sup> Aaron R. Kaufman<sup>†</sup> Melissa L. Sands<sup>‡</sup>

## A Comparing the 1990 and 1992 Primary Elections

Our difference-in-differences approach relies on the assumption that our parallel ballot initiatives are sufficiently similar, and that the electoral contexts for both elections are sufficiently similar.

To support these assumptions, we provide two critical pieces of evidence. First, we detail ballot summaries and important features of each of the four ballot initiatives. Second, we discuss other key elements of the two primaries, including competitive races, and we show that our results are not sensitive to the exclusion of competitive races.

### A.1 Ballot Summaries

Based on the Voter Information Guides for these elections, the substance of the propositions, as well as the arguments for and against each type of proposition, were similar across the two primary elections. Arguments in favor of public and higher education bonds tended to focus on the need to accommodate growing enrollment while arguments against the propositions tended to focus on debt and costs to taxpayers. In this section, all ballot summaries and ballot initiative text come from the UC Hastings Library's repositories of California ballot initiatives <sup>1</sup>

Information Guide for 1990, Primary (1990). http://repository.uchastings.edu/ca\_ballot\_props/1060; Voter Information

<sup>\*</sup>Department of Government, Harvard University

<sup>&</sup>lt;sup>†</sup>Department of Government, Harvard University

<sup>&</sup>lt;sup>‡</sup>Department of Political Science, University of California, Merced

<sup>&</sup>lt;sup>1</sup>Voter Information Guide for 1992, Primary (1992). http://repository.uchastings.edu/ca\_ballot\_props/1066; Voter

**Proposition 121, Bonds for Higher Education Facilities (1990)** "This act provides for a bond issue of four hundred fifty million dollars (\$450,000,000) to provide funds for the construction or improvement of facilities of California's public higher education institutions, which include the University of California's nine campuses, the California State University's 20 campuses, the 71 districts of the California Community Colleges, the Hastings College of the Law, the California Maritime Academy, and off-campus facilities of the California State University approved by the Trustees of the California State University on or before July 1, 1990. The use of funds authorized under this act includes, but is not necessarily limited to, the construction or improvement of classrooms, laboratories, and libraries, and the implementation of earthquake and other health or safety improvements."

The detailed proposal outlines that \$130,000,000 would go to each of the University of California system, the California State University system, and the community college system. The remainder would go to asbestos removal and instructional materials. Prop 121 was supported by the chairman of the State Senate Education Committee, Governor George Deukmejian, and the president of the University of California. It was opposed by members of the Libertarian Party and several University of California faculty members.

**Proposition 123, Public School Construction Bonds (1990)** "This act provides for a bond issue of eight hundred million dollars (\$800,000,000), to provide capital outlay for construction or improvement of public schools."

In the detailed proposal, it is outlined that \$500,000,000 of this would go to the construction of new school buildings, \$260,000,000 would go to the reconstruction or modernization of existing buildings, and the remainder would go to air conditioning and insulation materials. Proposition 123 was supported by the president of the Parent Teacher Association, the Superintendent of Public Schools, and the Taxpayers' Association; it was opposed by the Libertarian Party and an association of retired teachers.

**Proposition 152, School Facilities Bond Act (1992)** "This act provides for a bond issue of one billion nine hundred million dollars (\$1,900,000,000) to provide capital outlay for construction or improvement of public schools.

The detailed proposal indicates that \$1.3 billion will go to buying land and constructing new school buildings, while \$570 million would go to school construction in small districts, asbestos removal, and air conditioning. Prop 152 was supported by the chairwoman of the State Assembly Education Committee, the president of the Chamber of Commerce, and the president of the Parent Teacher Association. It was opposed by members of the Libertarian Party and the Excellence Through Choice in Education League (ExCEL).

Guide for 1990, Primary (1990). http://repository.uchastings.edu/ca\_ballot\_props/1059

**Proposition 153, Higher Education Facilities Bond Act (1992)** "This act authorizes a bond issue of nine hundred million dollars (\$900,000,000) to fund the construction or improvement of California's public college and university facilities. Authorized projects for the 138 public campuses shall include, but are not necessarily limited to, earthquake and other health safety improvements, modernization of laboratories to keep up with scientific advances, and construction of classrooms and libraries."

The text of the initiative indicates that the Governor and legislature will decide how to spend the bond money, with the intention of constructing new buildings and altering existing buildings in the University of California, California State University, and community college systems, with no money allowed to be spent on building new campuses. Prop 153 was supported by the chairman of the State Senate Education Committee, the president of the Chamber of Commerce, and the president of the University of California. It was opposed by members of the Libertarian Party and several University of California faculty members.

#### A.2 Key Races in the 1990 and 1992 Primary Elections

If we consider the entire county of Los Angeles, the 1992 primary election had more competitive and highprofile elections compared to the 1990 primary election. However, in the areas most proximate to the riots there were locally competitive elections in both cycles.

June 1990 featured a competitive San Fernando Valley special run-off election in which the president pro tempore of the state Senate narrowly defeated a challenger. The top of the ticket was an uncompetitive race for governor, in which John Van de Kamp and Pete Wilson both beat their competitors by considerable margins. Leo McCarthy and March Fong Eu won their primaries for Lieutenant Governor and Secretary of State by large margins as well. There were no competitive Democratic primaries for congressional races except in districts with strong Republican incumbents. There were competitive Democratic primaries in the 32nd State Senate district (Pomona), the 41st Assembly District (Santa Monica), the 48th Assembly District (Watts), and the 59th Assembly District (San Gabriel Valley).

June 1992 featured a presidential primary, in which Bill Clinton defeated Californian Jerry Brown and George Bush defeated Pat Buchanan, both nationally and in Los Angeles County. Barbara Boxer and Diane Feinstein both won uncompetitive Senate primaries. The only competitive Democratic primaries in Los Angeles County were Xavier Becerra's CA-30 with a winning margin of less than 5,000 votes, CA-37 in Watts and Compton where Walter Tucker won by less than 1,000 votes, and Ed Royce's 39th district, bordering Orange County, with a margin of 3,500 votes. There was a competitive State senate race in the 23rd (Beverly Hills), and competitive Assembly races in the 38th (Northridge), the 44th (Pasadena), 46th (East LA), 49th (Watts), 50th (Huntington Park), and 57th (East San Gabriel Valley) districts.

#### A.3 Competitiveness Analysis

For the purposes of testing the consequences of competitiveness on our analysis, competitive races are defined as open races, i.e., those in which no incumbent ran. In 1992, the Los Angeles basin had open races for Senate Districts 19, 23, and 25, Assembly Districts 46 through 58, and Congressional Districts 25, 30, 33, 36, and 37. In 1990, there were open seats in Assembly Districts 48, 52, 58, and 59, and Congressional District 29.

If higher turnout in precincts with competitive races is correlated with political preferences, this could represents a threat to the validity of our difference-in-differences estimates. To assess this threat, we divide our data into precincts with no competitive races in the primary elections of either 1990 or 1992, and precincts with one or more competitive races in one of those two elections.

We define a competitive precinct as any precinct with an open race in either 1990 or 1992 for Congress, State Assembly, or State Senate. A noncompetitive district is one with no open seats in either year for any of those three seats. If we find that the distribution of the difference-in-differences is substantively similar between both subsets, then we can infer that differential turnout in competitive races is not driving our result.

Figure A.1 shows histograms of the precinct-level difference-in-differences values for all voters, white voters, and African American voters, respectively, among the 839 competitive precincts, while Figure A.2 replicates this analysis for 752 noncompetitive precincts. We are unable to identify the districts in which the remaining 85 precincts fall.

We observe very similar population averages of the difference-in-differences estimates across these two subsets. Among precincts with competitive races, the population-weighted mean of the overall difference-indifferences is 0.047, while the weighted means among white voters and African American voters are 0.029 and 0.071, respectively. For comparison, the weighted means among precincts without competitive races are 0.055 for all voters, 0.028 for African American voters, and 0.076 for white voters. We therefore conclude that our results are not driven by differentially competitive races in 1992 as compared to 1990.



Figure A.1: Histograms of the precinct-level difference-in-difference estimates in competitive precincts. The dashed lines represent the weighted mean of each distribution. The distribution of difference-in-difference estimates among competitive precincts look substantively very similar to the distribution of difference-in-difference estimates among all precincts.



Figure A.2: Histograms of the precinct-level difference-in-difference estimates in noncompetitive precincts. The dashed lines represent the weighted mean of each distribution. The distribution of difference-in-difference estimates among noncompetitive precincts look substantively very similar to the distribution of difference-in-difference estimates among all precincts.

## **B** Ecological Inference: Assumptions and Robustness

King's Ecological Inference (EI) (King, 1997a) method incorporates two key components: the method of bounds of Duncan and Davis 1953, and a random coefficient model with parameter variation characterized by a truncated normal distribution (Swamy, 2012). The first component limits the possible range of EI parameters, while the second structures the correlations between them.

The method makes three key assumptions: (1) parameter variation is characterized by a truncated bivariate normal distribution; (2) that the parameters are uncorrelated with the regressors; and (3) there is no spatial autocorrelation.

In a thorough analysis of EI's sensitivity to its assumptions, (Cho, 1998) shows that even in the presence of spatial autocorrelation, EI performs exceedingly well. This is comforting, since our analysis explicitly finds spatial autocorrelation of far smaller magnitude of that tested by Cho. She performs a similar analysis with the truncated bivariate normal distribution, and finds similarly reassuring results.

However, she notes that the most severe errors occur when the data are in violation of the second assumption, often called the "no aggregation bias assumption." In the case of the 1992 Los Angeles riots, the no aggregation bias assumption substantively implies that the African-American (white) population in a strongly African American (white) district supports public schools at the same or a similar rate to the African-American (white) population in a strongly white (African American) district.

For African American voters, we believe this is a relatively safe assumption. The African-American population in the Los Angeles basin in 1992 was extremely homogeneous in its preferences, registering as Democrats more than 95% of the time. Moreover, in our survey data, we find little heterogeneity in political preferences by location.

However, we are less confident in the no aggregation bias assumption for white voters: due to residential sorting or effects of segregation on voting (Enos, 2017), it is possible that whites in heterogeneous precincts are more liberal than whites in more homogeneously white precincts. Therefore we attempt to infer, should this bias exist, the extent to which it could affect our results.

If such aggregation bias is present, the results of EI will underestimate the liberalness of whites in heavily African-American or Latino precincts, and overestimate the liberalness of whites in homogeneously white precincts. In the aggregate these effects should cancel out, and therefore should not bias our unweighted difference-in-difference estimates. However, when we apply weights to each precinct inversely proportional to the size of the ecological inference standard error, as suggested by King (1997b); Adolph et al. (2003), we effectively down-weight whites in heterogeneous precincts and up-weight whites in homogeneous precincts. In practice this up-weights precincts for which our results indicate that whites are surprisingly liberal, and down-weights precincts for which our results indicate the opposite, thereby potentially generating bias in favor of our results. Thus we report *both* weighted and unweighted estimates for the group-specific difference-indifferences. We note that these estimates are nearly identical, regardless of weighting. The weighted average value of the difference-in-differences estimate for whites is 0.029, and for African Americans, it is 0.071. The unweighted value for whites and for African Americans are 0.028 and 0.076, respectively.

With a prior that the key EI assumption is not violated for African-Americans and not finding evidence that it biases our results for whites or African Americans we are confident in our use of ecological inference for studying political preferences of racial subgroups in the Los Angeles basin in 1992.

## C Robustness and Placebo Tests

#### C.1 Raw Support for Ballot Initiatives by Race

We visualize the two components of our difference-in-differences to explore their underlying individual trends. The plots in figure C.1 display the precinct-level change in support for each referendum (bottom two panels), and the difference-in-differences (top panel), on the vertical axes. The horizontal axes show the proportion of the precinct population that is white (left column) or African American (right column). The overall trend in this figure suggests that the more African American a precinct is, the greater the increase in support for public schools following the riot.

#### C.2 Geographic Distribution of Difference-in-Differences Values

Here we present maps indicating the difference-in-differences estimates for each precinct, first for all voters, and then for white voters only. Note that among both white voters and all voters, larger values of the difference-in-differences estimates are within the area most affected by the riot, indicated by the black ellipse. The black ellipse indicates the riot area from a one standard deviation ellipse (Wang, Shi and Miao, 2015) around the locations of all deaths attributed the riot.

#### C.3 Distance Analysis Robustness Tests

We conduct several tests of spatial dependence and find that changes in political behavior are correlated with distance from the geographic origin of the riot and not from other locations in Los Angeles, such as other African American population centers.

Figure C.4 and Table C.1 provide further evidence that the riot influenced the voting behavior of Los Angeles basin residents, over and above the impact of events such as the Rodney King beating and trial. Figure C.4 shows the relationship between distance and EdDiff for African Americans (top panel) and white voters (bottom panel), with points sized, and the loess line weighted by, the inverse standard errors of the EI estimates (Adolph et al., 2003). Table C.1 shows that the post-riot change in policy support is correlated with distance from the riot through regression analysis. We estimate weighted least squares regression coefficients with weights based on population when considering all voters; when considering racial subgroups weights are based on the standard errors of the EI estimates. We include both linear and quadratic terms on distance to account for potentially nonlinear effects. Considering all voters combined (Columns 1 and 2), distance is linearly negatively correlated with EdDiff, meaning that moving further away from the riot, voters are less supportive of public schools. Results from the same regression specifications limited to white voters



Figure C.1: Change in support for ballot initiatives at the precinct level by that precinct's racial demographics, with loess lines in red. Support for education spending increases as precincts become more African-American, while support for education spending decreases as precincts become more white. The same trends apply to the estimates of the difference-in-differences.



Figure C.2: The value of the difference-in-differences estimate in each precinct for all voters. The black ellipse indicates the riot area.



Figure C.3: The value of the difference-in-differences estimate in each precinct among white voters. The black ellipse indicates the riot area.

	(1) All	(2) All	(3) White	(4) White	(5) Black	(6) Black
Distance	$-0.035^{*}$ (0.003)	$-0.035^{*}$ (0.013)	$0.005 \\ (0.003)$	$0.048^{*}$ (0.011)	$-0.006^{*}$ (0.002)	$-0.014^{*}$ (0.007)
$Distance^2$		0.00003 (0.006)		$-0.019^{*}$ (0.005)		$0.004 \\ (0.003)$
Constant	$0.084^{*}$ (0.003)	$0.084^{*}$ (0.007)	$0.022^{*}$ (0.003)	0.0004 (0.006)	$0.078^{*}$ (0.002)	$0.082^{*}$ (0.003)
Observations	$1,\!676$	$1,\!676$	$1,\!676$	$1,\!676$	$1,\!676$	$1,\!676$
$\mathbb{R}^2$	0.070	0.070	0.002	0.011	0.006	0.007

Table C.1: Weighted precinct-level regressions of EdDiff on distance from Florence and Normandie, measured in units of 10 kilometers, for all voters, white voters, and African American voters, respectively. Columns 1, 3 and 5 show the bivariate linear relationship, while Columns 2, 4, and 6 also include the quadratic term. Regressions in Columns 1 and 2 are weighted by voting-age population; those in Columns 3 through 6 are weighted by the inverse of the standard errors of the ecological inference estimates. Standard errors are in parentheses. \* represents p < .05.

are presented in Columns 3 and 4, and African American voters in Columns 5 and 6. Because there are few whites living within 10 km of Florence and Normadie and few African Americans living further than 10 km from Florence and Normadie, we caution against literal interpretations of the distances implied by these regressions. Nevertheless, a negative relationship holds for white voters living more than 12.6 km from Florence and Normandie. Among white voters closest to Florence and Normandie, proximity to the riot is associated with lower support for public schools net of support for higher education. For African American voters, the relationship between distance and EdDiff is linear and negative.

## C.4 Distance Coefficients for Heavily Black Precincts Inside and Outside Riot Area

Among the top quartile of predominantly African-American precincts, we perform a series of placebo regressions where each precinct's centroid is treated as a placebo riot epicenter. We calculate the distance from all other precincts to that placebo precinct's centroid, then regress EdDiff on Distance<sub>placebo</sub>. The coefficients on Distance<sub>placebo</sub> are displayed in Figure 3 of the manuscript. Figure C.5 presents the coefficients on Distance<sub>placebo</sub>, separated by whether the placebo precinct falls inside and outside the riot zone as defined by a one standard deviation spatial ellipse around riot deaths. We note that the coefficients are markedly



Figure C.4: Loess lines for the value of the precinct-level difference-in-differences among African American voters (top) and white voters (bottom). Each point is weighted by the inverse of the standard error associated with its EI-derived difference-in-differences estimate, as suggested by Adolph et al. (2003). Points are sized, and the loess line weighted, by the inverse standard error of the EI estimates for each precinct.

Initiative	Year	Title	Dollar Amount	Result
53	1986	Public School Construction Bonds	\$800M	Pass
56	1986	Bonds for Higher Education	\$400 M	Pass
146	1990	Public School Construction Bonds	\$800 M	Fail
143	1990	Bonds for Higher Education	450 M	Pass

Table C.2: Two pairs of parallel ballot initiatives were placed before voters in 1986 and 1990, all prior to the Los Angeles Riots.

higher among precincts within the riot zone and that a t test for difference of means of these distributions yields t = 10.70.

#### C.5 Parallel Ballot Initiatives in 1986 and 1990 Placebo Test

As an additional robustness check, we examine two 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. We expect, in absence of a politicizing event as salient and powerful as the 1992 Los Angeles riots, that we will not find effects of the same strength as those between 1990 and 1992.

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

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

These ballot initiatives and the associated elections have several features that make them different from the initiatives used to construct EdDiff from 1990 to 1992 and, perhaps, an unreliable comparison: the population is different because the elections are general elections, rather than primaries; the elections occur four years apart, rather than two; and data on the racial composition of the electorate is not as reliable because of the time span between the 1986 election and 1990 census.

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 EdDiffPlacebo will be smaller than the coefficients on distance from the true test.

As shown in Table C.3, the relationship between EdDiffPlacebo and distance from the future location of the riot is smaller what we observed in Table C.1, suggesting that, in the absence of the riots, the relationship between voting and distance from Florence and Normandie would have been more muted.



Figure C.5: Estimated Distance Coefficient Values for Precincts Inside and Outside Riot Area.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Distance	$-0.02^{*}$	-0.02	$0.01^{*}$	-0.01	-0.00	-0.01
$I(Distance^2)$	(0.00)	-0.00	(0.00)	(0.01) $(0.01^{*})$	(0.00)	(0.01) (0.00)
Constant	$0.06^{*}$	(0.01) $0.06^{*}$	$-0.01^{*}$	(0.01) 0.00	$0.05^{*}$	0.05*
${N \over R^2}$	(0.00) 1,405 0.02	(0.01) 1,405 0.02	(0.00) 1,405 0.02	(0.01) 1,405 0.02	(0.00) 1,405 0.00	(0.00) 1,405 0.00

Table C.3: OLS regression of EdDiffPlacebo and distance from Florence and Normandie, measured in units of 10 kilometers. Standard errors are in parentheses. \* represents p < .05. Regressions in Columns 1 and 2 are weighted by voting-age population; those in Columns 3 through 6 are weighted by the inverse of the standard errors of the ecological inference estimates.

	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 D.1: Covariate balance in LACSS sample, African American respondents. All values represent proportions, except for age (years) and distance (meters). P values are generated by a t test for the difference in 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).

## D Survey Data Analysis

Table D.1 shows the covariate balance for African American LACSS respondents before and after the riot. Table D.2 shows the covariate balance for white LACSS respondents before and after the riot.

In the first two columns of Table D.3 we show results from regressions of support for spending on "improving our nation's education system" on an indicator for whether the respondent was asked either before or after the Rodney King trial verdict. Both excluding (Column 1) and including demographic controls (Column 2), the estimated coefficient on the "after verdict" indicator is approximately zero. In Columns 3 and 4, we repeat this analysis with self-reported respondent ideology as the dependent variable. We observe no evidence that African American respondents' ideology changed following the verdict.

	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 D.2: Covariate balance in LACSS sample among 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)

	Spending to	o little on education	More co	nservative
	(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)	$1.60^{*}$ (0.21)
$\begin{array}{c} \text{Controls?} \\ \text{N} \\ \text{R}^2 \end{array}$	No 418 0.00	Yes 380 0.08	No 272 0.00	Yes 248 0.03

Table D.3: OLS regression of measures of attitude change on an indicator for whether respondents were surveyed after the Rodney King verdict, among 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?" The decline in sample size 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.

	Before riot	After riot	Difference	p value
White Pr(Reg Republican)	0.389	0.242	-0.147	0.000
White Pr(Reg Democratic)	0.611	0.758	0.147	0.000
White N	785	$7,\!179$		
Black Pr(Reg Republican)	0.038	0.027	-0.011	0.461
Black Pr(Reg Democratic)	0.962	0.973	0.011	0.461
Black N	157	4,304		

Table E.1: Post-riot partian shift among new voter registrations by white and African Americans, from

4/28	(pre-riot)	to $5/4$	(post-riot)	. P	values	generated	by	a t	t test	for	difference	of	means
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	Before riot	After riot	Difference	p value
White Pr(Reg Republican)	0.373	0.243	-0.130	0.000
White Pr(Reg Democratic)	0.627	0.757	0.130	0.000
White N	1,397	$7,\!402$		
Black Pr(Reg Republican)	0.047	0.026	-0.021	0.088
Black Pr(Reg Democratic)	0.953	0.974	0.021	0.088
Black N	317	$4,\!458$		

Table E.2: Post-riot partian shift among new voter registrations by white and African Americans, from 4/27-4/28 (pre-riot) to 5/4-5/5 (post-riot). P values generated by a t test for difference of means.

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

#### E.1 Alternative Dates Before and After Deadline

Here we replicate the results from Table 3 using different date specifications to ensure that our findings are not dependent on the particular window of time examined in the main analysis. In particular, we compare dates on either side of the riot that are comparable in terms of distance from the registration deadline. Table E.1 shows the post-riot shift among new partian registrants, comparing 4/28/92 to 5/4/92. Table E.2 repeats this analysis, comparing 4/27-4/28 to 5/4-5/5.

#### E.2 Voter Registration Over Time

We use later years to compare the surge in registration in 1992 to the surge before other elections. Using the 2005 voter file, we examine registration going back to 2003 (we do not go back further in time in order to avoid complications from attrition). Figures E.1 and E.2 use the 1992 and 2005 voter files, respectively, to show the number of new registrants in Los Angeles County binned by week, relative to voter registration deadlines. Figures E.3 and E.4 use those voter files to show the proportion of weekly registrants who register as Democrats in Los Angeles county over time. In these figures, the blue dotted lines represent primary registration deadlines and the red dotted line represents the post-riot extended deadline. We observe that the uptick in the count of new registrants in the post-riot week prior to the extended 1992 primary registration deadline is greater than the uptick in new registrants prior to other comparable primary election registration deadlines for which we have data.



Figure E.1: Plot of the number of registrants in Los Angeles binned by week. The black dots represent the number of weekly registrants, and a loess line is fitted to those points. The dotted vertical lines represent voter registration deadlines. In particular, the blue line represents the 1990 primary election registration deadline, the red line represents the extended post-riot 1992 primary registration deadline, and the grey lines represent general election registration deadlines, in 1990 and 1992, respectively. Note that the largest pre-primary bump in registration occurs in the week prior to the extended deadline after the riot.



Figure E.2: Plot of the number of registrants in Los Angeles binned by week. The black dots represent the number of weekly registrants, and a loess line is fitted to those points. The dotted vertical lines represent voter registration deadlines. In particular, the blue line represents the 2004 primary election registration deadline, and the grey line represents the 2004 general election registration deadline. Approximately 30% of those who registered in the four weeks preceding the primary deadline registered within the week prior to the deadline.



Figure E.3: Plot of the proportion of weekly registrants who register as Democrats in Los Angeles county over time, from 1990 through 1992. The black dots represent the proportion of a week's registrants who registered as Democrats, and a loess line is fitted to those points. The weight of each point is scaled to represent the number of individuals who registered in that week. The dotted vertical lines represent voter registration deadlines. In particular, the blue line represents the 1990 primary election registration deadline, the red line represents the extended post-riot 1992 primary registration deadline, and the grey lines represent general election registration deadlines, in 1990 and 1992, respectively.



Figure E.4: Plot of the proportion of weekly registrants who register as Democrats in Los Angeles county over time, from 2003 through 2005. The black dots represent the proportion of a week's registrants who registered as Democrats, and a loess line is fitted to those points. The weight of each point is scaled to represent the number of individuals who registered in that week. The dotted vertical lines represent voter registration deadlines. In particular, the blue line represents the 2004 primary election registration deadline, and the grey lines represents the 2004 general election registration deadline.

## F Voter File Matching and Attrition

In matching the 1992 and 2005 California voter files, we cannot identify voters who left the state between those years. 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.

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 attempted 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** We use Bureau of Labor Statistics (BLS) data on marriage rates by age among women as of year 2000 (Aughinbaugh, Robles and Sun, 2013). Since marriage rates have been decreasing over time, we believe this should produce an underestimate of the true number of married women who have changed their names.

Using date of birth from the voter file, we calculate the age of everyone in the sample in year 1992. The BLS 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, we 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 Center for Disease Control, 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 has averaged 500,000 per year since 1990 (Perry et al., 2016). Out-migration has disproportionately occurred 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 our 1992 sample size of 30, 166 individuals who registered in the ten weekdays before and after the riot by (500, 000/31, 000, 000), times the number of years between 1992 and 2005, for a total of 6, 325 individuals from our sample who we expect to have left California, and thus to no longer appear on the voter rolls (30, 166 \* (500, 000/31, 000, 000) \* 13 = 6, 325).

**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 out-migration, 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.

	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
N	6,887	$3,\!294$	$3,\!471$	1,526
$R^2$	0.00	0.00	0.00	0.01

Table G.1: OLS regression of turnout in 2004 primary election among those registering immediately before and immediately after the riot on an indicator for those who registered after the riot. Controls include age, gender, and party ID. Standard errors are in parentheses. \* represents p < .05.

	Wł	nite	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
N	6,887	$3,\!294$	$3,\!471$	1,526
	0.00	0.00	0.00	0.01

Table G.2: OLS regression of turnout in 2004 general election among those registering immediately before and immediately after the riot on an indicator for those who registered after the riot. Controls include age, gender, and party ID. Standard errors are in parentheses. \* represents p < .05.

# G Long-term Participation of Riot Registrants

In Tables G.1 and G.2 we regress participation in the 2004 primary and general elections, respectively, on registration before or after the riot.

## H Race Imputation Methodology

Here we further assess the validity of our imputations. Our imputation procedure has three steps. In the first step we match the census surname race probability file to the voter file; 89% of individuals have an exact match. For the remaining 11%, we perform a fuzzy match to identify the closest surname; this reduces error from typos in the voter file and multiple forms of the same surname. After this step, 38 individuals remain with no surname match within our threshold of string distance. The second step involves geolocating each registered voter's address and then locating that address within a census block, then merging that census block ID to a file of race by census block. Due to geolocating errors, roughly 130,000 individuals were placed in census blocks with zero population. None of the 38 individuals with no surname information were also placed in a zero population census block. The final step involves a Bayesian update in which we take the census information as a prior and then update it using the surname probabilities, producing a posterior of racial probabilities.

Our imputed value is the race with the highest probability, even if it is not a majority. To determine how sensitive our results are to these imputations, we perform an analysis in which for each individual we draw from their race distribution, rather than merely taking the modal value, and reproduce our results in Tables 2 and 3.

For 1,000 iterations, we resample the race of everyone in our data set and reproduce Tables 2 and 3 in the main text. Then we take a 95% confidence interval of each value in those tables.

	Pre-Riot	Pre-Riot	Pre-Riot	Post-Riot	Post-Riot	Pre-Riot
	(lower)	(median)	(upper)	(lower)	(median)	(upper)
African American White	$0.132 \\ 0.656$	$0.136 \\ 0.661$	$\begin{array}{c} 0.140 \\ 0.667 \end{array}$	$0.256 \\ 0.546$	$0.259 \\ 0.549$	$0.262 \\ 0.552$

Table H.1: 95% bootstrapped confidence intervals for Table 2 in the main text, based on bootstrapping the imputed race of individuals in the voter file.

	Pre-Riot (lower)	Pre-Riot (median)	Pre-Riot (upper)	Post-Riot (lower)	Post-Riot (median)	Pre-Riot (upper)	Diff	p value
	()	()	(******)	()	()	(*****)		
White Pr(Reg Republican)	0.349	0.353	0.358	0.243	0.246	0.248	0.108	0.000
White Pr(Reg Democratic)	0.642	0.647	0.651	0.752	0.754	0.757	-0.108	0.000
Ν		2,777			$9,\!698$			
Black Pr(Reg Republican)	0.049	0.060	0.070	0.029	0.032	0.034	0.029	0.000
Black Pr(Reg Democratic)	0.930	0.940	0.951	0.966	0.968	0.971	-0.029	0.000
N		667			$5,\!621$			

Table H.2: 95% bootstrapped confidence intervals for Table 3 in the main text, based on bootstrapping the imputed race of individuals in the voter file.

We might be concerned that our imputation bias is much higher among African Americans than among whites. To allay these concerns, we show the imputation posterior probability of being white among all registrants we identify as white and compare those to the posterior probability of being African American among all registrants we identify as such, to show that there are minimal differences. In Figure H.1 we break down these distributions by all registrants, only pre-riot registrants, and only post-riot registrants.



Figure H.1: The distribution of the probability of most likely race, normalized.

## I Decomposition of Treatment Effect

## I.1 "Back of the Envelope Calculations"

In the Los Angeles basin, bonds for public schools (Prop 152) received 19,098 more "Yes" votes than bonds for higher education (Prop 153) in 1992, while in 1990 public education bonds (Prop 123) received 5,217 *fewer* "Yes" votes than higher education bonds (Prop 121). This leaves a total of 24,315 votes – the post-riot increase in support for public schools, over and above higher education – to be explained. A question, then, is what proportion of these votes can be attributed to mobilization (i.e., new voters entering the electorate after the riot) versus persuasion (i.e., voters changing their minds on public education bonds in the wake of the riot). Since we cannot directly observe individual votes cast for or against these ballot initiatives, we conduct a "back of the envelope" calculation to assess the importance of mobilization vis-à-vis persuasion.

We find that 24,587 individuals registered to vote between the end of the riot and the 1992 primary election registration deadline. Note that if all of these individuals voted in support of public schools in 1992, this would entirely account for the increase in support for public education in the basin following the riot. For reasons discussed in the main text, we anticipate that a high proportion of those new registrants subsequently turned out the vote in the primary, and voted in support of bonds for public schools. If 80% of those new registrants turned out to vote, and support for public schools was equivalent to the percent of new registrants who registered as Democrats (62%), mobilization of new registrants would account for just over half of the "unexplained" votes in favor of public education funding. If we include those who registered with a third party or as unaffiliated, along with Democrats, mobilization of new registrants would account for 69% of those "unexplained" votes. These highly-conservative estimates assume that zero percent of individuals who were registered prior to the riot were mobilized and voted "yes" in 1992 after having voted "no" or abstained in 1990. Thus we are confident in asserting that mobilization, rather than persuasion, was the driving force in the post-riot increase in voter support for public education.

#### I.2 Precinct-level Mobilization and Support for Public Education

Figures I.1 and I.2 provide further evidence that a large portion of the shift in policy support is attributable mobilization rather than persuasion. We subset the voter file to individuals who registered in the wake of the riot (but before the extended registration deadline) and aggregate up to the precinct level. Each point in the scatterplots thus represents a precinct, with the size of the dot scaled to the number of registrants in that precinct. In figure I.1, along the horizontal axis we show the proportion of registrants who affiliated with the Democratic party, and along the vertical axis we show the difference-in-differences value for that precinct. Overall there is a positive relationship between how Democratic are a precinct's post-riot registrants and the EdDiff value for that precinct. In figure I.2, the horizontal axis represents the count of new registrants per precinct in the wake of the riots, and the vertical axis again displays the difference-in-differences value for that precinct. Again the relationship is positive, suggesting that precincts with the most mobilization of new voters also display the greatest shifts in support of public schools.



Figure I.1: Relationship between the post-riot proportion of a precinct that registers with the Democratic Party and the precinct-level difference-in-differences value, based on the 1992 Los Angeles voter file. Each point in the scatterplot represents a precinct, with the size of the dot scaled to the number of registrants in that precinct.



Figure I.2: Relationship between the number of new registrants in a precinct and the precinct-level difference-in-differences value, based on the 1992 Los Angeles voter file. Each point in the scatterplot represents a precinct, with the size of the dot scaled to the number of registrants in that precinct.

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