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Technical Appendix

# Impact of Realignment on County Jail Populations

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## Empirical Strategy for Estimating Cross-County Relationships Between Realignment and Jail Incarceration Rates

To assess the degree to which realigned inmates are being transferred into county jails, we exploit the cross-county variation in the impact of realignment that we documented in Figure 3 of the main report. Specifically, we assess whether counties that have experienced larger declines in the rate at which county residents are incarcerated in state prison also experience larger increases in their county jail incarceration rates. This analysis relies on estimation of the regression model

$$\Delta\text{County Jail Rate}_{it} = \alpha + \beta\Delta\text{Prison Incarceration Rate}_{it} + \varepsilon_{it}, \quad (1)$$

where $i=(1,\ldots,58)$ indexes counties, $t=(1,\ldots 9)$ indexes the first nine post-realignment months (October 2011 through June 2012), $\Delta$County Jail Rate$_{it}$ is the pre-post realignment change in the number of jail inmates per 100,000 county residents in county $i$ in month $t$, $\Delta$Prison Incarceration Rate$_{it}$ is the pre-post realignment change in the number of county residents incarcerated in a state prison, $\alpha$ and $\beta$ are parameters to be estimated, and $\varepsilon_{it}$ is a mean-zero error term. The coefficient $\beta$ reflects the change in the jail incarceration rate caused by a change in the prison incarceration rate, and it provides a gauge of the degree to which realigned prison inmates impact the jail population. We measure the change in the jail incarceration rate using monthly jail data measured at the county level from the Board of State and Community Corrections' Jail Profile Survey. To measure changes in county level incarceration rates, we calculate the difference between cumulative weekly admissions and releases between specific dates for each county from our weekly admissions and releases files.[1]

The manner in which we measure the change in jail and prison incarceration rates merits a detailed discussion. Absent some policy-induced shock to the prison population, such as the implementation of AB109, one would expect prison and jail populations to positively co-vary. For example, higher crime leads to more arrests, which leads to a larger jail population of inmates awaiting trial and transfer to prison, which in turn leads to a larger prison population. The reform in question, however, should cause negative covariance between prison and jail populations, as the legislation expands the scope of jails and contracts the scope of the state's prison system. Hence, our analysis must focus on isolating variation in the prison population that is attributable to the reforms ushered in by AB109.

One possible manner of characterizing the change in the prison population would be to calculate the change in the number of county residents incarcerated in state prison for a given post-realignment month relative to the comparable month one year previous. June 2012 is the latest month for which we have data for both prison and jail populations. Focusing on the change relative to June 2011 ensures that we are making comparisons relative to the same time last year, and that any association we observe between the change in the prison incarceration rate and the change in the jail incarceration rate is not being driven by particular effects of calendar month and potential heterogeneity in these effects across counties. A potential weakness of this strategy, however, is that the change over the course of a full year when only a subset of months of that year fall into the post-realignment period is in part driven by underlying trends in crime and corrections

[1] We do not have measures at any point in time of the level of state prison incarceration from any given county. However, since the incarcerated population at time t equals the incarcerated population at time t-1 plus admissions and minus releases during the intervening period, one can gauge changes from admissions and release data alone.

that predate the AB 109 reforms. For example, the change in jail incarceration rates from October 2010 through 2011 will be driven principally by what happened during the eleven pre-realignment months. To the extent that pre-realignment factors induce positive covariance between the county prison and jail populations, estimation of trans-institutionalization rates using the year-long differences may be biased towards zero.

An alternative strategy would be to calculate the changes in incarceration and jail populations by focusing on the more narrow time window between September 2011 and each post-realignment month in our data. By using the month immediately preceding the implementation of realignment, we can be sure that covariance in prison and jail is realignment-induced and not reflecting trends in underlying crime rates or enforcement and prosecutorial efforts at the county level. A shortcoming of this alternative characterization of the pre-post change is that the use of different calendar months for the pre and post period may confound seasonal variation in the jail and prison incarceration rates with an impact of realignment.

Our characterization of the dependent and explanatory variables in equation (1) draws on the relative strengths of these two alternatives approaches. Specifically, we calculate the pre-post realignment changes in the jails' incarceration rate and the county-specific prison incarceration rate relative to September 2011 for each of the nine post-realignment months from October 2011 through June 1012. From each of these changes we subtract the corresponding change from one year previous. Doing so nets out any seasonal variation in prison and jail incarceration rates and isolates variation in the county's jail and prison incarceration rates above and beyond seasonal variation.

To illustrate our strategy here, let's focus specifically on our characterization of changes in prison and jail incarceration rates between September 2011 and June 2012. We begin by first tabulating the changes in rates for each county over this time period. The change in the jail and prison incarceration rates over this period will be driven by two factors: (1) the impact of the realignment reforms implemented between these two months and (2) the seasonal factors that influence trends in county jail and prison populations between these particular calendar months. We wish to isolate the first factor for each county and study the cross-county relationship between the effect of realignment on the number of county residents in prison and the number of county resident in local jails. Hence, we need to somehow adjust for the seasonal effect. To do so, we calculate comparable changes in prison and jail incarceration rates from September 2010 through June 2011 and subtract these earlier 2010 changes from the changes in incarceration rates that straddle the implementation of realignment. Our dependent variable thus measures the extent to which the change in the county jail incarceration rates between September 2011 and June 2012 exceeds the change in county jail incarceration rates for the comparable period one-year earlier. Similarly, our key explanatory variable is the extent to which the change in the county-level prison incarceration rate between September 2011 and June 2012 exceeds the comparable change for the county for the same period one year earlier.[2]

We repeat this process for each county relative to each post-realignment month. Hence, for each county we tabulate the change in jail and prison incarceration rates from September 2011 to October 2011 minus the comparable change from one year earlier, the comparable relative change from September 2011 to November 2011, the comparable relative change from September 2011 through December 2011, and so on through June

[2] For all prison change calculations, we use weeks that occur in the middle of the month as end points. We make this specification choice due to the fact that the jail populations measure average daily population over the course of the entire month. The results are not sensitive to this choice.

2012. In all, each county contributes nine data points to the analysis, one for each post-realignment month for which we have complete prison and jail data.

To ensure that our results are not being driven by the difference-in-difference structure of our dependent and explanatory variables, we also present a complete set of parallel results based on the simple first difference of the explanatory and dependent variables.

We use this constructed dependent and explanatory variable to estimate various specifications of equation (1). First, we present results from simple bivariate regressions of the difference-in-difference in county jail incarceration rates on the corresponding difference-in-difference in county prison incarceration rates. The inclusion of the constant in the bivariate regression implies that we estimate the trans-institutionalization effect using variation in our difference-in-difference variables after netting out the state-level average for both. Second, we present a series of models that adds a complete set of county fixed effects to the specification. Doing so identifies the rate of cross-institution transfer making use of variation occurring within county beyond the county-specific average values for our difference-in-difference characterization of the explanatory and dependent variable. Finally, we present estimates including both county fixed effects and nine post-realignment month fixed effects. This latter category nets out both county-level averages for the nine data points per county as well as state-level average values of the difference-in-difference values that vary by end month. This latter specification is the most stringent and identifies the model with variation occurring within counties around a very flexibly-specified state-level time trend. There is, however, a drawback to relying on this specification, and it might, in fact, go one step too far, given how our data are constructed. As described above, using the differenced data we remove seasonal effects, but in doing so we also subtract out any underlying county-specific trend. As a result, all observations used are purged of these potential confounders and we have "cleaned" nine post-realignment observations per county. Including month fixed effects may then simply remove a statewide average treatment effect.

Our preferred specification is the second approach described above, which includes county-level fixed effects but not month effects. We believe that the county-fixed effects adequately adjust for all unobservable factors that influence post-realignment incarceration trends. As we show in subsequent analysis, many of these factors are quite important and are likely to be correlated with the realignment dose. We prefer this specification to the one including time effects due to the fact that there is very little variation remaining in the data, once time effects are added. Because our explanatory and dependent variables are changes, the inclusion of county fixed effects allows for county-specific time trends.

In Appendix Tables A3 through A8 we present complete results for all three specifications and for our two alternative characterizations of the dependent and explanatory variables. While we report our preferred specifications in the main body of the text, we present the more complete set of results here to afford the reader the full range of estimates and the ability to make one's own judgment.

## Measuring County-Level Jail Incarceration Growth Net of the Effect of the Realignment Dose

In the main text of the report, we present estimation results that regress growth in local jail incarceration rates at the county level after netting out the effect of the increase in the offender caseload (the realignment dose) caused by the decline in the county's prison incarceration rate. Table A9 presents a correlation matrix between all of these explanatory variables. We also add the county's pre-realignment prison incarceration rate, as we control for this variable in some model specifications below. Several notable patterns in this table merit discussion. While there is a weak positive correlation between the use of split sentences and pre-realignment jail incarceration, counties with high prison incarceration rates prior to realignment tend to be less likely to employ split sentences. Moreover, the proportion of county voters supporting three-strike sentencing reform (Proposition 36) is negatively correlated with the use of split sentences. Interestingly, this measure of ideology is also strongly and negatively correlated with the county's jail and prison incarceration rates before realignment was implemented. In other words, counties where the support for Proposition 36 was the weakest had the highest jail and prison incarceration rates. Finally, both pre-realignment incarceration rate variables are positively correlated with local crime rates.

To estimate this net growth, we employ this simple before-after characterization of the change in jail and prison incarceration rates to estimate the following equation

$$\Delta\text{County Jail Rate}_{it} = \alpha_i + \beta\Delta\text{Prison Incarceration Rate}_{it} + \varepsilon_{it}, \quad (2)$$

where all variables and indices are defined as above. The sole difference between the model specification in equation (2) and the model specification in equation (1) is that equation (2) allows for county-specific fixed effects (indicated by the county subscript on the intercept term $\alpha$). The county-specific fixed effect estimates from this model provide a gauge of the average increase in the counties' jail incarceration rate over the nine periods that form the bases for our data set. Moreover, since the change in the county prison incarceration rate is controlled for in the model, the estimates reflect the average change in the county after accounting for the realignment dose. These 57 fixed effect coefficients (Alpine County is not included in any model since it does not have a jail facility), provide our dependent variable for the analysis. Table A10 presents results when we use the first-difference specification of the dependent variable, while Table A11 presents comparable results when we use the difference-in-difference specification.

The structure of tables A10 and A11 are identical. Each column presents the results from a regression of the change in the jail incarceration rate after netting out the effect of the realignment dose on various combinations of the explanatory variables listed above. In model (1) we control for the proportion of sentences that are split, the pre-realignment population-to-capacity ratio, the proportion of local voters supporting Proposition 36, and the jail incarceration rate in June 2011. There is little evidence of an impact of the proportion split share on jail population growth in either table. In addition, while the coefficient on the population-to-capacity ratio has the expected sign, the coefficient is statistically insignificant. We find large, negative, and highly significant effects of both the proportion of voters supporting Proposition 36 and the pre-realignment jail incarceration rates in the models employing the first-difference specification of the dependent variable. In the difference-in-difference specification, the coefficient on the jail incarceration rate is similar, but the significant effect of the vote share variable disappears. We will postpone discussion of the magnitude until somewhat near the end of the discussion of these regression results.

Model (2) adds the pre-realignment prison incarceration rate for each county. Adding this additional control variable has little effect on the other coefficients. This is not surprising since the pre-realignment incarceration rate is strongly correlated with the realignment dose (see Figure 3), the effect of which has already been netted out of our independent variable. We next add controls for the violent and property crime rates in each county in 2011 (shown as Model (3)). While neither coefficient is significant, their inclusion increases the size of the Proposition 36 and pre-realignment jail incarceration rate coefficients in Table A10. In Table A11, Proposition 36 is still statistically insignificant. Moreover, the coefficient on the jail population-to-capacity ratio increases and becomes marginally significant. Most importantly, Model (3) in both tables demonstrates that the results are not being driven by underlying differences across counties in crime rates. Finally, Model (4) substitutes voter support for Proposition 34 (to abolish the death penalty) for the Proposition 36 variable. The results are qualitatively similar, in that support for Proposition 34 is negatively associated with jail incarceration growth in the post-realignment period in Table A10 but not in Table A11. This is not too surprising since the cross-county correlation between these two vote share variables exceeds 0.90.

To characterize the magnitude of these effects, we use the coefficient estimates in our preferred specification, shown as Model (3), in conjunction with the values of each variable at the 25$^{th}$ and 75$^{th}$ percentiles of each distribution to calculate the effect of a difference in the explanatory variable equal to the interquartile range (the value at the 75$^{th}$ percentile minus the value at the 25$^{th}$). With an interquartile difference in the proportion of voters supporting Proposition 36 of 0.081, our estimate in Table A10 implies that the county at the 75$^{th}$ percentile of this distribution would experience a change in the jail incarceration rate below the comparable change for the county at the 25$^{th}$ percentile by roughly 8 per 100,000, holding all else constant. A comparable calculation for the pre-realignment jail incarceration rate implies that the county at the 75$^{th}$ percentile of this distribution experiences an increase in the jail incarceration rate that is roughly 10 per 100,000 lower than the comparable change for county at the 25$^{th}$ percentile. Similarly, the county at the 75$^{th}$ percentile of the population-to-capacity ratio experiences an increase that is 3.5 inmates per 100,000 lower than that for the county at the 25$^{th}$ percentile of the distribution. When we employ the models in Table A11, there is no measurable effect of support for Proposition 36, while the effects of the jail population-to-capacity ratio and the pre-realignment jail incarceration rate are similar in magnitude.

Are the effects of these additional variables on jail incarceration rates large? When benchmarked against the average change in county jail incarceration rates over this period (17 per 100,000), indeed they are. We could alternatively compare these effect sizes to a comparable calculation for variation in the realignment dose. Between September 2011 and June 2012, the county at the 25$^{th}$ percentile of this distribution experienced an increase in its local offender caseload of 23 per 100,000 county residents as a result of the decline in the county's prison incarceration rate. The comparable figure for the county at the 75$^{th}$ percentile of this distribution is 56. Combined with our largest estimate of the prison-jail transfer rate (0.367), this implies that the county at the 25$^{th}$ percentile would experience an increase in the jail incarceration rate that is 12.11 per 100,000 lower than the county at the 75$^{th}$ percentile. With a comparable effect for the corrections ideology variable of 8 and for the pre-realignment jail incarceration of 10, it becomes clear that these factors are of comparable importance in explaining what we have seen so far to underlying variation in the realignment dose.

TABLE A1
County jail and prison incarceration rates

| | Pre-realignment incarceration rates (September 2011) | | September 2010–June 2011 changes | | September 2011–June 2012 changes | | Jail/Prison ratio [(F)-(D)]/[(E)-(C)] |
|---|---|---|---|---|---|---|---|
| | Jail | Prison | Prison Pop | Jail Pop (ADP) | Prison Pop | Jail Pop (ADP) | |
| County | (A) | (B) | (C) | (D) | (E) | (F) | |
| Alameda | 243.5 | 280.7 | -889 | -264 | -1099 | -551 | 1.37 |
| Alpine | | 363.0 | | | | | |
| Amador | 176.2 | 521.7 | 1 | -31 | -23 | 7 | -1.58 |
| Butte | 249.2 | 598.8 | 1 | 0 | -224 | 10 | -0.04 |
| Calaveras | 164.3 | 248.6 | 12 | 0 | -23 | 20 | -0.57 |
| Colusa | 203.6 | 375.9 | 2 | -4 | -5 | 16 | -2.86 |
| Contra Costa | 135.9 | 182.4 | 42 | -225 | -238 | 172 | -1.42 |
| Del Norte | 377.3 | 516.4 | 8 | -1 | -19 | -29 | 1.04 |
| El Dorado | 184.4 | 252.6 | 16 | -10 | -35 | -3 | -0.14 |
| Fresno | 182.9 | 513.9 | 100 | 22 | -1166 | 606 | -0.46 |
| Glenn | 382.9 | 455.1 | 21 | 19 | -19 | 1 | 0.45 |
| Humboldt | 277.9 | 426.7 | -3 | -16 | -146 | -18 | 0.01 |
| Imperial | 352.1 | 236.6 | 42 | 87 | -82 | -97 | 1.48 |
| Inyo | 354.1 | 389.7 | 2 | -2 | 0 | -9 | 3.50 |
| Kern | 277.1 | 598.9 | 305 | 17 | -1175 | 175 | -0.11 |
| Kings | 219.4 | 1052.3 | 135 | -34 | -264 | 93 | -0.32 |
| Lake | 366.5 | 606.3 | -1 | 12 | -59 | 5 | 0.12 |
| Lassen | 255.6 | 383.0 | -4 | 17 | -20 | 32 | -0.94 |
| Los Angeles | 139.8 | 549.1 | -662 | -2086 | -5437 | 2590 | -0.98 |
| Madera | 271.4 | 413.9 | 5 | 42 | -101 | 16 | 0.25 |
| Marin | 115.7 | 151.7 | 8 | -13 | -25 | 19 | -0.97 |
| Mariposa | 213.3 | 368.3 | 1 | -11 | -3 | -1 | -2.50 |
| Mendocino | 228.1 | 406.6 | 7 | -33 | -42 | 43 | -1.55 |
| Merced | 262.1 | 390.5 | -51 | -31 | -166 | 50 | -0.70 |
| Modoc | 231.1 | 262.7 | -1 | 8 | -7 | -9 | 2.83 |
| Mono | 175.3 | 167.7 | -2 | -15 | -5 | 4 | -6.33 |
| Monterey | 245.2 | 425.2 | 92 | -16 | -186 | 88 | -0.37 |
| Napa | 202.1 | 284.6 | 62 | 15 | -21 | -14 | 0.35 |
| Nevada | 152.7 | 125.7 | -1 | -19 | -16 | 40 | -3.93 |
| Orange | 201.1 | 295.3 | -752 | 224 | -1797 | 705 | -0.46 |
| Placer | 148.3 | 266.6 | 25 | -26 | -108 | 61 | -0.65 |
| Plumas | 189.5 | 354.2 | 14 | -2 | -15 | 14 | -0.55 |
| Riverside | 143.1 | 485.2 | -25 | -244 | -1516 | 563 | -0.54 |
| Sacramento | 271.3 | 539.9 | -715 | -429 | -1488 | 20 | -0.58 |

TABLE A1 *(continued)*

| | Pre-realignment incarceration rates (September 2011) | | September 2010–June 2011 changes | | September 2011–June 2012 changes | | Jail/Prison ratio [(F)-(D)]/[(E)-(C)] |
|---|---|---|---|---|---|---|---|
| | Jail | Prison | Prison Pop | Jail Pop (ADP) | Prison Pop | Jail Pop (ADP) | |
| **County** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | |
| San Benito | 226.4 | 280.0 | 24 | -3 | -14 | -13 | 0.26 |
| San Bernardino | 253.6 | 589.8 | 336 | -404 | -2454 | -124 | -0.10 |
| San Diego | 151.6 | 381.1 | 85 | -201 | -1758 | 468 | -0.36 |
| San Francisco | 183.7 | 182.3 | 27 | -225 | -426 | 87 | -0.69 |
| San Joaquin | 160.2 | 505.9 | 87 | -187 | -588 | 183 | -0.55 |
| San Luis Obispo | 194.1 | 284.6 | -267 | 43 | -334 | 31 | 0.18 |
| San Mateo | 135.4 | 217.5 | 53 | -27 | -216 | 59 | -0.32 |
| Santa Barbara | 215.5 | 366.6 | 114 | -23 | -263 | 113 | -0.36 |
| Santa Clara | 196.4 | 299.9 | 309 | -193 | -754 | 159 | -0.33 |
| Santa Cruz | 168.6 | 208.9 | -40 | -18 | -47 | -36 | 2.57 |
| Shasta | 127.7 | 852.2 | 28 | -5 | -230 | -11 | 0.02 |
| Sierra | 97.1 | 449.7 | -1 | -5 | 0 | -2 | 3.00 |
| Siskiyou | 224.2 | 534.7 | 25 | 20 | -33 | 5 | 0.26 |
| Solano | 183.2 | 387.5 | -67 | -113 | -415 | 138 | -0.72 |
| Sonoma | 192.9 | 251.8 | 25 | 33 | -141 | 75 | -0.25 |
| Stanislaus | 191.9 | 482.7 | 42 | -96 | -567 | 134 | -0.38 |
| Sutter | 248.6 | 461.4 | 53 | 31 | -117 | 51 | -0.12 |
| Tehama | 298.6 | 787.7 | 49 | -1 | -73 | 10 | -0.09 |
| Trinity | 348.9 | 415.4 | -3 | 6 | -9 | 5 | 0.17 |
| Tulare | 311.1 | 643.5 | 21 | -3 | -480 | 228 | -0.46 |
| Tuolumne | 220.8 | 482.2 | 31 | 7 | -20 | 5 | 0.04 |
| Ventura | 177.9 | 267.1 | -2 | -63 | -436 | 173 | -0.54 |
| Yolo | 182.1 | 551.8 | 111 | -67 | -133 | 81 | -0.61 |
| Yuba | 505.3 | 691.7 | -15 | -62 | -98 | 48 | -1.33 |
| **Statewide** | **184.3** | **434.7** | **-1,180** | **-4,605** | **-25,136** | **6,486** | **-0.46** |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

TABLE A2
County jail capacity

| | ADP/Rated capacity (%) | | Capacity constrained releases | | | Share of split sentences (%) | Court ordered jail cap | Inmates on federal contract | Expected # of new beds due to AB900 | Planned year of opening |
|---|---|---|---|---|---|---|---|---|---|---|
| County | Sept 2011 | June 2012 | Sept 2011 | June 2012 | Change | | June 2012 | June 2012 | | |
| Alameda | 81.1 | 69.4 | 0 | 0 | 0 | 8.4 | No | 340 | 0 | |
| Alpine | | | | | | | | | | |
| Amador | 118.4 | 127.6 | 12 | 12 | 0 | 32.3 | No | 0 | 89 | TBD |
| Butte | 93.3 | 95.0 | 23 | 195 | 172 | 3.6 | Yes | 96 | 0 | |
| Calaveras | 78.5 | 109.2 | 0 | 5 | 5 | 33.3 | Yes | 0 | 95 | 2013 |
| Colusa | 52.2 | 69.6 | 0 | 0 | 0 | 29.4 | No | 0 | 0 | |
| Contra Costa | 72.1 | 80.8 | 0 | 0 | 0 | 84.2 | No | 150 | 0 | |
| Del Norte | 111.7 | 83.5 | 0 | 0 | 0 | 14.3 | No | 0 | 0 | |
| El Dorado | 81.8 | 81.1 | 105 | 109 | 4 | 52.1 | Yes | 0 | 0 | |
| Fresno | 66.0 | 88.0 | 1,516 | 1,550 | 34 | 32.5 | Yes | 201 | 0 | |
| Glenn | 69.4 | 70.1 | 0 | 0 | 0 | 67.6 | No | 0 | 0 | |
| Humboldt | 93.7 | 89.3 | 60 | 127 | 67 | 63.6 | No | 0 | 0 | |
| Imperial | 166.2 | 140.4 | 0 | 0 | 0 | 7.8 | No | 182 | 232 | TBD |
| Inyo | 72.9 | 63.5 | 0 | 0 | 0 | 0.0 | No | 0 | 0 | |
| Kern | 88.7 | 95.2 | 515 | 889 | 374 | 10.1 | Yes | 186 | 822 | TBD |
| Kings | 102.4 | 133.0 | 0 | 84 | 84 | 76.2 | Yes | 0 | 252 | 2016 |
| Lake | 92.0 | 93.7 | 0 | 0 | 0 | 3.0 | No | 0 | 0 | |
| Lassen | 51.0 | 72.5 | 0 | 0 | 0 | 4.7 | No | 0 | 0 | |
| Los Angeles | 107.9 | 126.3 | 1,482 | 1,658 | 176 | 5.4 | Yes | 903 | 1024 | TBD |
| Madera | 99.5 | 103.3 | 0 | 15 | 15 | 48.1 | No | 2 | 145 | 2013 |
| Marin | 83.7 | 89.1 | 0 | 0 | 0 | 60.0 | No | 3 | 0 | |
| Mariposa | 60.3 | 58.6 | 0 | 0 | 0 | 60.0 | No | 0 | 0 | |
| Mendocino | 71.2 | 85.8 | 0 | 0 | 0 | 22.9 | No | 0 | 0 | |
| Merced | 87.1 | 93.8 | 100 | 190 | 90 | 64.6 | Yes | 0 | 0 | |
| Modoc | 62.8 | 41.9 | 0 | 0 | 0 | 0.0 | No | 0 | 0 | |
| Mono | 54.2 | 62.5 | 0 | 0 | 0 | 28.6 | No | 0 | 0 | |
| Monterey | 129.7 | 140.4 | 334 | 333 | -1 | 6.3 | No | | 288 | TBD |
| Napa | 100.4 | 95.1 | 65 | 80 | 15 | 73.8 | No | 0 | 0 | |
| Nevada | 59.3 | 80.9 | 0 | 0 | 0 | 41.4 | No | 55 | 0 | |
| Orange | 131.9 | 138.7 | 0 | 0 | 0 | 23.2 | No | 1185 | 512 | 2019 |
| Placer | 84.1 | 93.5 | 49 | 63 | 14 | 7.8 | Yes | 0 | 0 | |
| Plumas | 46.3 | 67.2 | 0 | 11 | 11 | 7.1 | No | 0 | 0 | |
| Riverside | 106.7 | 101.9 | 0 | 610 | 610 | 60.0 | Yes | 0 | 1250 | 2016 |
| Sacramento | 98.7 | 99.2 | 0 | 0 | 0 | 45.2 | Yes | 338 | 0 | |
| San Benito | 97.9 | 88.7 | 28 | 17 | -11 | 92.9 | No | 0 | 60 | TBD |

TABLE A2 *(continued)*

| | ADP/Rated capacity (%) | | Capacity constrained releases | | | Share of split sentences (%) | Court ordered jail cap | Inmates on federal contract | Expected # of new beds due to AB900 | Planned year of opening |
|---|---|---|---|---|---|---|---|---|---|---|
| **County** | **Sept 2011** | **June 2012** | **Sept 2011** | **June 2012** | **Change** | | **June 2012** | **June 2012** | | |
| San Bernardino | 98.4 | 96.2 | 2,493 | 3,855 | 1,362 | 16.5 | Yes | 329 | 1368 | 2013 |
| San Diego | 103.6 | 113.6 | 664 | 1,057 | 393 | 21.9 | Yes | 104 | 838 | 2016 |
| San Francisco | 59.8 | 63.5 | 0 | 0 | 0 | 42.7 | No | 0 | 0 | |
| San Joaquin | 83.2 | 96.9 | 617 | 750 | 133 | 66.2 | Yes | 0 | 1280 | TBD |
| San Luis Obispo | 114.5 | 116.4 | 141 | 204 | 63 | 4.9 | No | 0 | 155 | 2015 |
| San Mateo | 117.4 | 124.5 | 26 | 35 | 9 | 85.8 | No | 2 | 0 | |
| Santa Barbara | 104.7 | 118.5 | 543 | 494 | -49 | 26.2 | Yes | 0 | 376 | 2018 |
| Santa Clara | 91.7 | 95.8 | 0 | 0 | 0 | 23.9 | No | | 0 | |
| Santa Cruz | 76.0 | 70.0 | 27 | 37 | 10 | 48.1 | No | | 0 | |
| Shasta | 61.4 | 58.5 | 246 | 397 | 151 | 41.8 | No | 0 | 0 | |
| Sierra | 35.7 | 21.4 | 0 | 5 | 5 | 0.0 | No | 0 | 0 | |
| Siskiyou | 86.5 | 91.3 | 59 | 72 | 13 | 37.5 | No | 0 | 150 | TBD |
| Solano | 70.2 | 82.9 | 147 | 43 | -104 | 7.7 | No | 0 | 362 | 2014 |
| Sonoma | 69.7 | 74.6 | 45 | 69 | 24 | 52.9 | No | 0 | 0 | |
| Stanislaus | 74.3 | 93.7 | 499 | 525 | 26 | 83.9 | Yes | 0 | 456 | 2016 |
| Sutter | 54.0 | 68.5 | 0 | 0 | 0 | 1.7 | No | 0 | 42 | TBD |
| Tehama | 101.6 | 106.8 | 0 | 0 | 0 | 30.3 | No | 0 | 0 | |
| Trinity | 96.2 | 105.7 | 0 | 4 | 4 | 23.1 | No | 0 | 0 | |
| Tulare | 80.5 | 93.8 | 477 | 353 | -124 | 62.0 | Yes | 0 | 514 | TBD |
| Tuolumne | 81.2 | 84.6 | 48 | 6 | -42 | 61.8 | No | 0 | 0 | |
| Ventura | 79.9 | 89.4 | 47 | 80 | 33 | 27.3 | No | 0 | 0 | |
| Yolo | 92.6 | 113.3 | 0 | 8 | 8 | 42.5 | Yes | 2 | 0 | |
| Yuba | 85.9 | 98.4 | 0 | 0 | 0 | 25.9 | No | 240 | 0 | |
| **Statewide** | **94.9** | **102.4** | **10,368** | **13,942** | **3,574** | **22.8** | | **4,318** | **10,310** | |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey. Data on jail capacity and construction provided by BSCC.

## TABLE A3

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail incarceration rates using the first difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.182[b]<br>(0.087) | -0.231[a]<br>(0.067) | -0.008<br>(0.030) |
| ADP, sentenced | -0.207[a]<br>(0.062) | -0.281[a]<br>(0.069) | -0.033<br>(0.073) |
| Sentenced felons | -0.500[b]<br>(0.229) | -0.554[a]<br>(0.193) | 0.140<br>(0.678) |
| Sentenced misdemeanants | 0.042<br>(0.059) | -0.035<br>(0.085) | 0.208<br>(0.154) |
| ADP, unsentenced | 0.025<br>(0.049) | 0.050<br>(0.037) | 0.025<br>(0.043) |
| Unsentenced felons | 1.398<br>(1.365) | -0.385<br>(0.352) | -0.616<br>(0.830) |
| Unsentenced misdemenants | 0.122[c]<br>(0.073) | 0.089<br>(0.060) | 0.181<br>(0.123) |
| Pre-trial releases due to capacity constraints | -0.079[b]<br>(0.032) | -0.120[c]<br>(0.073) | -0.275<br>(0.177) |
| Sentenced releases due to capacity constraints | -0.167[b]<br>(0.076) | -0.166[b]<br>(0.076) | -0.349[b]<br>(0.157) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the pre-post realignment difference change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

TABLE A4

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail Incarceration rates using the difference-in-difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.260[a]<br>(0.079) | -0.367[a]<br>(0.105) | -0.094<br>(0.089) |
| ADP, sentenced | -0.060<br>(0.066) | -0.272[a]<br>(0.094) | 0.006<br>(0.046) |
| Sentenced felons | -0.050<br>(0.083) | -0.268[a]<br>(0.091) | 0.005<br>(0.065) |
| Sentenced misdemeanants | 0.016<br>(0.030) | 0.026<br>(0.026) | 0.039<br>(0.039) |
| ADP, unsentenced | -0.200[a]<br>(0.075) | -0.095[a]<br>(0.037) | -0.099<br>(0.099) |
| Unsentenced felons | -0.157[b]<br>(0.078) | -0.093[b]<br>(0.045) | -0.060<br>(0.103) |
| Unsentenced misdemenants | 0.022<br>(0.040) | 0.039<br>(0.038) | 0.047<br>(0.067) |
| Pre-trial releases due to capacity constraints | -0.081[b]<br>(0.039) | -0.131[b]<br>(0.065) | -0.205[c]<br>(0.115) |
| Sentenced releases due to capacity constraints | -0.135[b]<br>(0.066) | -0.245[a]<br>(0.063) | -0.246[b]<br>(0.109) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the pre-post realignment difference change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

TABLE A5

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail incarceration rates for counties without court imposed jail population limits using the first-difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.064<br>(0.149) | -0.193<br>(0.133) | -0.007<br>(0.145) |
| ADP, sentenced | -0.236[a]<br>(0.063) | -0.329[a]<br>(0.050) | -0.117<br>(0.077) |
| Sentenced felons | -0.919<br>(0.669) | -0.792[c]<br>(0.431) | 0.849<br>(1.122) |
| Sentenced misdemeanants | -0.268<br>(0.291) | -0.311<br>(0.360) | 0.082<br>(0.247) |
| ADP, unsentenced | 0.172<br>(0.162) | 0.136<br>(0.137) | 0.110<br>(0.149) |
| Unsentenced felons | -0.335<br>(0.557) | 0.112<br>(0.368) | 0.414<br>(0.383) |
| Unsentenced misdemenants | 0.013<br>(0.118) | 0.207<br>(0.198) | 0.509<br>(0.326) |
| Pre-trial releases due to capacity constraints | -0.101<br>(0.084) | -0.081<br>(0.060) | -0.207<br>(0.153) |
| Sentenced releases due to capacity constraints | -0.013<br>(0.017) | -0.027[b]<br>(0.013) | -0.017<br>(0.027) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the difference-in-difference characterization of the change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

TABLE A6

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail incarceration rates for counties with court-imposed jail population limits using the first-difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.184<br>(0.111) | -0.242[a]<br>(0.078) | 0.073<br>(0.103) |
| ADP, sentenced | -0.176[b]<br>(0.077) | -0.267[a]<br>(0.089) | 0.032<br>(0.127) |
| Sentenced felons | -0.428<br>(0.261) | -0.485[b]<br>(0.219) | -0.463<br>(0.593) |
| Sentenced misdemeanants | 0.070<br>(0.062) | 0.044<br>(0.046) | 0.040<br>(0.097) |
| ADP, unsentenced | -0.009<br>(0.058) | 0.025<br>(0.027) | 0.041<br>(0.077) |
| Unsentenced felons | 1.731<br>(1.702) | -0.464<br>(0.452) | -1.123<br>(1.184) |
| Unsentenced misdemenants | 0.117<br>(0.074) | 0.056<br>(0.054) | 0.099<br>(0.107) |
| Pre-trial releases due to capacity constraints | -0.077[c]<br>(0.039) | -0.132<br>(0.094) | -0.319<br>(0.269) |
| Sentenced releases due to capacity constraints | -0.210[b]<br>(0.094) | -0.206[b]<br>(0.095) | -0.482[b]<br>(0.200) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the difference-in-difference characterization of the change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

## TABLE A7

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail incarceration rates for counties without court-imposed jail population limits using the difference-in-difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.247[b]<br>(0.113) | -0.382[a]<br>(0.090) | -0.236<br>(0.164) |
| ADP, sentenced | -0.035<br>(0.072) | -0.270[a]<br>(0.064) | 0.055<br>(0.061) |
| Sentenced felons | -0.003<br>(0.095) | -0.211[a]<br>(0.070) | 0.141<br>(0.079) |
| Sentenced misdemeanants | 0.118<br>(0.078) | 0.081<br>(0.061) | 0.145<br>(0.106) |
| ADP, unsentenced | -0.212[c]<br>(0.125) | -0.112<br>(0.073) | -0.291<br>(0.185) |
| Unsentenced felons | -0.109<br>(0.177) | -0.129<br>(0.119) | -0.236<br>(0.283) |
| Unsentenced misdemenants | 0.191<br>(0.166) | 0.190<br>(0.151) | 0.354<br>(0.282) |
| Pre-trial releases due to capacity constraints | 0.116<br>(0.068) | -0.046<br>(0.092) | -0.101<br>(0.147) |
| Sentenced releases due to capacity constraints | 0.053<br>(0.058) | -0.061[b]<br>(0.029) | -0.098<br>(0.055) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the difference-in-difference characterization of the change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

## TABLE A8

**Estimated effects of the pre-post realignment change in county-level prison incarceration rates on the corresponding changes in county jail incarceration rates for counties with court-imposed jail population limits using the difference-in-difference characterization of the dependent variables**

| Model dependent variable | Bivariate regression results | Model inclusive of county fixed effects | Model inclusive of county and month fixed effects |
|---|---|---|---|
| Average daily population (ADP) | -0.201[b]<br>(0.092) | -0.363[a]<br>(0.134) | 0.111<br>(0.074) |
| ADP, sentenced | 0.021<br>(0.079) | -0.279[b]<br>(0.119) | 0.060<br>(0.125) |
| Sentenced felons | 0.034<br>(0.108) | -0.280[b]<br>(0.116) | 0.073<br>(0.132) |
| Sentenced misdemeanants | -0.019<br>(0.029) | 0.009<br>(0.027) | -0.009<br>(0.050) |
| ADP, unsentenced | -0.223[b]<br>(0.104) | -0.083[c]<br>(0.044) | 0.050<br>(0.104) |
| Unsentenced felons | -0.200[c]<br>(0.101) | -0.077<br>(0.050) | 0.070<br>(0.110) |
| Unsentenced misdemenants | -0.019<br>(0.015) | 0.009<br>(0.029) | -0.041<br>(0.053) |
| Pre-trial releases due to capacity constraints | -0.118[a]<br>(0.039) | -0.157[c]<br>(0.083) | -0.279<br>(0.209) |
| Sentenced releases due to capacity constraints | -0.146[c]<br>(0.076) | -0.278[a]<br>(0.073) | -0.181<br>(0.184) |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Figures in the table are regression coefficients from regressions of the difference-in-difference characterization of the change in the county's jail incarceration rate on the corresponding change in the county's prison incarceration rate. Standard errors are reported in parentheses and are calculated assuming an error variance-covariance matrix clustered at the county level.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

TABLE A9

Correlation matrix for county level variables used to model the residual change in county-level jail incarceration rates

| | Proportion split share | Jail pop-capacity ratio, June 2011 | Proportion supporting prop 36 | Jail inc. rate, June 2011 | Prison inc. rate, June 2011 | Violent crimes per 100,000, 2011 | Property crimes per 100,000, 2011 |
|---|---|---|---|---|---|---|---|
| Proportion split share | 1 | – | – | – | – | – | – |
| Jail pop-capacity ratio, June 2011 | -0.206 | 1 | – | – | – | – | – |
| Proportion supporting prop 36 | -0.158 | -0.021 | 1 | – | – | – | – |
| Jail inc. rate, June 2011 | 0.014 | -0.027 | -0.332 | 1 | – | – | – |
| Prison inc. rate, June 2011 | -0.291 | -0.024 | -0.419 | 0.066 | 1 | – | – |
| Violent crimes per 100,000, 2011 | -0.133 | -0.509 | 0.115 | 0.122 | 0.349 | 1 | – |
| Property crimes per 100,000, 2011 | 0.164 | -0.430 | -0.348 | 0.277 | 0.370 | 0.681 | 1 |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

Table A10

**Regression model estimates investigating the determinants of pre-post realignment jail incarceration growth beyond the realignment-induced population shock using county fixed-effect models from first-difference specification of the dependent variable**

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Proportion split share | 5.994<br>(6.950) | 6.262<br>(7.739) | 8.875<br>(8.045) | 7.619<br>(8.348) |
| Jail pop-capacity ratio, June 2011 | -12.445<br>(9.759) | -12.331<br>(9.951) | -20.265[c]<br>(11.860) | -22.794[c]<br>(12.078) |
| Proportion supporting prop 36 | -91.871[a]<br>(26.337) | -90.587[a]<br>(30.830) | -98.491[a]<br>(36.760) | - |
| Jail inc. rate, June 2011 | -0.181[a]<br>(0.033) | -0.181[a]<br>(0.033) | -0.167[a]<br>(0.034) | -0.168[a]<br>(0.035) |
| Prison inc. rate, June 2011 | – | 0.001<br>(0.014) | 0.009<br>(0.015) | 0.015<br>(0.015) |
| Violent crimes per 100,000, 2011 | – | – | 0.002<br>(0.021) | -0.002<br>(0.022) |
| Property crimes per 100,000, 2011 | – | – | -0.009<br>(0.007) | -0.007<br>(0.007) |
| Proportion supporting prop 34 | – | – | – | -57.957[b]<br>(26.355) |
| $R^2$ | 0.417 | 0.418 | 0.451 | 0.427 |
| N | 57 | 57 | 57 | 57 |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Standard errors are in parentheses. Each figure comes from a regression of the county-level change in jail incarceration rates net of the effect of the realignment inmate dose experienced by the county on the explanatory variables listed in the table. All models include a constant term. The dependent variable is estimated from the first-difference regression model inclusive of county fixed effects and the change in county-specific prison incarceration rates. The coefficient on the county fixed effects provide the county values for our dependent variables.

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

## TABLE A11

**Regression model estimates investigating the determinants of pre-post realignment jail incarceration growth beyond the realignment-induced population shock using county fixed-effect models from difference-in-difference specification of the dependent variable**

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Proportion split share | 3.785<br>(8.145) | 9.734<br>(8.853) | 10.123<br>(9.457) | 10.969<br>(9.592) |
| Jail pop-capacity ratio, June 2011 | -21.547[c]<br>(11.437) | -19.011[c]<br>(11.384) | -22.145<br>(13.949) | -22.163<br>(13.877) |
| Proportion supporting prop 36 | -30.948<br>(30.867) | -2.527<br>(35.267) | -1.066<br>(43.215) | – |
| Jail inc. rate, June 2011 | -0.209[a]<br>(0.038) | -0.202[a]<br>(0.038) | -0.198[a]<br>(0.040) | -0.191[a]<br>(0.041) |
| Prison inc. rate, June 2011 | – | 0.025<br>(0.016) | 0.028<br>(0.018) | 0.032<br>(0.017) |
| Violent crimes per 100,000, 2011 | – | – | -0.004<br>(0.025) | -0.009<br>(0.025) |
| Property crimes per 100,000, 2011 | – | – | -0.002<br>(0.008) | -0.000<br>(0.007) |
| Proportion supporting prop 34 | – | – | – | 12.032<br>(30.281) |
| $R^2$ | 0.397 | 0.426 | 0.428 | 0.429 |
| N | 57 | 57 | 57 | 57 |

SOURCE: Authors' calculations based on county level prison admissions and release data provided to the authors by CDCR and the BSCC Jail Profile Survey.

NOTES: Standard errors are in parentheses. Each figure comes from a regression of the county-level change in jail incarceration rates net of the effect of the realignment inmate dose experienced by the county on the explanatory variables listed in the table. All models include a constant term. The dependent variable is estimated from the difference-in-difference regression model inclusive of county fixed effects and the change in county-specific prison incarceration rates. The coefficient on the county fixed effects provide the county values for our dependent variables

[a] Coefficient statistically significant at the one percent level of confidence.

[b] Coefficient statistically significant at the five percent level of confidence.

[c] Coefficient statistically significant at the ten percent level of confidence.

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