What Happens When Women Serve Less Time in Prison?

Projected Changes in Arrests, Prison Population, and Costs

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The size of the prison population is shaped by two factors: how many people enter prison and how long they remain there. While policy debates tend to focus on admissions, time served behind bars is an equally important driver of incarceration levels and correctional spending. As lawmakers examine options for improving public safety and reducing the fiscal and social costs of incarceration, time served is one potential policy lever.

For policymakers seeking to appropriately balance crime control, fairness, public expenditures, and other concerns, the central question is how reducing time served would affect public safety. How many additional arrests might occur if people left prison earlier? What types of offenses would those arrests involve? How large would these changes be relative to overall arrest activity? And how would reducing time served affect the size of the prison population and the costs associated with it?

For women, these questions raise additional considerations because their incarceration can disrupt caregiving, housing stability, family relationships, and reentry planning in ways that extend beyond the individual and across generations.

This report examines the impacts of reducing time served by analyzing data about women released from prison in Illinois and North Carolina. The analysis models how outcomes could vary depending on how reductions in women's time served are structured. Some scenarios apply reductions to all women in the cohorts, while others focus on groups with smaller model-estimated arrest increases. This design allows the analysis to assess both the scale of

projected changes and how those changes are distributed across the population.

Key Takeaways

- **Reducing the time women serve in prison is associated with modest increases in arrests under the modeled scenarios.** A 50% reduction in time served is estimated to increase annual arrests by 105 in Illinois and 96 in North Carolina, representing a 7% and 9% increase, respectively, above modeled baseline arrest levels.
- **Estimated additional arrests represent a very small share of statewide arrest activity.** In a scenario applying a 50% reduction in time served to all women, additional arrests would account for about 0.3% of annual female arrests in Illinois and 0.2% in North Carolina.
- **Most estimated additional arrests would be for nonviolent crimes.** About 9 in 10 of the additional arrests would likely be for property offenses, drug offenses, and supervision violations; 1 in 10 would be for violent offenses.
- **Estimated additional arrests are concentrated among a relatively small group.** About two-thirds are associated with the quarter of women for whom the model estimates the largest increase in arrests.
- **Reducing time served for all women by 50% would cut the average daily population (ADP) associated with those in the release cohort by about 40-50%.** That represents a drop of roughly 950 women in each state, compared with baseline ADP of about 1,800 women in Illinois and 2,400 in North Carolina.
- **Reducing time served would substantially cut prison costs under the modeled scenarios.** Under a 50% reduction in time served for all women, estimated net annual cost savings range from $61.8 million to $94.1 million in Illinois and $68.3 million to $102.7 million in North Carolina, after accounting for expenses that would shift to community supervision and additional arrest- and victimization-related costs.

A Two-Part Analysis of Women's Justice System Involvement

This report is one of two briefs examining women's involvement in the justice system and how policy choices influence public safety, family stability, and costs.

This analysis examines the public safety, prison population, and cost implications of reducing the amount of time women serve in prison. Using new modeling, it estimates changes in arrests, victimization costs, and prison populations under different time-served reduction scenarios. An accompanying brief examines the costs of women's justice system involvement. It estimates that women's prison incarceration costs 25% to 75% more per person than standard prison cost estimates and projects that total correctional costs for women will rise by billions of dollars over the next decade.

Why Focus on Reducing Women's Time Served?

The Council on Criminal Justice previously examined the public safety implications of shortening lengthy prison terms through its Task Force on Long Sentences. That analysis found that reducing long prison stays in Illinois was associated with relatively few additional arrests and substantial reductions in the average daily population (ADP). It raised a related question for the Women's Justice Commission: Would similar patterns emerge for women?

That question matters because women's pathways into prison, experiences during incarceration, and reentry needs often differ from men's. Many women enter prison with histories of trauma and domestic abuse, and disproportionately experience mental health and substance use disorders, economic instability, and caregiving responsibilities. Because women are often embedded in family and caregiving networks, incarceration can disrupt housing stability, caregiving arrangements, family relationships, and children's well-being in ways that extend beyond the individual. Women's incarceration can also carry different costs for prison systems: A separate CCJ analysis estimates that incarcerating women in prison costs 25% to 75% more than standard per-person prison cost estimates. These higher costs are driven by multiple factors, from smaller facilities and reduced economies of scale to mixed custody levels and related staffing inefficiencies as well as women's higher average health and behavioral health needs.

This report examines how reducing time served for women would affect three outcomes: the number of arrests among women after release, ADP, and costs. The analysis estimates how those outcomes change if women leave prison sooner, including whether earlier release is associated with additional arrests, how shorter stays affect ADP, and whether reduced prison costs exceed the added costs associated with additional arrests and victimization.

Illinois and North Carolina were selected for study because they offer useful contrasts in geography and policy context while also sharing key features for this analysis. Neither state

has discretionary parole release, but both use post-release supervision. Both also have sizable women's prison populations as well as publicly available, individual-level correctional data on prison releases. Those release records were linked to individual-level criminal history records to support the simulation analysis.

Methodology and Approach

This analysis uses release cohorts of roughly 12,000 women who exited prison in Illinois and North Carolina between 2018 and 2021. Individual-level correctional records were linked to criminal history records to examine arrest patterns before incarceration and after release.

These data were used to create simulation models that project how arrest patterns would change under reductions in time served ranging from 10% to 50%. The models draw on observed pre- and post-incarceration arrest trajectories to estimate how arrest patterns might have shifted if releases had occurred earlier. This approach captures the incapacitation effect of prison time, as well as post-release patterns of offending. The simulations also allow incarceration to be associated with decreases, increases, or no change in post-release arrests across individuals, capturing deterrent, criminogenic, and neutral effects rather than assuming a single incarceration effect.

In addition to estimating changes in arrests, the models generate projections of changes in ADP and associated costs. Cost estimates include correctional cost savings from lower ADP, offset by estimated community supervision costs for women released earlier, as well as added costs associated with additional arrests and victimization. The analysis does not monetize broader family or community effects. Arrests are categorized by offense type—violent, property, drug, and other—to approximate variation in costs across crimes, recognizing that more serious offenses are associated with higher costs and that all arrests carry some system cost.

To illustrate the largest potential effects and make patterns most visible, the findings below focus primarily on a 50% reduction in time served. Results from smaller reductions are consistent with the pattern described here and are presented in the supplemental methodology report.

Who Is Included in the Analysis

Before turning to the findings, it is useful to understand who is included in the analysis and the baseline levels used to interpret the simulations. The analysis includes:

- Four annual release cohorts: all women released from prison in Illinois and North Carolina in 2018, 2019, 2020, and 2021.
- About 12,000 women: 6,419 women released from Illinois prisons and 5,552 women released from North Carolina prisons.
- Average time served of roughly 16 months: about 14 months (1.18 years) in Illinois and 17 months (1.42 years) in North Carolina.
- Baseline ADP of about 2,000 women in each state from 2018 to 2021: 1,847 women in Illinois and 2,395 in North Carolina.
- Modeled baseline arrests of about 3,400 to 4,600 arrests in the three years after release: before applying any time-served reduction, the model estimates 4,566 arrests in Illinois and 3,379 in North Carolina. This translates to about 1,100 to 1,500 arrests per year.

The analysis also examines how outcomes vary depending on how reductions are structured. Some scenarios apply reductions to all women in the cohorts, while others focus on groups with smaller model-estimated arrest increases. This design allows the report to assess not only the scale of projected changes, but also how those changes are distributed across the population.

Findings

Reducing Time Served Is Associated With Modest Increases in Arrests

Under a 50% reduction in time served applied to all women, the model estimates roughly 100 additional arrests per year in each state during the three-year follow-up period, or about a 7% to 9% increase above modeled baseline arrest levels.

Figure 1 shows the estimated number of additional arrests associated with reducing time served. These values are annualized estimates based on the three-year follow-up period, not

observed counts in a single calendar year.

Under the 50% reduction scenario, the model estimates approximately 105 additional arrests per year in Illinois and 96 in North Carolina. These arrests are increases above modeled baseline levels before applying any time-served reduction; they are not total post-release arrests among women in the release cohorts.

Results follow the same pattern in models using smaller reductions in time served. Reductions of 10%, 20%, and 30% produce smaller estimated increases in arrests. See the supplemental methodology report for all models.

Figure 1. Estimated Additional Annual Arrests from Reducing Time Served for Women

Additional Arrests Represent a Very Small Share of Total Female Arrests

Under a 50% reduction in time served applied to all women, estimated additional arrests represent about 0.3% of annual female arrests in Illinois and 0.2% in North Carolina.

While the number of additional arrests increases as time served is reduced, these changes represent a very small share of women's overall arrest activity (Figure 2). Put differently, the largest modeled reduction produces an increase equal to between one-fifth and one-third of one percent of annual arrests of women in each state.

The female-arrest comparison is the most relevant benchmark because the analysis focuses on women released from prison. When placed in the broader context of all arrests statewide, the estimated increase is smaller still: less than one-tenth of one percent in both states, or about 0.08% of all arrests in Illinois and 0.04% in North Carolina (not visualized).

Figure 2. Estimated Additional Arrests Compared With Annual Female Arrests

Most Additional Arrests Would Not Be for Violent Offenses

Under a 50% reduction in time served applied to all women, about 9 in 10 estimated additional arrests would likely be for nonviolent offenses, while 1 in 10 would be for violent offenses.

Offense type is central to assessing the public safety implications of earlier release. To estimate offense mix, the analysis applies observed post-release arrest patterns to the additional arrests projected under each scenario.

The vast majority of additional arrests would be for nonviolent crimes, including property, drug, supervision-related, and other offenses (Figure 3). Patterns are similar in Illinois and North Carolina, although the distribution across nonviolent categories varies. Those differences likely reflect a combination of behavior, enforcement, charging, and supervision practices.

Figure 3. Estimated Additional Arrests Under a 50% Reduction in Time Served, by Offense Category

Additional Arrests Are Concentrated Among a Small Share of Women

Under a 50% reduction in time served applied to all women, about two-thirds of estimated additional arrests are concentrated among the quarter of women for whom the model estimates the largest increase in arrests.

The effects of reducing time served are not evenly distributed across the population. Figure 4 shows how additional arrests are distributed when women are grouped by model-estimated arrest increases, meaning the estimated change in arrests under the simulated reduction in time served.

The groups are shown as cumulative shares of the population. The lowest 25% includes the quarter of women with the smallest estimated increase in arrests; the lowest 50% and lowest 75% add progressively larger shares of the population. The figure also shows the highest

25%, meaning the quarter of women with the largest model-estimated arrest increases, and the full population.

These groupings are based on simulation results, not formal risk categories or individual release recommendations. They do not account for the full set of factors that would inform individual release decisions, such as offense severity, institutional behavior, behavioral health needs, caregiving responsibilities, or reentry needs.

The additional arrests are concentrated among women for whom the model estimates the largest arrest increases. Reducing time served by 50% for women in the lowest 25% is projected to result in two to three additional arrests per year in each state. By contrast, applying the same reduction to women in the highest 25% is projected to result in about 60 additional arrests per year in each state.

This concentration helps explain why policy design matters. Broader reductions include women across the full distribution of model-estimated arrest increases, producing larger reductions in ADP and costs but also more additional arrests. More targeted reductions produce smaller estimated increases in arrests, but also smaller reductions in ADP and costs. Translating this finding into policy would require states to identify appropriate eligibility criteria using information available before release.

Figure 4. Estimated Additional Arrests Under a 50% Reduction in Time Served, by Model-Estimated Arrest Increase Group

Reducing Time Served Lowers ADP

Under a 50% reduction in time served applied to all women, ADP is projected to decline by 40-50% in the analyzed cohorts, or by about 950 women in each state.

Reducing time served lowers ADP because women spend fewer days in prison. These estimates do not mean that a specific number of women are released at one time or removed from the system; they mean that, across the release cohort, shorter prison stays result in lower ADP.

Figure 5 shows how this population change varies depending on how broadly the reduction is applied. The figure uses cumulative groups—the lowest 25%, lowest 50%, lowest 75%, and all

women—to compare more targeted reductions with reductions applied to the full cohort. As in the prior section, the groups are based on model-estimated arrest increases under the simulated reduction in time served.

Reducing time served for all women produces the largest decrease in the prison population. Under a 50% reduction, ADP is estimated to fall by roughly 950 women in each state. For context, the estimated ADP associated with the observed cohorts was roughly 1,800 women in Illinois and 2,400 women in North Carolina. Against that baseline, the 50% reduction scenario applied to all women represents a reduction of 51% in Illinois and 41% in North Carolina.

More targeted approaches produce smaller prison population reductions because they apply to fewer people. For example, applying reductions to the lowest 75% of women based on model-estimated arrest increases is estimated to reduce ADP by 360 to 370 women in each state.

The comparison illustrates a core analytic tradeoff: Broader reductions in time served produce larger drops in ADP, while more targeted approaches produce smaller increases in arrests.

Figure 5. Estimated Reductions in ADP Under a 50% Reduction in Time Served, by Model-Estimated Arrest Increase Group

Reducing Time Served Lowers Overall Costs

Under a 50% reduction in time served applied to all women, estimated annual cost savings range from $61.8 million to $94.1 million in Illinois and $68.3 million to $102.7 million in North Carolina, after accounting for community supervision costs and added costs from additional arrests and victimization.

The estimates for this piece of the analysis are shown as ranges because the annual cost of incarcerating women varies across systems. To estimate correctional cost reductions, the analysis draws on a prior Council on Criminal Justice cost analysis of women's criminal justice system involvement. That report estimates the annual cost of incarcerating women at roughly $87,000 to $122,000 per woman, reflecting variation in state cost structures, facility operations, staffing, healthcare, service needs, and other cost drivers.

This analysis also accounts for the cost of community supervision. Because women released earlier are assumed to be supervised in the community, the analysis does not count the full prison cost as a reduction. Instead, estimated community supervision costs of about $10,600 per woman per year are subtracted from the incarceration cost estimate. This produces an estimated correctional cost reduction of roughly $77,000 to $112,000 per woman per year for each one-person reduction in ADP.

The analysis then subtracts the estimated costs associated with estimated additional arrests. These include law enforcement response and arrest-related costs, the expense of court processing and supervision, and costs associated with crime, including those borne by victims. In other words, the estimates do not assume that reducing time served only lowers costs; they account for both reduced correctional costs and added costs from additional arrests and victimization.

Figure 6 presents estimated annual cost savings under a 50% reduction in time served, after accounting for community supervision costs and added costs from projected arrests and victimization. Across all modeled groups, the estimated reductions exceed the added costs. In the most targeted scenario—the quarter of women with the smallest model-estimated arrest increases—estimated annual cost reductions range from $2.5 million to $3.7 million in Illinois and $3.1 million to $4.7 million in North Carolina. When the reduction is applied to all women, estimated annual cost reductions rise to $61.8 million to $94.1 million in Illinois and $68.3 million to $102.7 million in North Carolina. As with the ADP estimates, broader approaches produce larger cost reductions, while more targeted approaches produce smaller cost reductions and smaller increases in arrests.

Interpreting the Cost Estimates

These estimates should be interpreted as modeled annual cost changes, not immediate budget savings. Correctional costs are not strictly linear in practice; many are fixed or change only when population reductions reach certain thresholds, such as the closing of a housing unit, reduction of staffing posts, or shuttering of a facility. As a result, projected cost reductions reflect average per-woman estimates rather than guaranteed decreases in agency budgets.

Additional detail on the cost assumptions, community supervision offset, arrest and victimization cost calculations, and lower- and upper-bound estimates is provided in the supplemental methodology report.

Figure 6. Estimated Annual Cost Reductions Under a 50% Reduction in Time Served, by Model-Estimated Arrest Increase Group

Benefit-Cost Ratios Show Larger Cost Reductions Than Added Costs

Under a 50% reduction in time served applied to all women, estimated correctional cost savings from a lower average prison population are about 8 to 11 times larger than added arrest- and victimization-related costs in Illinois and 11 to 15 times larger in North Carolina.

Benefit-cost ratios compare two parts of the cost analysis: the estimated cost reductions from lower ADP, after accounting for community supervision costs, and the added costs associated with additional arrests and victimization. A ratio of 8 to 1 means that estimated cost reductions are eight times larger than estimated added costs.

Figure 7 presents benefit-cost ratios under a 50% reduction in time served. Ratios are shown as lower and upper bounds because cost reductions are estimated using a range of per-person incarceration costs for women.

The ratios are generally higher for more targeted scenarios and lower as reductions are applied to larger shares of the cohort. This pattern occurs because additional arrests are not evenly distributed across the population. Groups with the smallest model-estimated arrest increases have relatively few additional arrests, so added arrest- and victimization-related costs are small relative to the estimated cost savings from lower ADP. As reductions include more women with larger model-estimated arrest increases, added costs rise and the benefit-cost ratio declines.

Figure 7. Estimated Benefit-Cost Ratios Under a 50% Reduction in Time Served, by Model-Estimated Arrest Increase Group

What the Findings Mean for Policy Design

This analysis suggests that reducing time served for women can produce large reductions in ADP and overall costs while generating relatively modest increases in arrests compared with

modeled baseline arrest levels and statewide arrest activity. Under the largest modeled scenario—a 50% reduction in time served applied to all women—estimated additional arrests represent a small increase above modeled baseline arrest levels and a very small share of statewide arrest activity, and are projected to be mostly for nonviolent offenses.

The concentration of projected arrests is one of the clearest policy design findings in the analysis. The added arrests are not spread evenly across women in the release cohorts; they are clustered among a relatively small group. That finding suggests potential value in targeting reductions in time served, but it also highlights the central implementation challenge: whether systems can identify, in advance and using information available before release, who is likely to have larger arrest increases if released earlier. The groupings used in this analysis are based on simulation results, not observed arrest counts, formal risk classifications, or individual release recommendations. They do not assign risk levels or identify which women should be released earlier.

While more targeted approaches produce smaller estimated increases in arrests, they also yield smaller reductions in ADP and costs. Broader approaches produce larger drops in ADP and larger net cost savings, even after accounting for community supervision costs and added arrest- and victimization-related costs. When the 50% reduction is applied to all women in the cohorts, correctional cost reductions are several times larger than added arrest- and victimization-related costs in both states. At the same time, broader approaches include women across the full distribution of estimated arrest increases, underscoring the tradeoff between maximizing ADP and cost reductions and limiting additional arrests.

The central takeaway is that reducing women's time served can lower the average daily prison population as well as costs while limiting increases in arrests, but the results depend on policy design. The analysis provides a framework for comparing approaches and weighing public safety, population, and cost considerations together rather than treating them as separate questions.

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