OPM - Criminal Justice Policy & Planning Division

Prison Population Projection

Highlights

- The correction population is projected to remain essentially flat—at approximately 9,000 people—from February 2021 to 2022.
- Accurately estimating the impact of a complex public-health response on the correction population exceeds the scope of this analysis. OPM CJPPD can reasonably forecast that as processes more broadly return to normal in 2021, the correction population will gradually tick up.
- Last year, the state's prison population contracted by 27%. For comparison, between 2008 and 2020 the correction population declined by an annual average of 3.8%. 2020's steeper decline was driven by disruptive forces created by the pandemic as admissions shrank and discretionary releases for suitable cases were prioritized.
- Last year's unanticipated contraction first appeared in March 2020, when the population shrank 5%. Initially, Monthly Indicator Reports focused on front-end processes: fewer arrests and prison admissions. Subsequent analysis highlighted back-end factors as discretionary releases rose as a proportion of all exits.
- By October, a new pattern emerged: a slower churn and a more stable month-over-month population count. The pandemic was no longer driving the prison population down as starkly as in the spring and summer months.
- OPM CJPPD expects this late-2020 to carry over into 2021 until the pandemic's effects are fully subdued.

Forecasting the size of the prison population

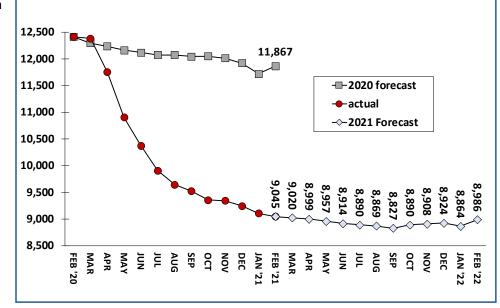
OPM began forecasting the DOC facility population in 2007, making 2021 the fifteenth edition of OPM's prison population forecast. Over the past decade and a half, OPM methodology has evolved from an Auto Regressive Integrated Moving Average (ARIMA) to the reliance on trend data, an input-output model of operational flows and qualitative assessments of the impact of proposed legislative and policy changes. In both cases, historical-performance data underpins the analysis. Under normal circumstances, every February OPM CJPPD has managed to predict within 5% of target the prison population 12 months out.

A global health pandemic suddenly disrupted the underlying trends in 2020, pushing the prison population far below OPM's February forecast. Last February a reduction of 4.4% was predicted. The prison population actually contracted by 27%.

Understandably, forecasting a target that's dependent on a pandemic is very difficult. Arriving at a reliable prediction in times of uncertainty include three main steps: find out where changes started happening, quantify a baseline for what should have happened without the disruption, and calculate the distance from baseline to reality.

OPM CJPPD projects the correction population will be the same size in February 2022 as at the start of the forecast period: approximately 9,000 people. The DOC population is projected to remain flat or grow slightly in the long term as it inches forward, returning to the overall trend seen before the disruption brought on by the pandemic.

Connecticut's prison population, actual and projected



Contextualizing the forecast

Between February 2008 and March 2020, Connecticut's correction population experienced a long, steady and remarkably linear decline, contracting an average of 3.8% annually. The chart below clearly shows the stability of this trend as only minor deviations are seen in 2013 and 2019.

The COVID-19 pandemic created a massive disruption to the consistent linear trend. As mentioned above, OPM quantified a baseline scenario to depict the long-range trend underlying the trajectory of the correction population before the deviation caused by the pandemic. The grey dotted line shows where a baseline scenario would project to in six years' time. Following the societal response to the pandemic, which included sheltering in place at first and then social distancing, the prison population dipped in one year to levels not expected until 2026. As the deviation was externally driven and not structural, the system will, as it has in the past, return to the prevailing historical trend, which is driven by consistent, steady and conservative reductions in crime, arrests and admissions to prison.

OPM CJPPD is less certain of the time frame for the system to regress to the overall trend. In late 2020, the system began showing signs of stabilization, with month-over-month changes consistent with past performance, (<1%), contrasted with monthly drops in excess of 5% early in the year. The trend observed in late 2020 should carry forward into 2021 but will likely change again as inputs to the system rebound. Logistical constraints of criminal justice system processes will likely slow the rate of growth, but OPM CJPPD anticipates month-over-month increases to the correction population, particularly to the sentenced group once the pandemic is effectively mitigated, in 2021. When that might happen is subject to societal factors far outside the scope of this report.

In any event, OPM CJPPD is confident the population will not experience a drastic upswing in the coming months, rather a gradual regression to the overall trend. System processes, which tend to favor equilibrium states, have firm upper boundaries that resist rapid growth.

Please submit questions and comments to Kyle Baudoin, Statistical Analysis Center Director: kyle.baudoin@ct.gov.

