



CRIMINAL JUSTICE POLICY & PLANNING DIVISION:

REVIEW OF RECENT RESEARCH

MARCH 31, 2022

2022 Correctional Population Projection
2022 Recidivism Analysis: 2018 Release Cohort

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Today's report includes two sections:

I. 2022 Recidivism Analysis: 2018 release cohort

II. 2022 Correctional Population Projection

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II. 2022 Correctional Population Projection

Revisiting the 2021 Correctional Population Projection

- Here we first review the year-end performance of OPM CJPPD's 2021 projection.
- **Assessing the performance of prior forecasts a key step** in OPM CJPPD's annual projection process.
- We also review long term correction trends and the COVID-19 pandemic's impacts on the population.

February 2021

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

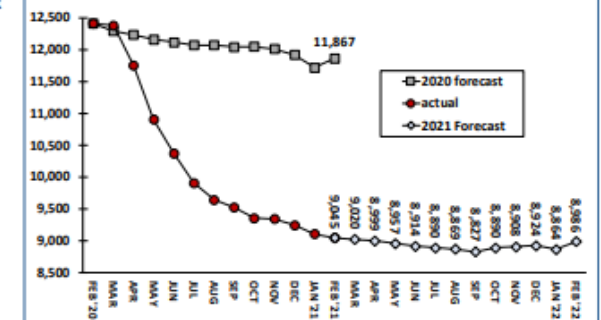
OPM began forecasting the DOC facility population in 2007, making 2021 the fifteenth edition of OPM's prison population forecast. Over the past decade and a half, OPM methodology has evolved from an Auto Regressive Integrated Moving Average (ARIMA) to the reliance on trend data, an input-output model 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%.

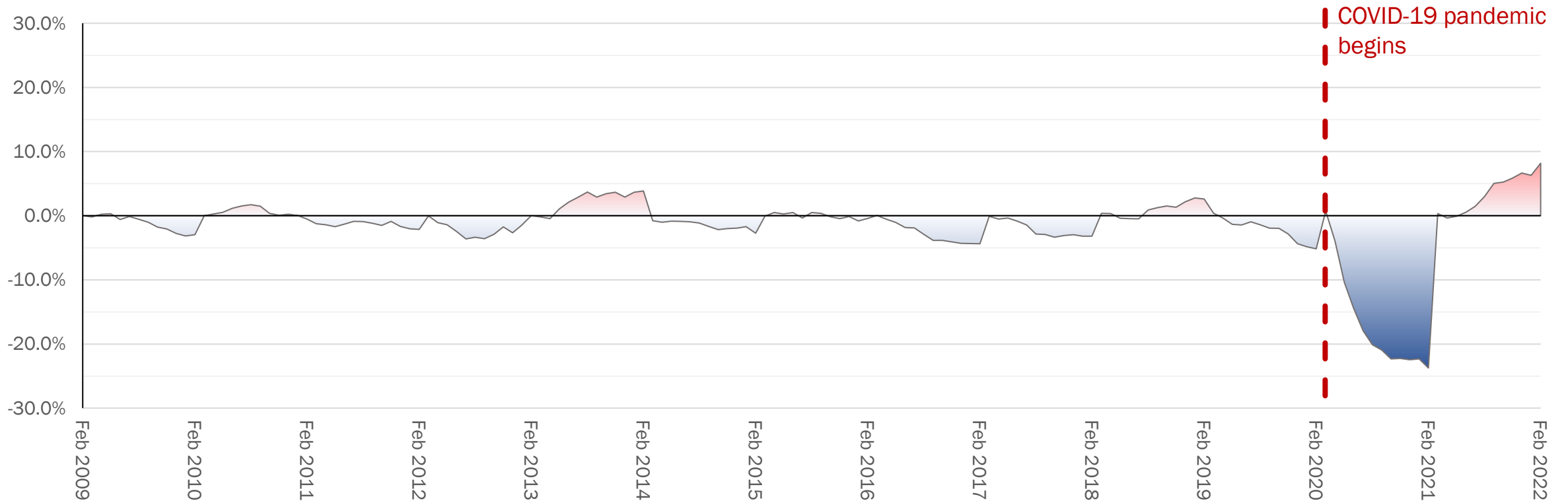
Understandably, forecasting a target that's dependent on a pandemic is very difficult. Arriving at a reliable prediction in times of uncertainty include three main steps: find out where changes started happening, quantify a baseline for what should have happened without the disruption, and calculate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



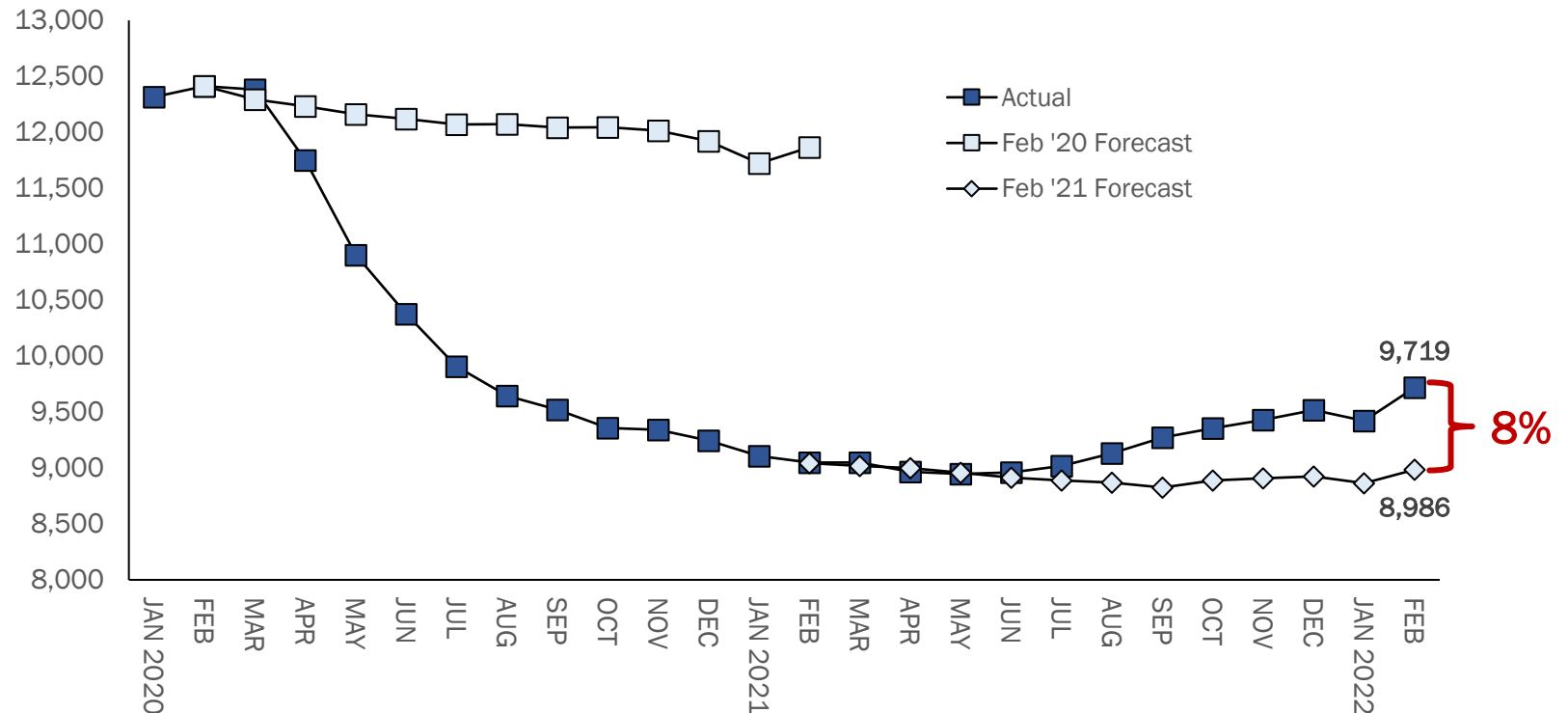
OPM's annual correctional population forecast has tracked the actual population within 5%



- Most years, the variances from OPM's forecasted population to the actual population range within 5% at the February end-of-reporting cycle.
- **Only twice** has the correction count varied from OPM's projections by more than 5% at the end of the reporting cycle: **2021** and this year, **2022**.

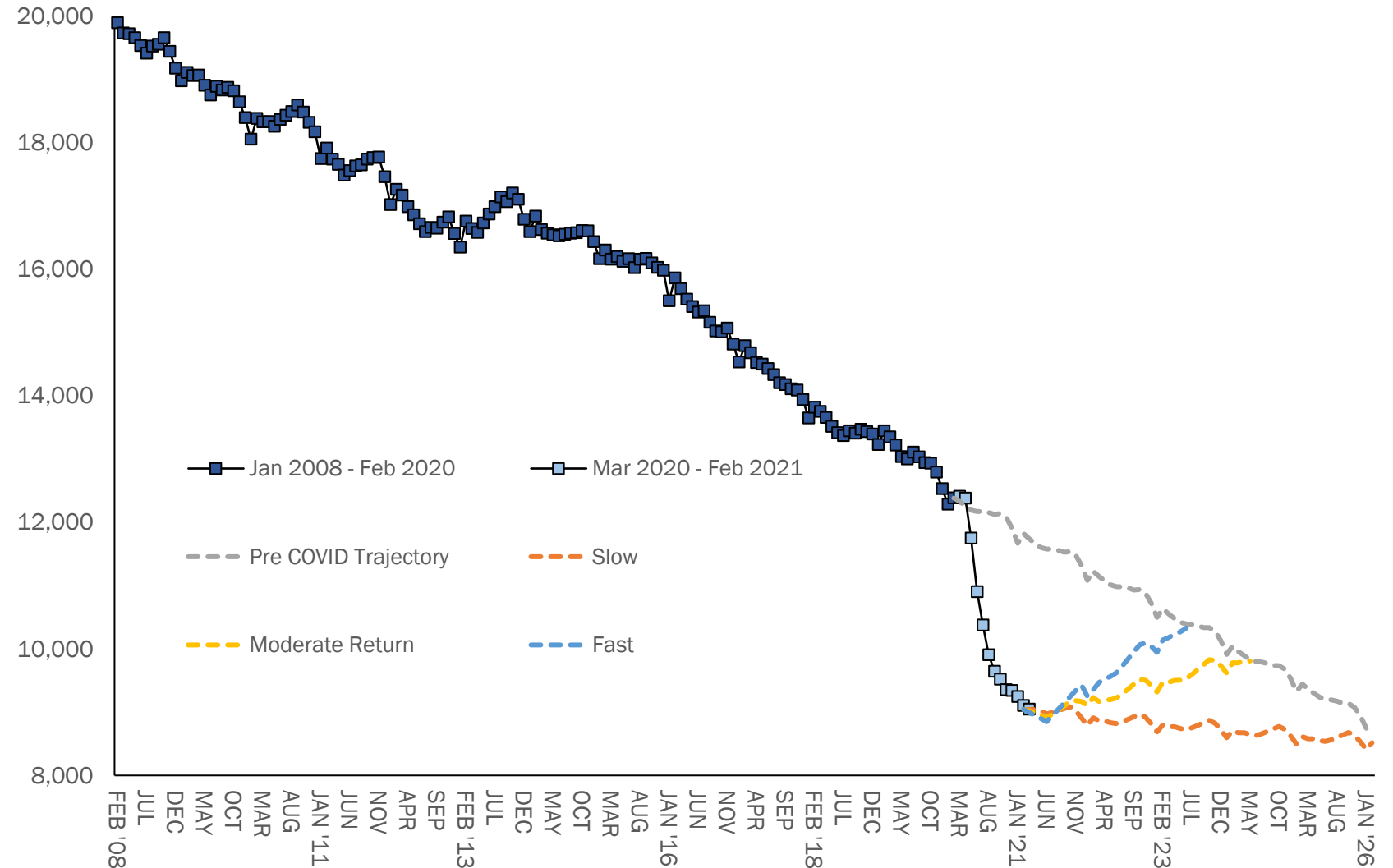
As of February 1, the correction facility population stood at 9,719, 8% higher than OPM's 2021 Annual Forecast estimate.

- As shown, the divergence of the correction facility population from our forecast began in June 2021
- Growth of the pretrial population held in DOC facilities drove the 2021 rise in the correction population
 - The *accused* population increased **31%** since February 2021
 - The sentenced population shrank by **3%** over this same period

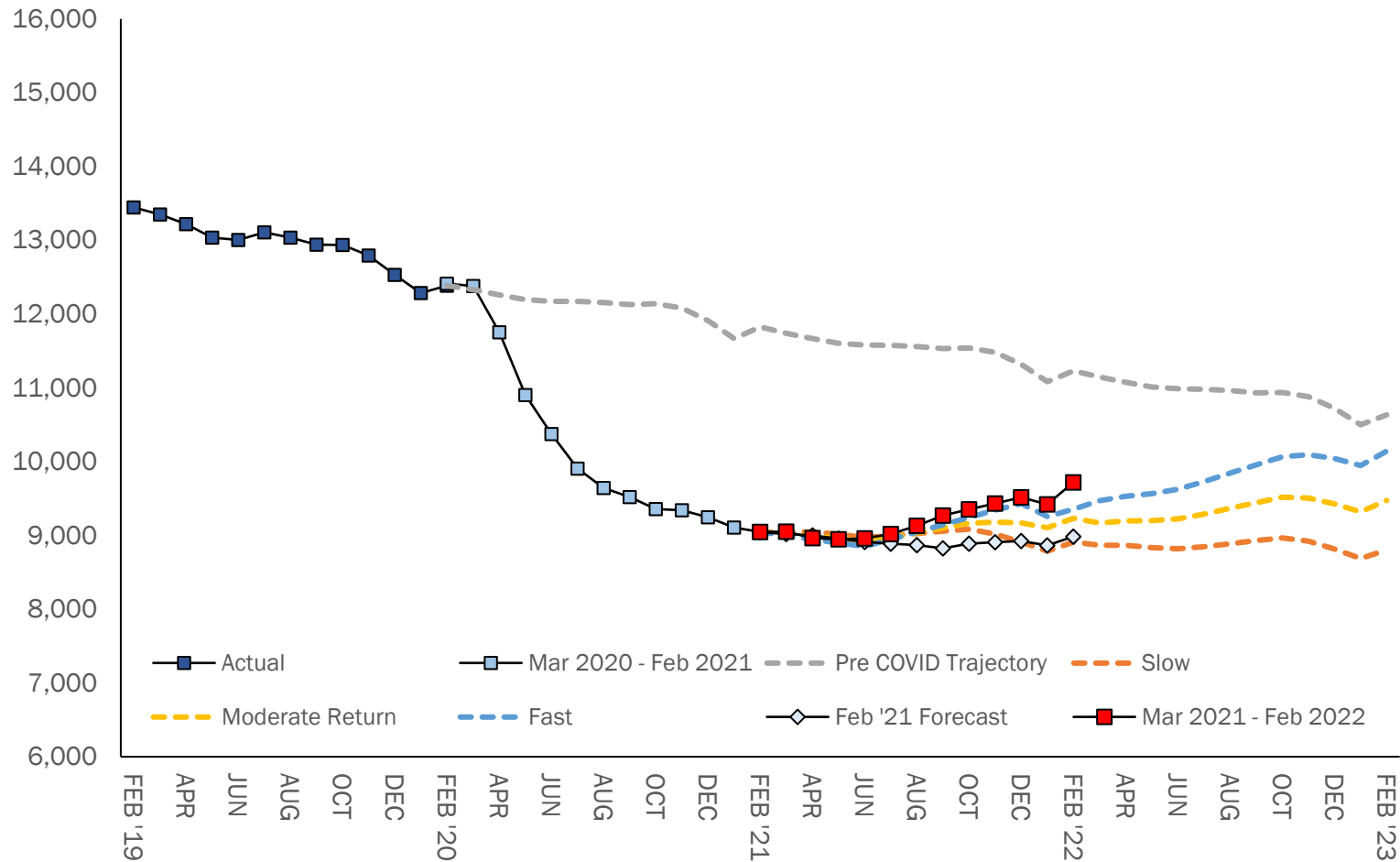


COVID-19 pandemic's disruption of long-term population trends

- The pandemic's onset drastically shifted correction population trends between March 2020 and February 2021.
- In developing our 2021 Annual Forecast, we had to anticipate how the correctional population might eventually return to the historic trend in years ahead.

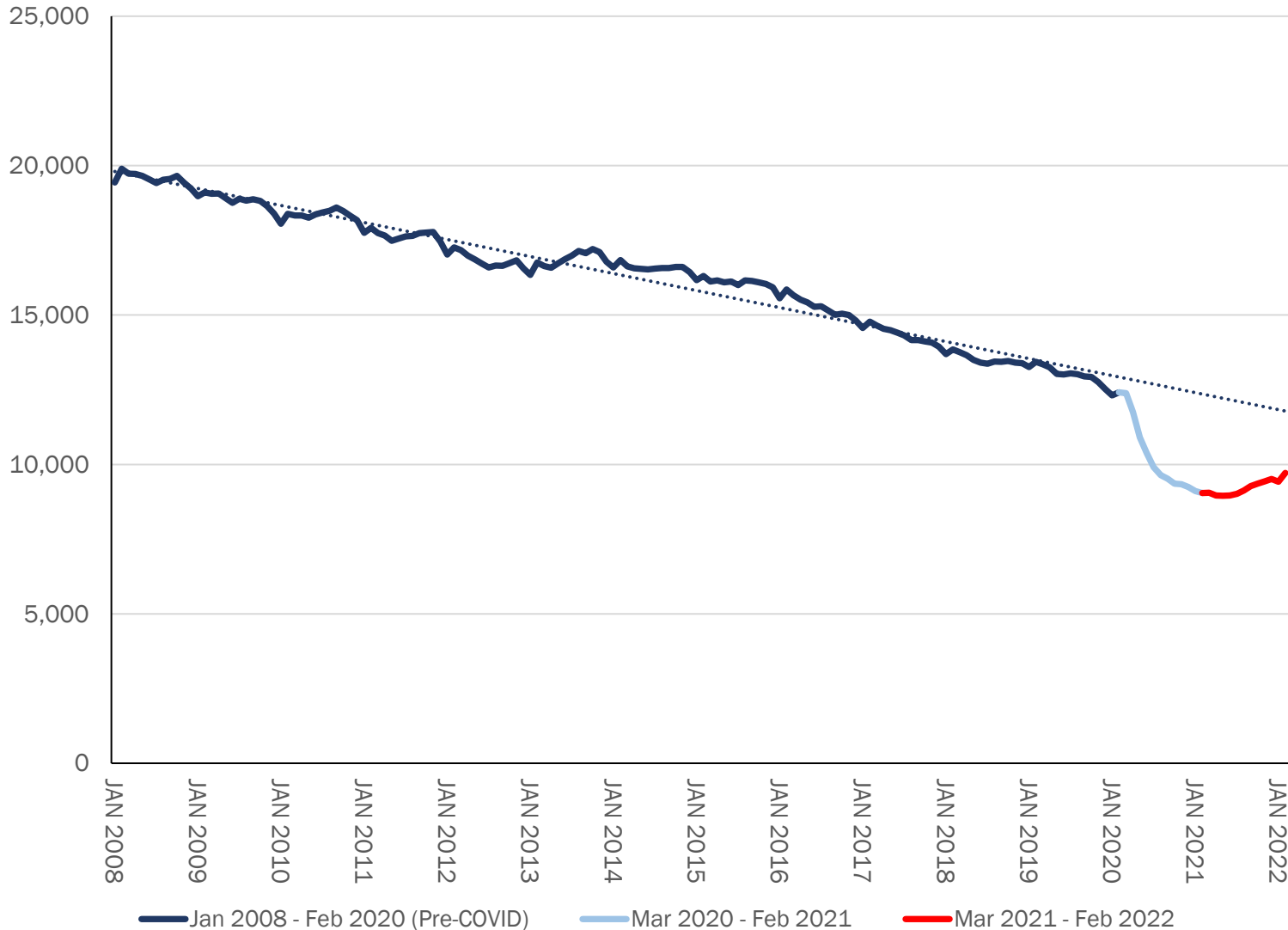


Comparing OPM's 2021 Annual Forecast approach against actual population changes



- OPM developed the 2021 Annual Forecast by opting for estimates between the slow and moderate return to trend lines.
- In actuality, the population changes between March 2021 and February 2022 exceeded our fast return trajectory.

Grappling with uncertainty to develop the 2022 Annual Forecast



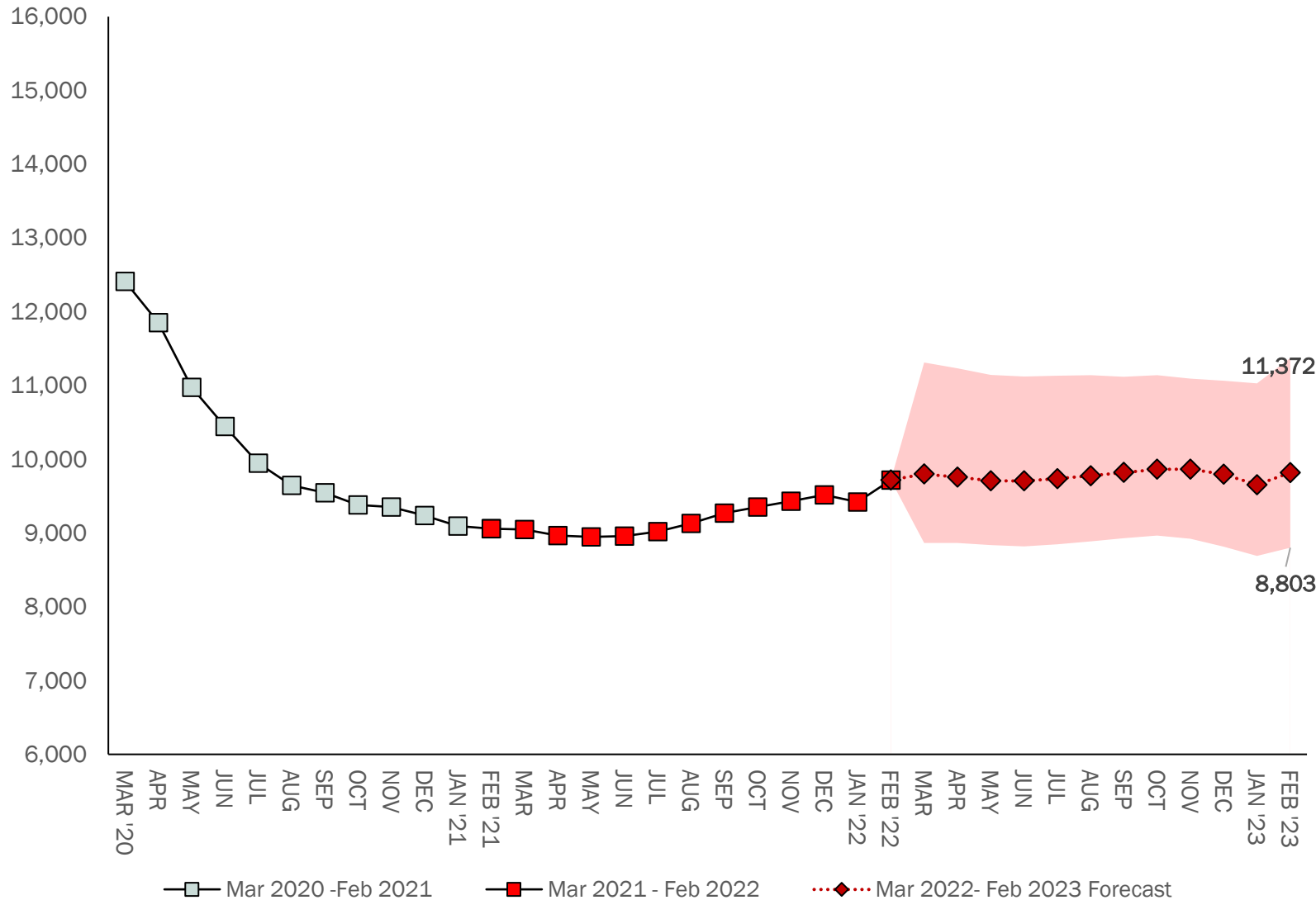
The historic trends underpinning OPM forecasts tell three distinct, different stories:

- A steady decline (February 2008 to February 2020)
- A steep drop before leveling out (March 2020 to February 2021)
- Modest growth (March 2021 to February 2022)

OPM's approach to developing the *2022 Annual Forecast*

1. Hold preliminary discussions with DOC staff to inform our expectations for 2022 and 2023
2. Build upon insights from *2021 Annual Forecast* development and performance
3. Employ multiple forecast methodologies
4. Assess range of forecast estimates
5. Develop composite forecast interpreting results across forecast methods

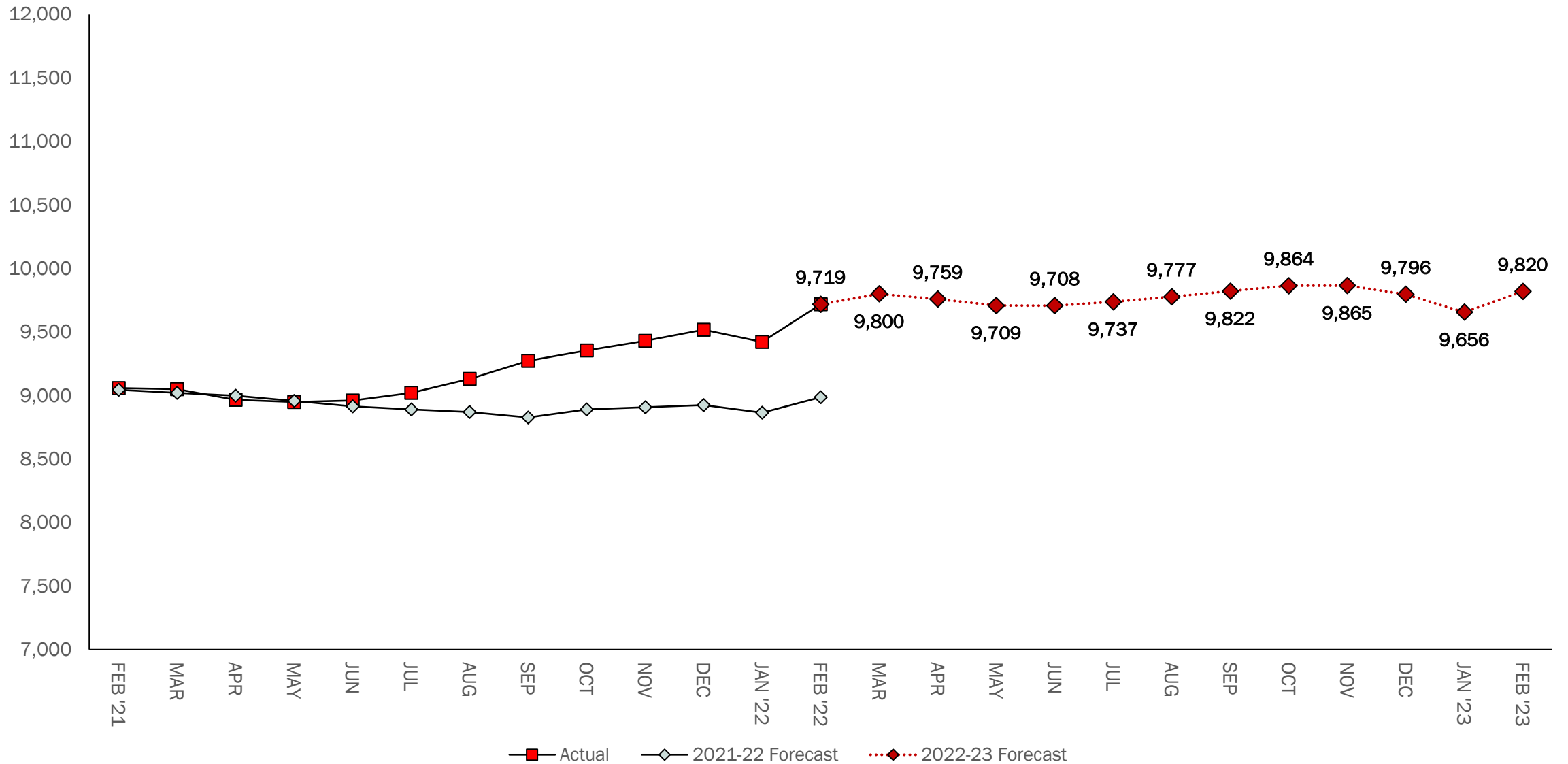
Resulting range of 2022-23 forecast estimates



- For 2022’s forecast, OPM CJPPD utilized 20 different forecasts representing a variety of methods, including:
 - Benchmark methods
 - OPM’s input-output methodology
 - ARIMA
 - ETS

- Included a mix of forecasts utilizing pre-COVID trends only and forecasts built with post-pandemic data

The 2022 Annual Forecast of the Correction Population





THANK YOU

For more information, please visit

[HTTPS://PORTAL.CT.GOV/OPM/CJ-ABOUT/HOMEPAGE/CJPPD](https://portal.ct.gov/opm/cj-about/homepage/cjppd)

OPM wishes to acknowledge the contributions of:

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Department of Correction