

Forecast Accuracy Brief: Youth Corrections Forecast 2021-23

Introduction

This brief assesses the accuracy of the October 2021 youth corrections forecast in predicting the July 1, 2023 close custody and residential bed populations. For the adult corrections forecast, the Office of Economic Analysis focuses on intra-biennial forecast errors for due to the frequent number of systemic policy changes (e.g., Measures 11 and 57, House Bills 3194 and 3078) that make longitudinal assessments problematic. To maintain a consistency across all its criminal justice forecasts, that methodology is used for the youth corrections forecast as well.

Background

For the April 2021 forecast cycle and beyond, the methodology for forecasting close custody beds was changed significantly. Prior forecasts attempted to project “demand” for beds, for which there are no actual data to assess forecast accuracy. The Juvenile Correction Population Forecast Advisory Committee chose to adopt the same model as has been used for the adult forecast for decades, projecting actual beds using a demographic-style flow algorithm. This will allow for accuracy assessments going forward. With enough historical observations available, it will also allow for the calculation of margins of error for the forecast.

Summary

Table 1 presents data on the July 1 population levels for both the beginning and the end of the 2021-23 biennium. In addition, it exhibits the July 1, 2023 forecast projected in October 2021 and the deviation therein. The close custody population was expected to rise modestly from 431 to 445 over the course of the biennium as the effects of the Covid-19 pandemic began to reverse course. In fact, admissions to close custody continued to weaken and the bed level decreased to 373, resulting in an error of 72 beds. Only the male discretionary bed allocation (DBA) cohort exhibited a positive error relative to the October 2021 forecast.

Note that the Department of Corrections (DOC)¹ populations for both males and females fell significantly over the course of the biennium while the Public Safety Reserve (PSR) cohorts rose. This is due to the impact of Senate Bill 1008 (2019), which altered the way youth are waived to adult court. Specifically, district attorneys’ offices must now apply for such a waiver rather than one automatically going into effect. The full impact of this legislation was not known at the time of the October 2021 forecast.

The residential bed forecast exhibits a similar growth profile to the close custody forecast. Given that the shift from DOC beds to PSR and DBA beds would make more youth eligible for residential stays, beds were expected to reverse course after a sustained period of decline. In fact, they fell modestly resulting in an error of 42 beds.

Overall, the Covid-19 pandemic has caused significant disruption in the criminal justice system. Forecasting amidst such turmoil is more likely to result in significant errors than other more tranquil time

¹ Department of Corrections youth are those tried as adults and sentenced to prison stays. However, given that their crimes were committed prior to their 18th birthday, they are remanded to the Oregon Youth Authority until release or their 25th birthday, whichever comes first.

periods. A few more biennial assessments are needed to truly understand the longitudinal performance of this methodology for the youth corrections forecast.

Table 1

Youth Corrections Forecast					
2021-23 Accuracy Assessment					
Close Custody					
		Population on 7/1/2023			
Males		Population 7/1/2021	October 2021 Forecast	Actual	Deviation
	DOC	123	83	44	-39
	PSR	46	88	64	-24
	DBA	215	217	226	9
	All Males	384	388	334	-54
Females					
	DOC	7	7	3	-4
	PSR	3	7	5	-2
	DBA	37	44	31	-13
	All Females	47	57	39	-18
Total Close Custody		431	445	373	-72
Residential					
		Population on 7/1/2023			
		Population 7/1/2021	October 2021 Forecast	Actual	Deviation
Males		208	220	193	-27
Females		26	36	21	-15
Total Residential		234	256	214	-42