Agenda

- Adult Forecast Specifics
- Brief methodology
- April 1, 2017 Forecasts
- Juvenile Forecast
- Brief methodology
- April 15, 2017 Forecasts
Forecast Specifics

- Produced by the Office of Economic Analysis.
- Published on April 1 and October 1 each year.
- Ten year forecast horizon, monthly basis
- Crucial input into the formulation of the Department of Corrections budget.
- Oversight provided by the Prison Forecast Advisory Committee.
Methodology . . .
Subpopulations

- Forecast is delineated by Gender and by Crime Type.
- Crime Types are Person, Property, and Statutory.
Forecast Calculation (flow model)

- $\text{Inmates}(t) = \text{Inmates}(t-1) + \text{Intakes}(t,t-1) - \text{Releases}(t,t-1)$
  - Where $t =$ future date being forecasted (e.g., October 1, 2014).
  - Forecast for date $t$ is the first day of the month.
  - Where $(t-1) =$ month prior to month being forecasted.
  - Where $(t,t-1)$ is the month between $t-1$ and $t$.
  - $t$ is between 1 and 120 months (ten–year forecast).
Forecast Components

- (1) Latest Inmate Census (March 1, 2017)
  - By Remaining Months of Sentence (0 to 120)
Release Profile of Current Inmates

March 1, 2017 Census
(2) Intake Forecast

- Function of various factors, including:
  - Projected population growth, Oregon population aged 18–39 (at risk).
  - Recent intake trends
  - Crime rates
  - Prosecutorial and Judicial discretion
Intakes, Recent History and Forecast

April 1, 2017 Forecast
(3) Release Profile of Future Intakes

- Based on the sentence lengths of recent, incoming inmates
- Timeframe is determined to reflect stable periods not unduly influenced by law changes and other factors.
- Single release profile, for each subpopulation, is used to “age out” future inmate intake cohorts.
Release Profile of Future Intakes

April 1, 2017 Forecast
April 1, 2017 Forecasts
Recent Forecast Tracking

Red line is the six month average (~63 beds)
Female Total Forecast

Women Forecast With HB 3194 Impacts

Number of Inmates

Actual
Latest
Previous
Male Total Inmate Forecast

Male Inmates with HB3194 Impacts

- Actual
- Latest
- Previous
All Inmates Forecast

All Inmates With HB 3194 Impacts

Number of Inmates

- Actual
- Latest
- Previous

Years: 2009 to 2024
Juvenile Bed Forecast

- Same timeframe (10-year) as adult forecast.
- Published April and October 15 each year.
- Four sub-populations
  - CC – Department of Corrections youth (M11)
  - CC – Public Safety Reserve (under 15 youth)
  - CC – Discretionary Bed Allocation
  - Residential Beds
- Latter two differ in that we are directed to forecast the demand (need) for these beds, not the budgeted capacity.
DOC Youth Forecast

Number of Youth


Historical Data  October 2016 Forecast  April 2017 Forecast
PSR Youth Forecast

Historical Data

October 2016 Forecast

April 2017 Forecast

Number of Youth

Year
Demand Methodology

- Based on snapshot of youth with an active disposition.
- Each “ideal” placement assignment based on success scores for community probation, residential bed, and close custody.
- Some discretion exercised for proximate scores.
DBA Forecast

![Graph showing historical data and forecasts for the number of youth, with projection lines for October 2016 and April 2017 forecasts.](image-url)
Total Close Custody Forecast

[Graph showing historical data, allocated beds by legislature, and forecasts.]
Residential Bed Forecast

- Residential Beds
- October 2016 Forecast
- March 2017 Forecast
- Funded Beds
Questions

- Contact
- Michael Kennedy (503) 378-5732
- Michael.kennedy@Oregon.gov