

Public Safety Council Oregon Prison Forecast

April 11th, 2017

Marion County Courthouse Square

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.

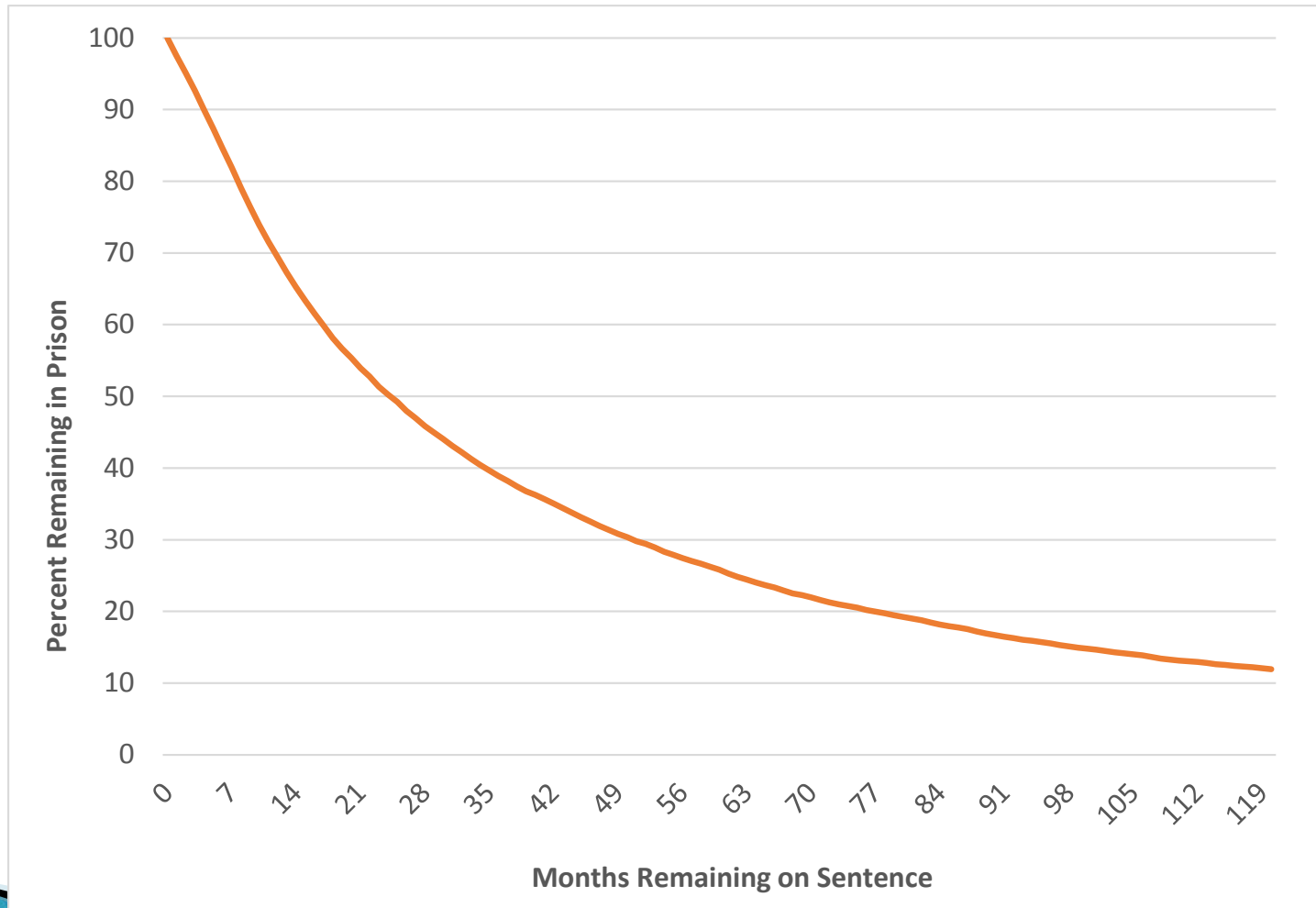
Forecast Calculation (flow model)

- ▶ $\text{Inmates}(t) = \text{Inmates}(t-1) + \text{Intakes}(t,t-1) - \text{Releases}(t,t-1)$
 - 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



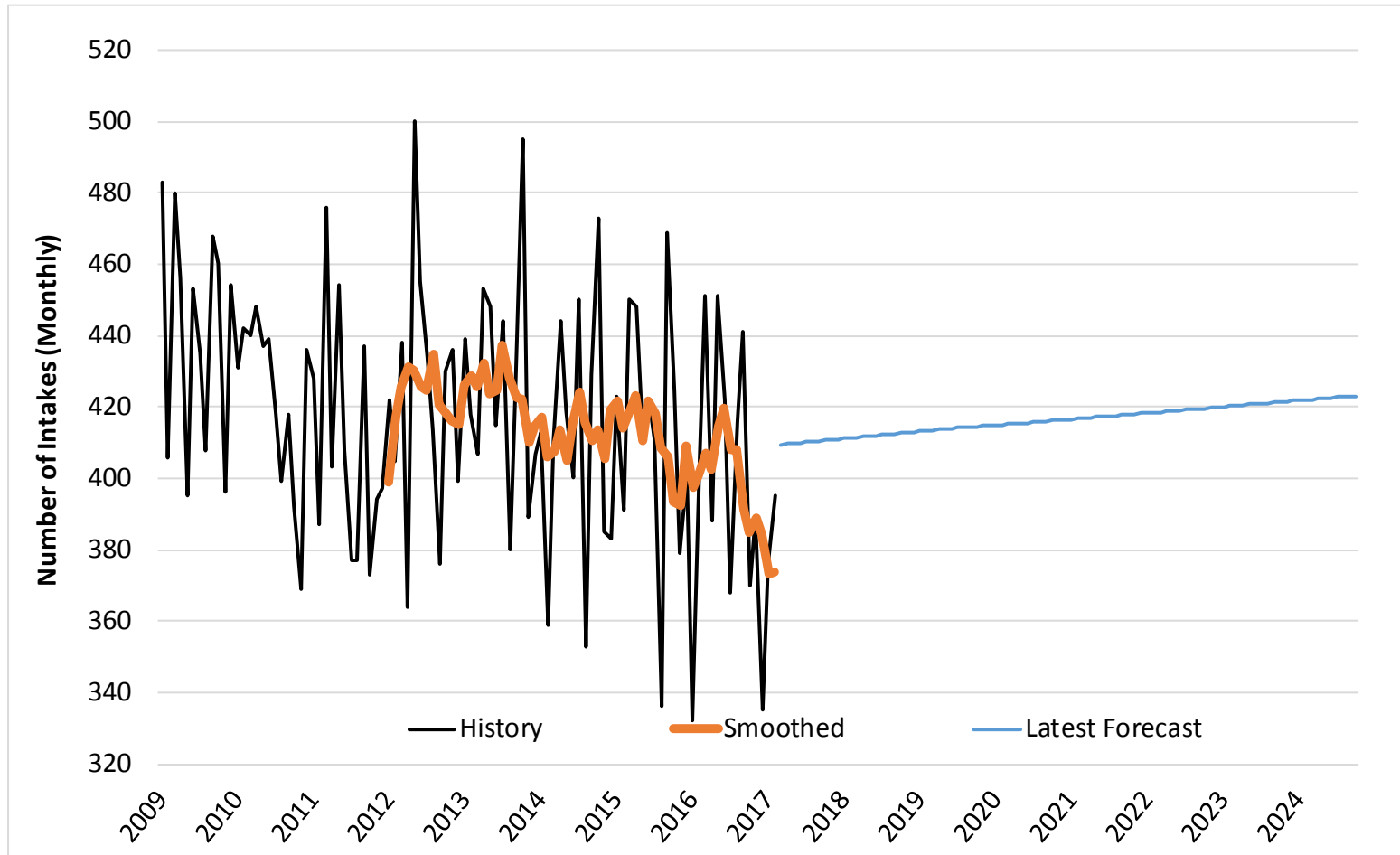
March 1, 2017 Census

Forecast Components

▶ (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

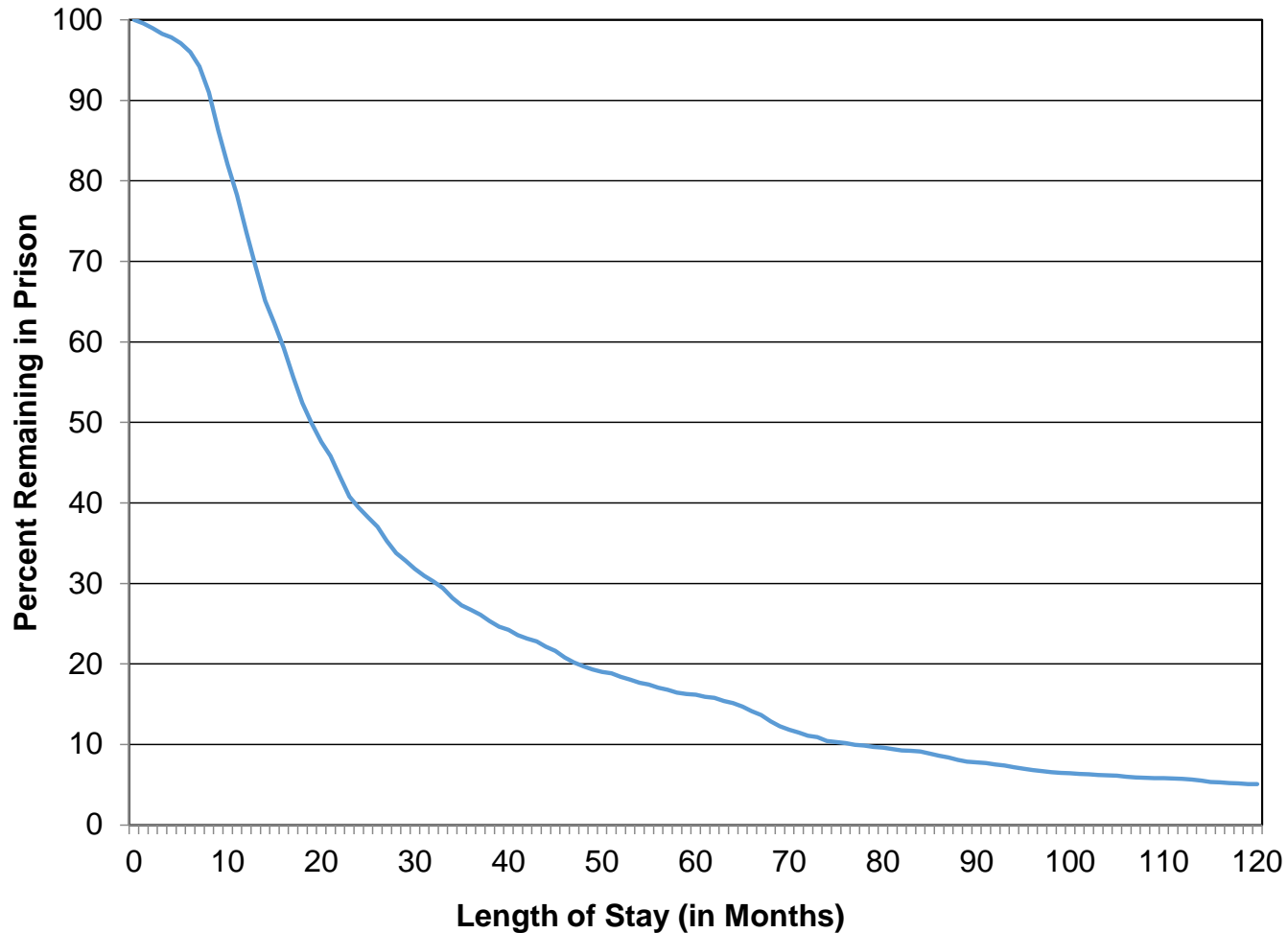


April 1, 2017 Forecast

Forecast Components

- ▶ (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.

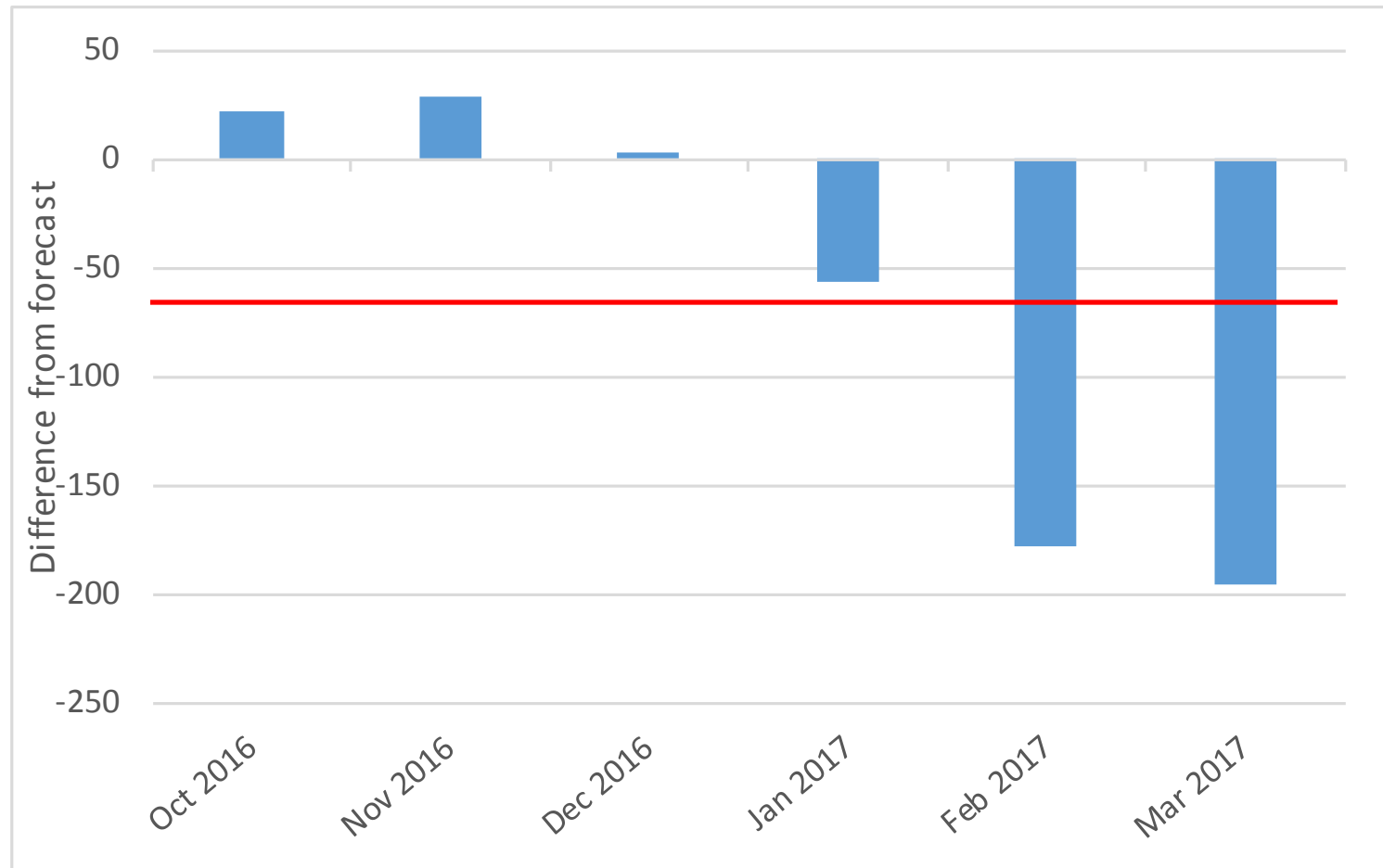
Release Profile of Future Intakes



April 1, 2017 Forecast

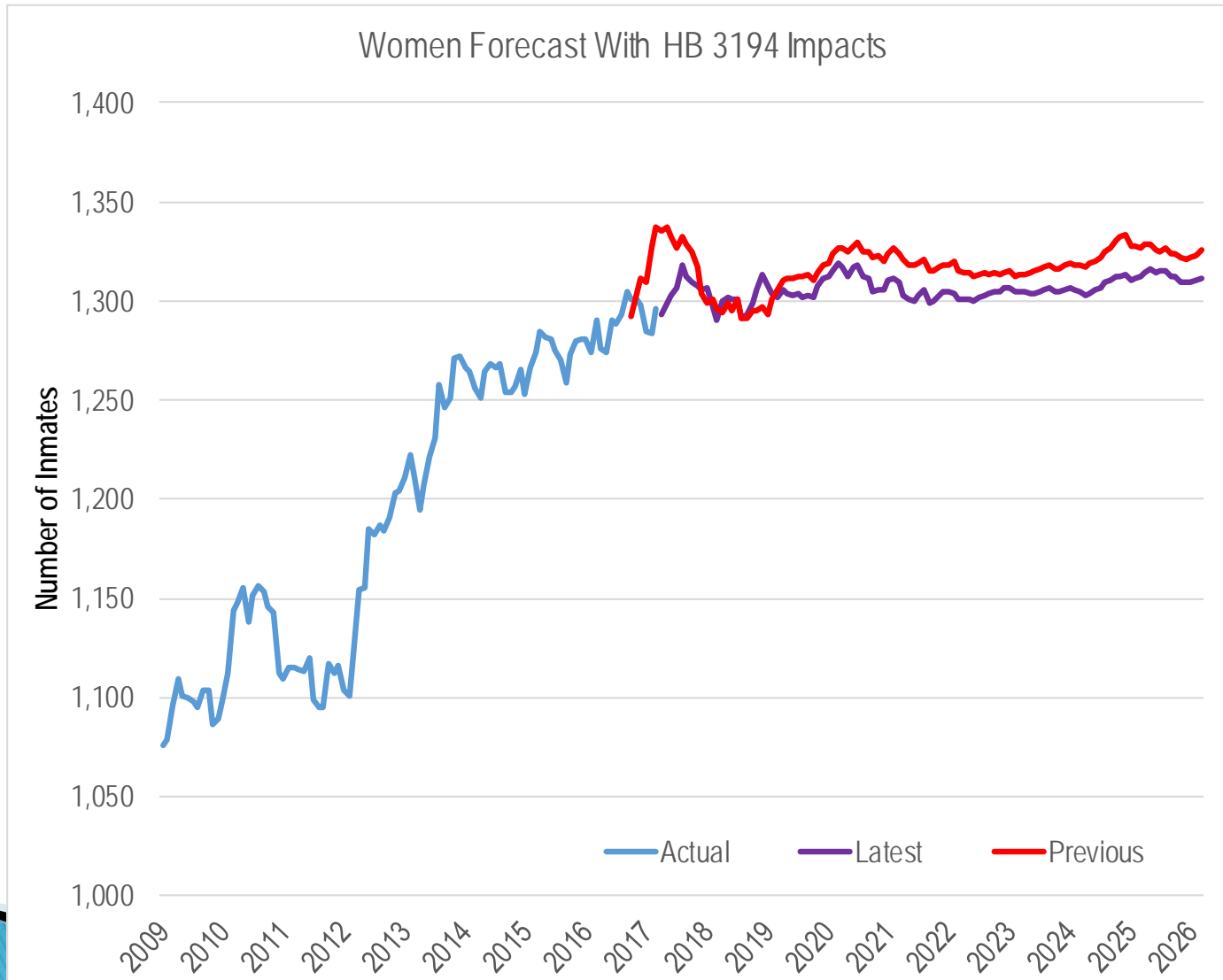
April 1, 2017 Forecasts

Recent Forecast Tracking

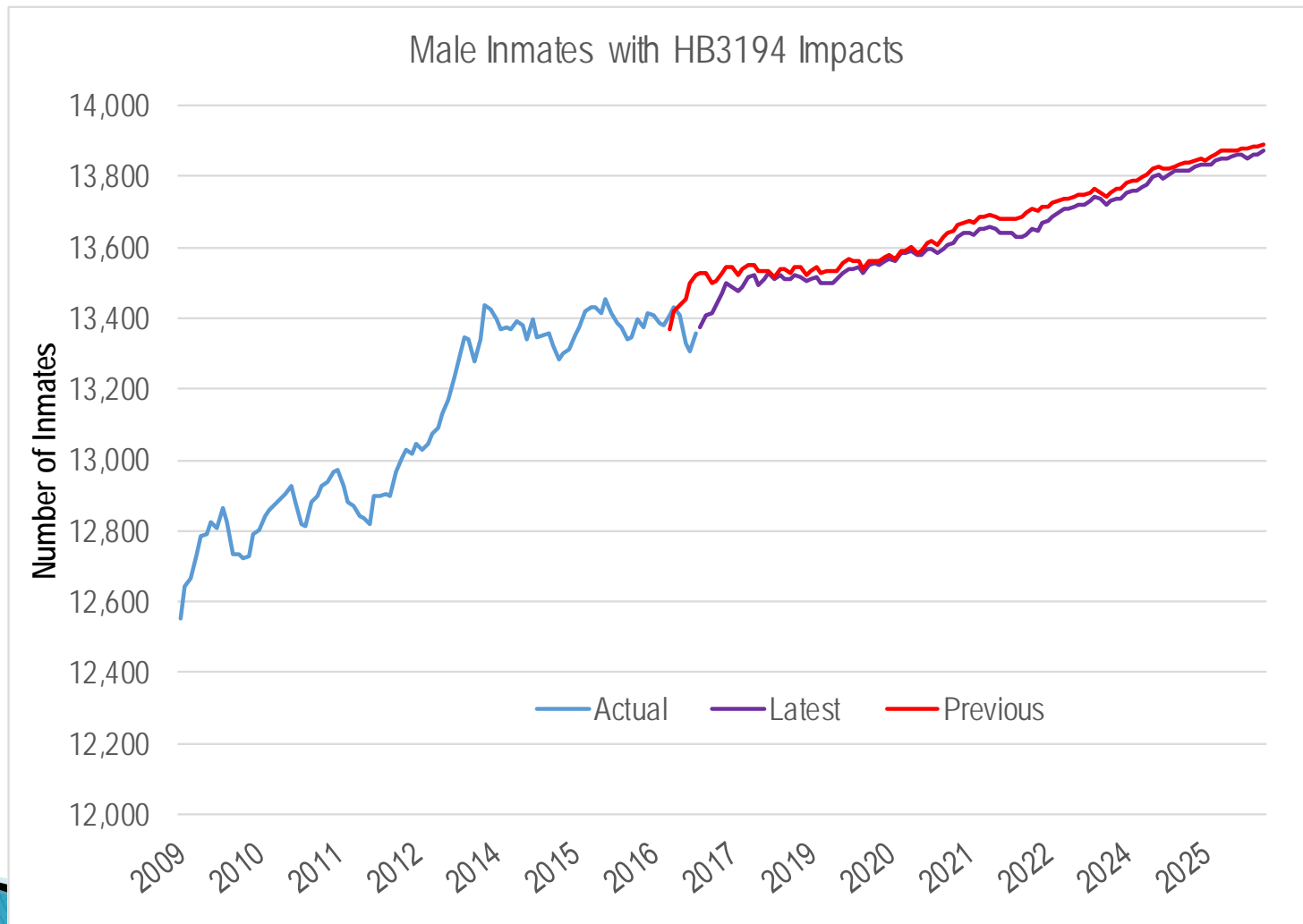


Red line is the six month average (-63 beds)

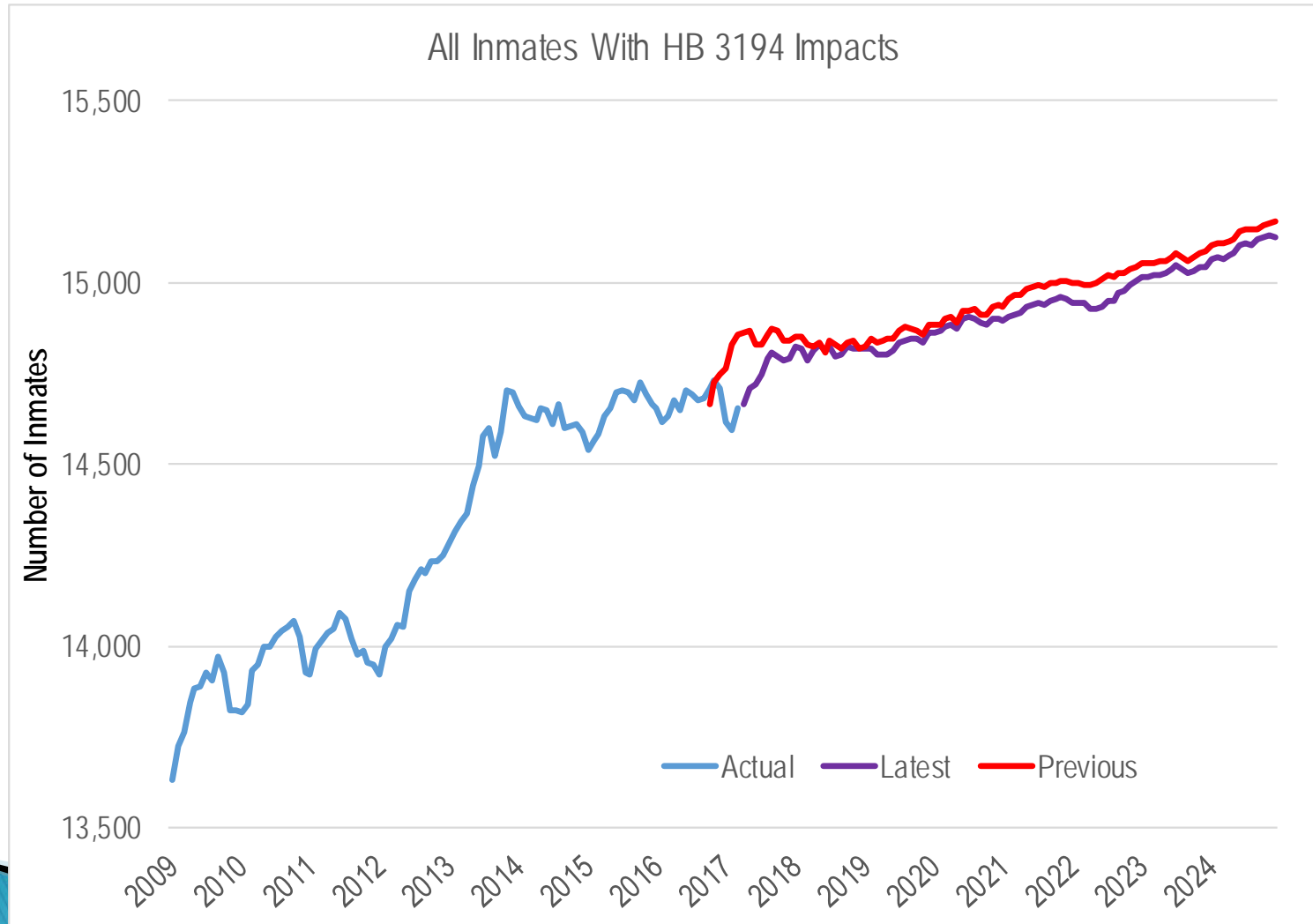
Female Total Forecast



Male Total Inmate Forecast



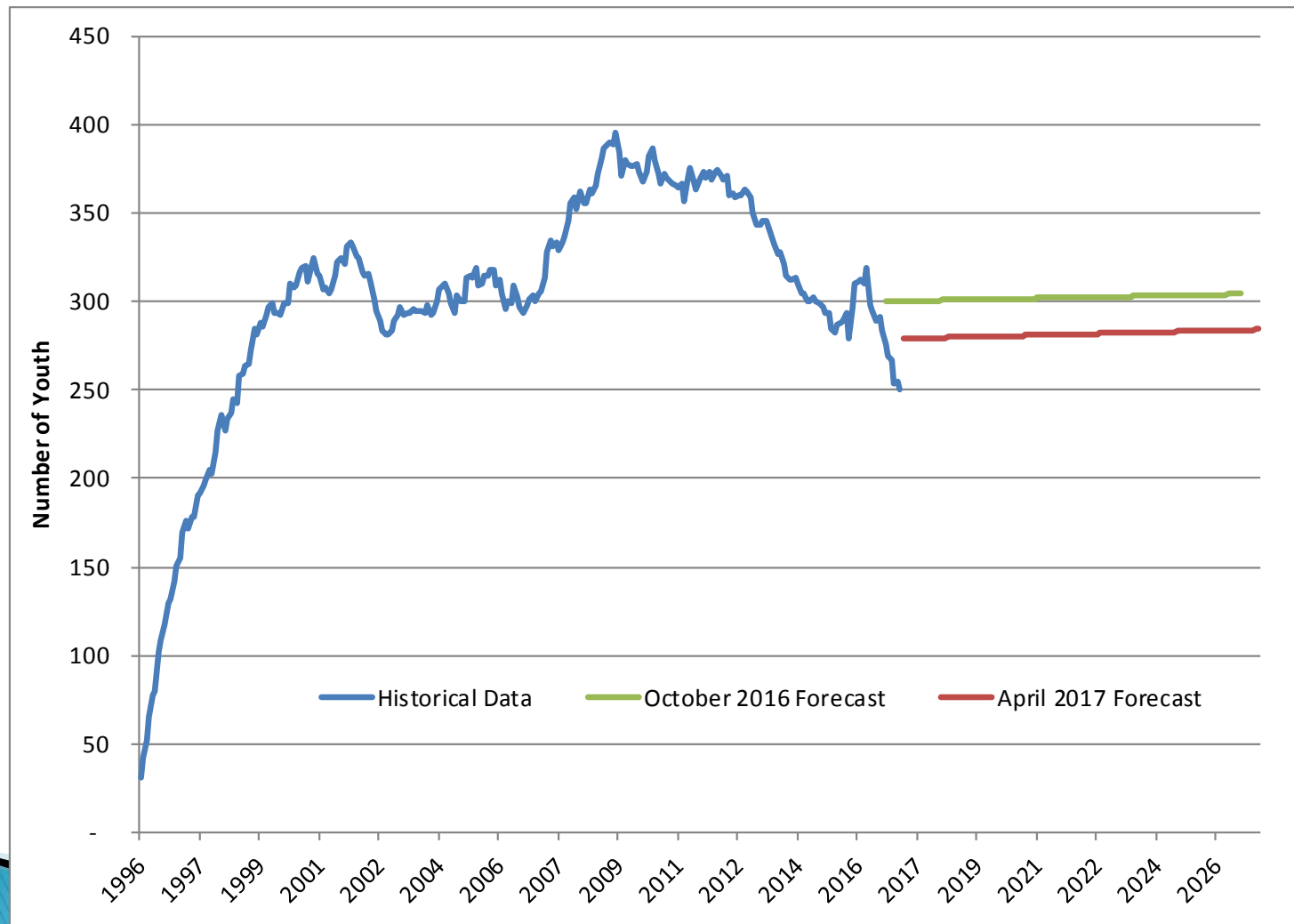
All Inmates Forecast



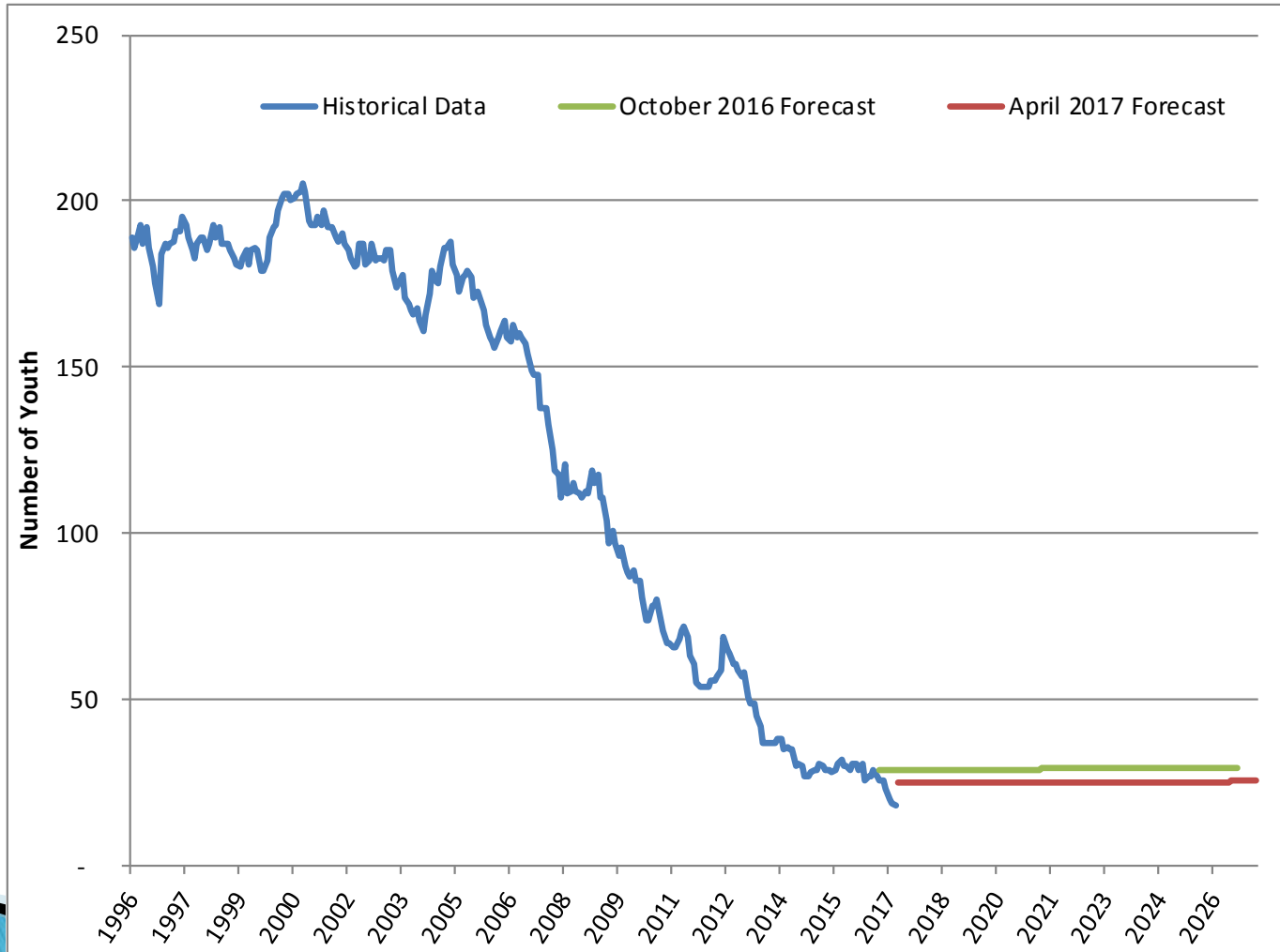
Juvenile Bed Forecast

- ▶ 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



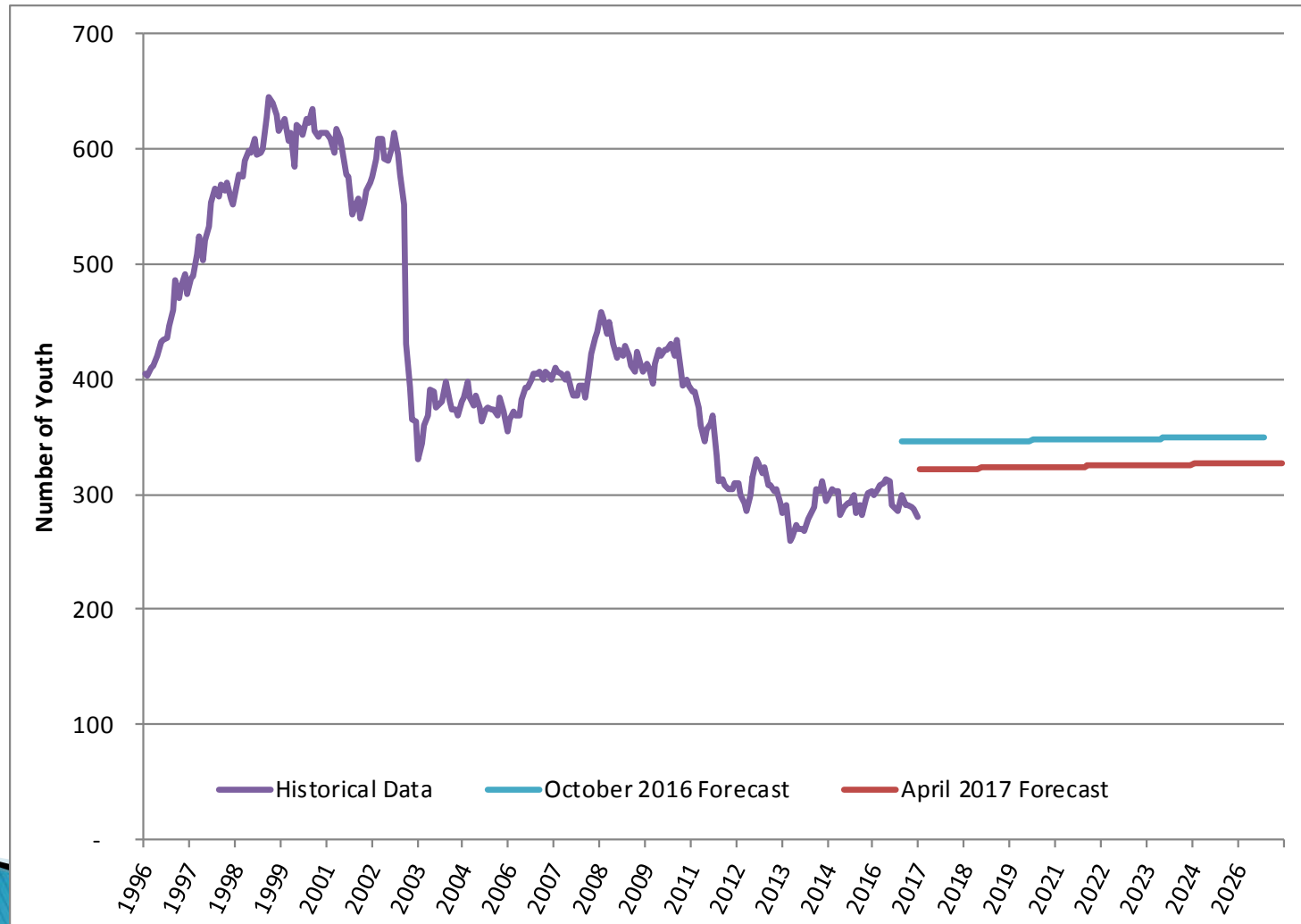
PSR Youth Forecast



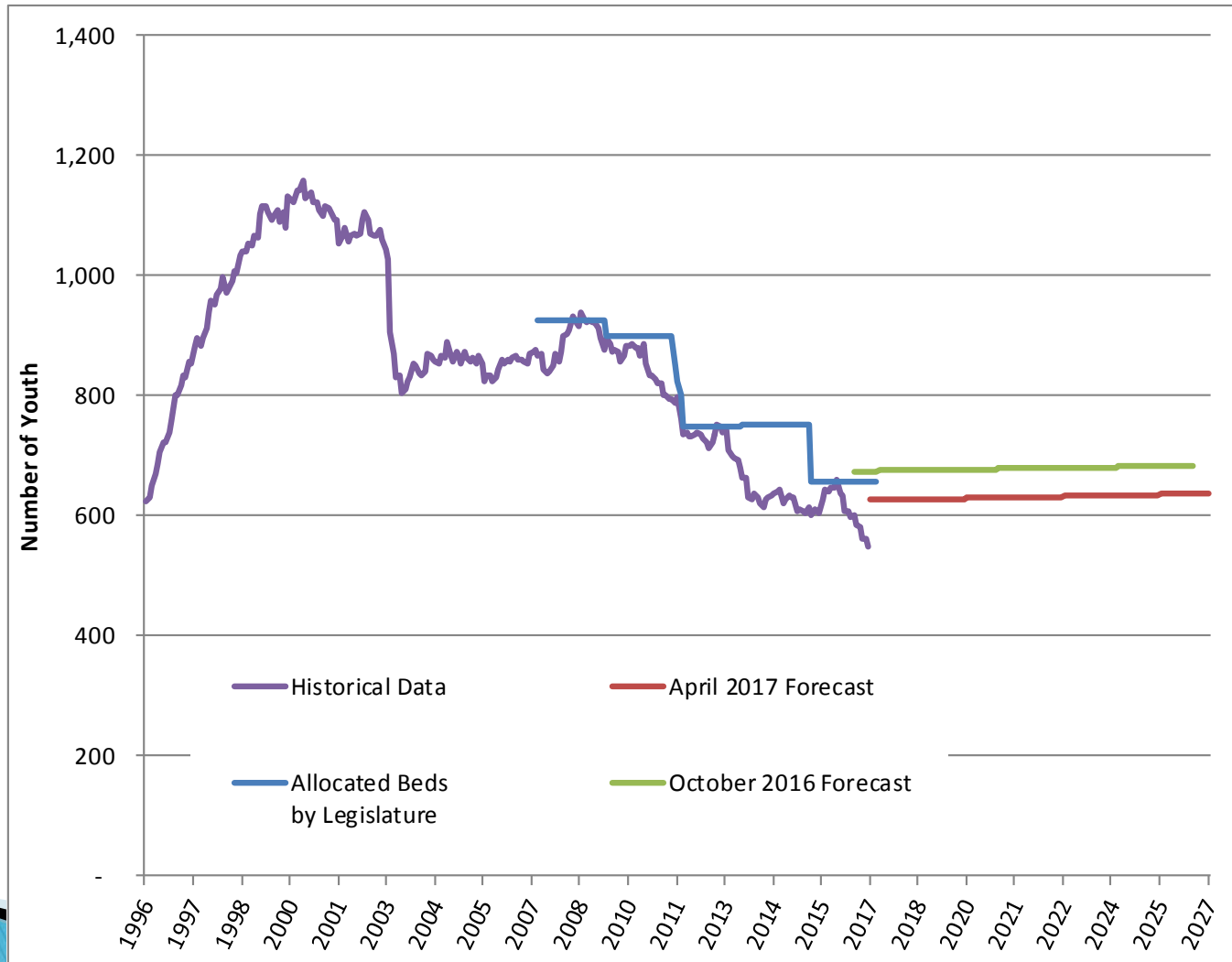
Demand Methodology

- ▶ 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.

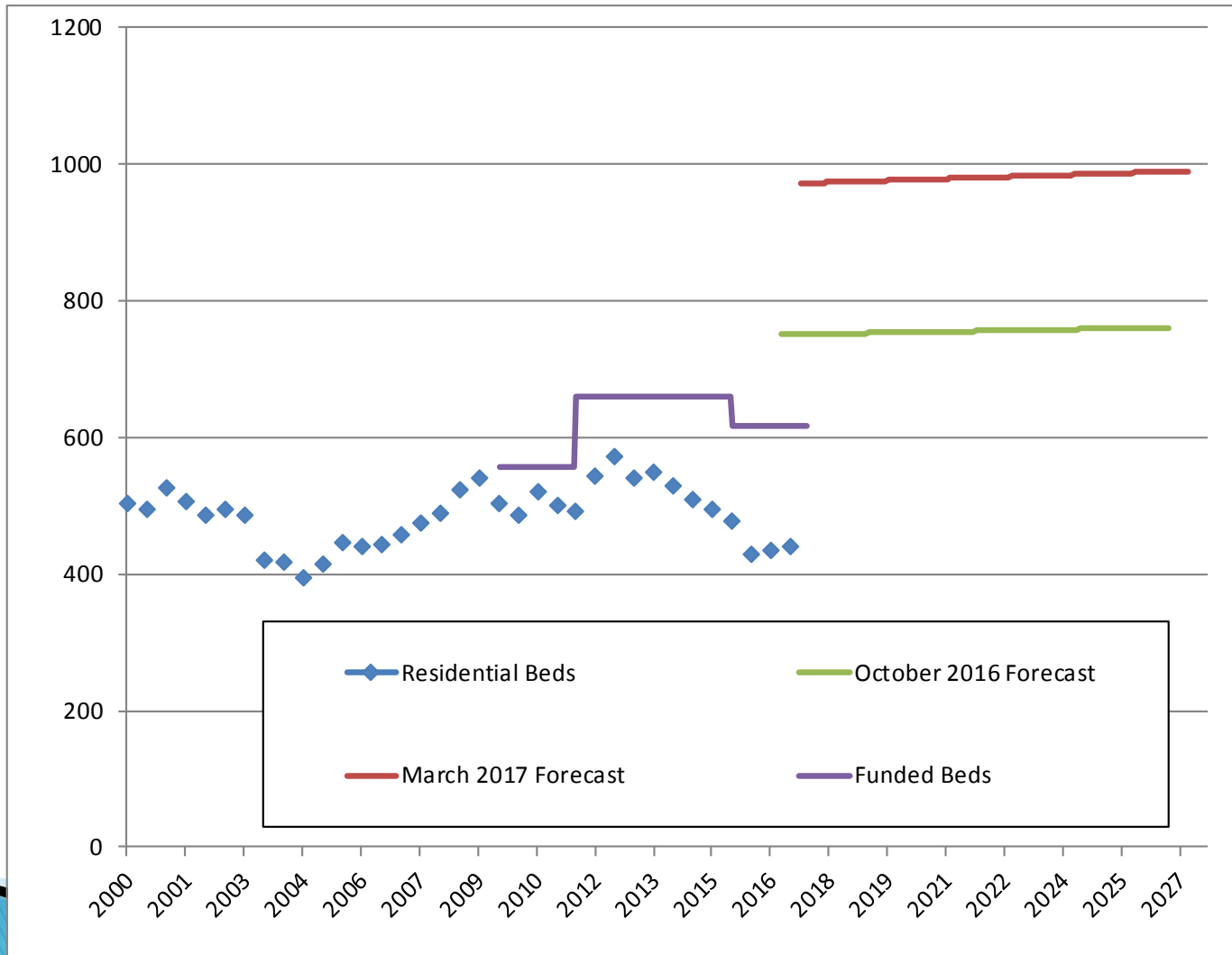
DBA Forecast



Total Close Custody Forecast



Residential Bed Forecast



Questions

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