

## Oregon Youth Authority Community Placement Demand Forecast

### Background

The Oregon Youth Authority (OYA) supervises youths in close custody, and on probation or parole. Per executive order, the Office of Economic Analysis (OEA) performs forecasts of the close custody populations for budgetary and planning purposes. OYA requested that OEA additionally forecast the need for community placement beds. For this document, community placement includes youths in residential treatment facilities and foster care. This is also called out-of-home placement or substitute care.

Youths on probation or parole can be placed in the community as an alternative to home placement. Youth are placed in the community when home placement is not appropriate, not available, or contrary to the interests of the youth or community. Home placement might be inappropriate, for example, if the offender's victim is in the home, if drug use is common in the offender's home, or the youth's behavior is not effectively managed in the home.

Community placement is more costly than home placement and the availability of bed space is restricted by funding levels. Because of this, it is useful for OYA to have a forecast of the demand for community placement beds. The demand for beds is essentially the number of beds that would be used if there were no funding restrictions. It helps provide a basis for building the essential service level budget.

### Methodology

Demand for community placement is a function of both the number of youths who should be on probation and parole, and the portion of those youths which need to be placed in the community. The forecast focuses primarily on community bed demand for youths on probation; demand from parole is relatively small, less variable, and treated as a static quantity for the forecast.

There are three factors analyzed for the calculation of community placements: probation caseload (including community and home placement), the percentage of probation cases placed in the community, and the number of parole cases placed in the community. Total community placement is calculated as:

$$\begin{array}{ccccccc} \text{Probation} & & \text{Community} & & \text{Parole} & & \text{Total} \\ \text{Caseload} & \times & \text{Placement} & + & \text{Community} & = & \text{Community} \\ & & \text{Percentage} & & \text{Placement} & & \text{Placement} \end{array}$$

Direct historical counts of youths on probation and of the percentage in community placement are influenced by availability of funds for those services. Therefore, demand is assessed using a statistical approach to count youths in a manner which is not directly dependent on funding levels.

The probation demand and the community placement percentage are each measured using youth criminality from referrals to county juvenile departments. Characteristics leading to probation in general, and those leading to residential placement, are measured statistically. The demand for community probation beds is essentially the number of youths statistically similar to youths who actually went to community placement. Since it

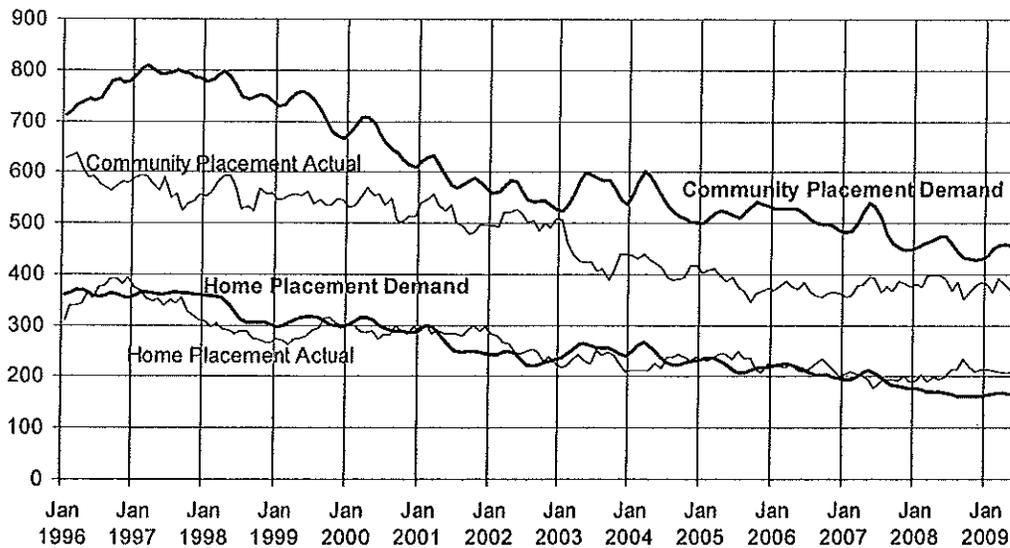
is based on referrals, not actual placements, the funding level for community beds does not directly influence it.

For both the probation cases overall, and the community placement percentage, an index measure is used to assess demand. The demand index measures can only compare demand at one time relative to demand at another time. To put demand in terms of an actual number of beds, the index measures need to be referenced to a bed capacity number. This is the capacity needed to satisfy demand. The reference level is subjective and debatable. In some sense, defining the reference level is defining the level of service which OYA should provide if funding were available.

The forecast assumes that demand has exceeded capacity at all times over the 13 year history of data. Under that assumption, demand for probation caseloads was most closely met in December of 2008, so the probation demand index is referenced to that time. The community percentage demand was most closely met in January of 2003, so that index is referenced to that time. This results in demand for probation community beds exceeding actual occupancy by an average of 130 beds over the 13 year history.

The chart below shows the probation demand for home placements and community placements along with the actual number of youths in the respective placements. While the demand for community placement exceeds capacity over the entire history, the demand for home placement tracks closely with the actual number.

*Probation Home and Community Placement – Demand and Actual*

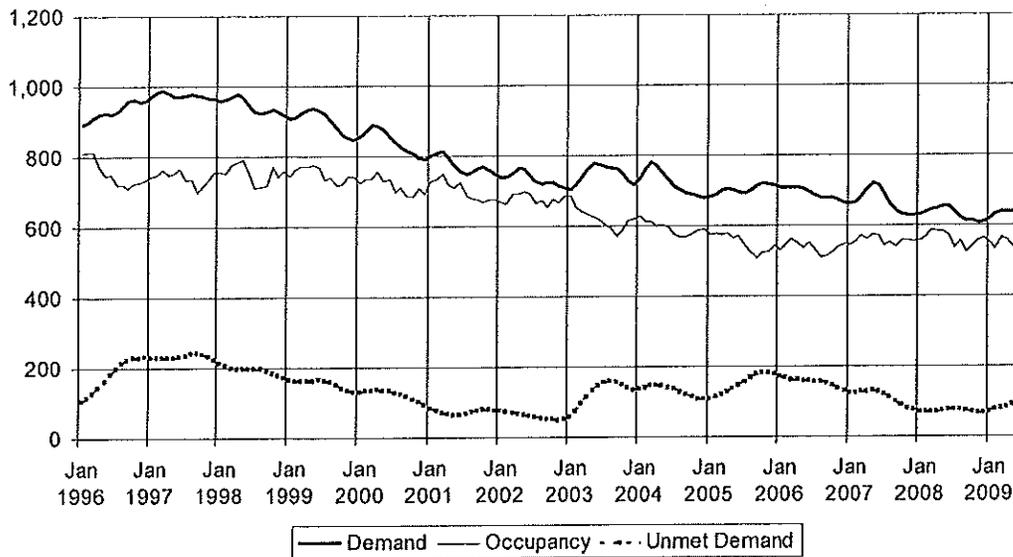


Demand for community beds also stems from youths on parole. After the demand for probation community beds is determined, the number of beds for parole is added. The number has historically not tracked with criminality measures, with the total number of community beds, or with outflow from probation and close custody. It also may be

significantly influenced by population management policy. Therefore, the average historical value of 180 is used.

The chart below shows the number of community beds over the past 13 years in terms of the actual number of beds occupied, and the demand for beds calculated using the methodology described above. Bed demand and occupancy have both generally decreased over the time period, with demand always exceeding occupancy. Unmet demand (demand in excess of occupancy) has averaged about 130. It was highest in 1997 at nearly 250, and lowest at the end of 2002 at about 50. Demand is currently about 640 beds which is about 100 beds in excess of occupancy.

*Community Bed Occupancy and Demand*



The demand for community placement is based on criminality measures available in referral data. Additional factors are used by OYA to determine youth placement, and are considered critical in the determination. These include quality of home and community environment, youth's social behavior, peer relationships, etc. Since those factors were not available for forecast calculations, the demand shown here may not reflect changing trends concerning those factors. Future work will explore the possibility of including those factors, and could lead to changes in the historical demand assessment.

## Forecast

The forecast for community placement demand is calculated from demand for probation, the community placement percentage, and the parole demand. The forecast assumes that parole demand is a fixed value at 180 beds. Forecasts for probation demand and the community percentage are based primarily on historical trends and assumptions regarding juvenile criminality in Oregon.

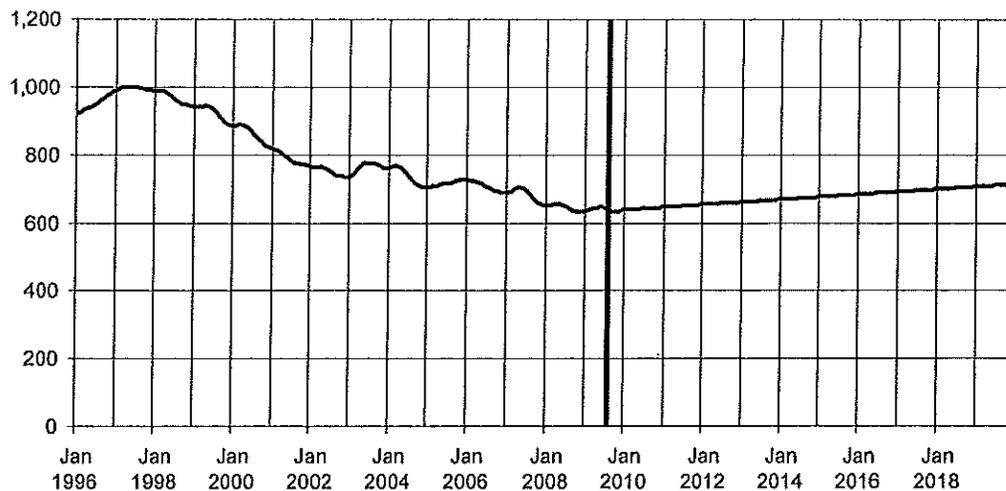
Juvenile crime is the main underlying driver of the forecast. It leads directly to probation caseload demand which directly influences the forecast. Over the past decade, juvenile crime has dropped substantially, both in Oregon and nationally. Although the long term trend is downward, the forecast assumes that juvenile crime rates have essentially bottomed out, and will increase modestly in the future. Such an increase is suggested by trends in some other jurisdictions where juvenile crime rates have already begun to rebound from recent historic lows.

The size of the at-risk population is not a significant driver in the forecast. The number of juveniles aged 13 to 18 years in Oregon has been relatively stable over the past decade and is expected to change little in the future. Therefore, population size changes are accounted for in the underlying crime trends.

The demand associated with the percentage of probation cases needing community placement is assumed to remain relatively stable going forward. Community placement is driven by criminal and non-criminal factors, many of which are not available for forecast analysis. It may also be driven by changing societal perspectives on what kind of behavior or environment demands community placement. Since the percentage has increased slightly over the past decade, the forecast assumes slight continued growth in the near term, with no change in the outer years of the forecast.

Demand for community placement beds, shown in the chart below, is currently 639. It is expected to grow to 650 by the start of the 2011-13 biennium.

### *History and Forecast of Community Placement Bed Demand*



### Forecast Tables

The table below shows forecast values semiannually until 2019. The last column in the table is the projected demand for community beds for youths on probation and parole.

	Probation Demand				Parole Demand	Total
	Probation Demand	Community Percentage	Community Placement	Home Placement	Community Placement	Community Demand
7/1/2009	620	74.0%	459	161	180	639
1/1/2010	612	75.0%	459	153	180	639
7/1/2010	617	75.0%	463	154	180	643
1/1/2011	622	75.0%	466	155	180	646
7/1/2011	627	75.0%	470	157	180	650
1/1/2012	632	75.0%	474	158	180	654
7/1/2012	637	75.0%	478	159	180	658
1/1/2013	642	75.0%	482	161	180	662
7/1/2013	647	75.0%	485	162	180	665
1/1/2014	652	75.0%	489	163	180	669
7/1/2014	657	75.0%	493	164	180	673
1/1/2015	662	75.0%	497	166	180	677
7/1/2015	667	75.0%	500	167	180	680
1/1/2016	672	75.0%	504	168	180	684
7/1/2016	677	75.0%	508	169	180	688
1/1/2017	682	75.0%	512	171	180	692
7/1/2017	688	75.0%	516	172	180	696
1/1/2018	693	75.0%	519	173	180	699
7/1/2018	698	75.0%	523	174	180	703
1/1/2019	703	75.0%	527	176	180	707
7/1/2019	708	75.0%	531	177	180	711