Office of the
Secretary of Public Safety and Homeland Security

REPORT ON THE OFFENDER POPULATION FORECASTS (FY2017 TO FY2022)

To The Governor and General Assembly

Commonwealth of Virginia

Richmond, October 15, 2016

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Office of the Secretary of Public Safety and Homeland Security

October 15, 2016

TO: The Honorable Terence R. McAuliffe
Governor

The Honorable S. Chris Jones
Chairman, House Appropriations Committee

The Honorable Thomas K. Norment, Jr.
Co-Chairman, Senate Finance Committee

The Honorable Emmitt W. Hanger, Jr.
Co-Chairman, Senate Finance Committee

The Honorable David B. Albo
Chairman, House Courts of Justice Committee

The Honorable Mark D. Obenshain
Chairman, Senate Courts of Justice Committee

Each year, the Secretary of Public Safety and Homeland Security is required to present revised offender population forecasts to the Governor, the Chairmen of the House Appropriations and Senate Finance Committees, and the Chairmen of the House and Senate Courts of Justice Committees.

To revise the forecasts, my office brought together policy makers, administrators, and technical experts from all branches of state government for a series of meetings over the course of the summer and early fall. Using a consensus approach, with input from all those who participated in the process, a forecast for each of the four offender populations was adopted.

The 2016 forecasting process is complete and, as required by the Appropriation Act, this report is respectfully submitted for your review. Please contact my office should you have questions regarding any aspect of the offender forecasts.

Sincerely,

Brian J. Moran

Authority

This report has been prepared and submitted to fulfill the requirements of Item 383 of Chapter 780 of the 2016 Acts of Assembly. This provision requires the Secretary of Public Safety and Homeland Security to present revised offender population forecasts to the Governor, the Chairmen of the House Appropriations and Senate Finance Committees, and the Chairmen of the House and Senate Courts of Justice Committees by October 15, 2016. Specifically, the Secretary must present updated forecasts for the adult state-responsible confined population, adult local-responsible jail population, juvenile state-responsible population, and juvenile local-responsible population. In addition, the Secretary must ensure that the adult state-responsible population forecast includes an estimate of the number of probation violators in the overall population who may be appropriate for punishment via alternative sanctions. This document contains the Secretary's report for 2016.

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Executive Summary

Forecasts of persons confined in state and local correctional facilities are essential for criminal justice budgeting and planning in Virginia. The forecasts are used to estimate operating expenses and future capital needs and to assess the impact of current and proposed criminal justice policies. The Secretary of Public Safety and Homeland Security oversees the forecasting process and, as required by the Appropriation Act, presents updated forecasts annually to the Governor, the Chairmen of the House Appropriations and Senate Finance Committees, and the Chairmen of the House and Senate Courts of Justice Committees.

To produce the offender forecasts, the Secretary's Office utilizes an approach known as "consensus forecasting." This process brings together policy makers, administrators, and technical experts from all branches of state government. The Technical Advisory Committee is composed of experts in statistical and quantitative methods from several agencies. While individual members of this Committee generate the offender forecasts, the Committee as a whole carefully scrutinizes each forecast according to the highest statistical standards. Selected forecasts are presented to the Secretary's Work Group. The Work Group evaluates the forecasts and provides guidance to the Technical Advisory Committee. The Work Group includes deputy directors and senior managers of criminal justice and budget agencies, as well as staff of the House Appropriations and Senate Finance Committees. Forecasts accepted by the Work Group then are presented to the Secretary's Policy Committee. Led by the Secretary, the Policy Committee reviews the various forecasts, making any adjustments deemed necessary to account for emerging trends or recent policy changes, and selects the official forecast for each offender population. The Policy Committee is made up of lawmakers, agency directors, and other top officials and includes representatives of Virginia's prosecutor, police, sheriff, and jail associations. Through the consensus process, a forecast is produced for each of the four major offender populations.

The forecasts, approved in September 2016, were based on all of the statistical and trend information known at the time that they were produced. A new jail data system, known as LIDS-CORIS, was implemented in June 2013. Challenges encountered after the launch of LIDS-CORIS were addressed by the developer and resulted in a series of revisions to the population data used to produce the adult state-responsible and local-responsible forecasts. Improvements in the LIDS-CORIS system and support programming, along with corrections and updates entered into the system by jail staff, led to subsequent updates of the data in June 2015 and September 2016. Due to the uncertainty regarding the time lag needed for LIDS-CORIS data to mature and stabilize, only data through December 2015 were used to generate the adult state-responsible and local-responsible population forecasts presented in this report.

Adult State-Responsible Confined Population The largest of the forecasted populations, the state-responsible (SR) confined population includes offenders incarcerated in state prisons, as well as SR offenders housed in local and regional jails around the Commonwealth. After peaking at 39,158 in June 2008, the SR population averaged an annual decline of 327 (0.8%) through June 2012. Much of the decline during that period can be attributed to a decrease in the annual number of SR New Court Commitments (NCC) which dropped by an average of 228 (2.4%) per year during this time. This shift was consistent with observed changes in arrest patterns, a decline in

felony sentencing events in circuit court, and a return to pre-2004 levels in the backlog of drug cases awaiting analysis at the Department of Forensic Science. Between June 2012 and June 2015, the SR population grew by an annual average of 432 (1.1%), reaching 39,146 offenders. During this same time period, the female SR population grew by an annual average of 173 (5.8%), reaching 3,343 offenders in June 2015. Based on the approved forecast, the total SR population is projected to increase by an average of 0.3% annually during the next six years to 38,977 offenders by the end of FY2022 (see table on following page). This forecast is lower than the forecast presented to the Governor and General Assembly last year. This is primarily driven by the forecast of SR NCC, which calls for slow growth of less than one percent per year throughout the forecast horizon. As required by Appropriation language, the forecast has been disaggregated to identify the number of probation violators within the overall population who may be appropriate for punishment via alternative sanctions. By the end of FY2022, it is projected that the state-responsible population will include 1,744 technical probation violators (i.e., offenders who violated the rules of probation but have not been convicted of a new crime).

Adult Local-Responsible Jail Population. The local-responsible jail population is defined as the number of persons confined in local and regional jails across the Commonwealth, excluding state and federal inmates and ordinance violators. Following substantial growth in FY2006 and FY2007, the average local-responsible jail population declined each succeeding year through FY2010. In FY2011, the average local-responsible jail population began to rise, with growth of less than 1% in FY2011 and 2012. The population increased by 3% in FY2013 and less than 1% in 2014, after which the population began dropping again. The average local-responsible jail population dropped about 1% in FY2015 and then 5% in 2016. Under the approved forecast, the local-responsible jail population is projected to return to an average annual growth of less than 1% in FY2017, and in succeeding years, through 2022. This would bring the average local-responsible population to 19,120 in FY2022, slightly below the average population in 2015 (see table below).

Juvenile Direct Care Population. Juvenile offenders committed to the state are held in facilities operated by the Department of Juvenile Justice (DJJ) or they are placed in re-entry, community placement, or halfway house programs[1]; collectively, these make up DJJ's total direct care population. The number of juveniles in the direct care population has been falling since FY2000. Some of the early decline may be attributed to a change in the minimum criteria for a juvenile to be committed to DJJ (from a felony or two Class 1 misdemeanor adjudications to a felony or four Class 1 misdemeanor adjudications) beginning July 1, 2000, as well as subsequent statutory changes discussed later in this report. These policy changes alone cannot explain the persistent downward trend in commitments. At court services units, the point of entry into the juvenile justice system, the total number of juvenile intake cases has declined for the eleventh consecutive year. In addition, DJJ has implemented procedures that include the use of validated risk assessment instruments in numerous aspects of community and facility operations in order to reserve juvenile correctional beds for those who represent the greatest risk to public safety. In FY2016, the total direct care population averaged 406, a decrease of 103 from the previous year. The forecast for the direct care population anticipates a continued decline through FY2018. Beginning in FY2018, this population is expected to level off. For FY2022, the average population is projected to be 258 juveniles (see table below).

[1] DJJ operated halfway houses for the direct care population beginning in July 2012. Due to budget reductions, the halfway houses were closed in January 2014.

Juvenile Detention Home Population. Juveniles held in local or commission-operated juvenile detention homes around the Commonwealth make up the juvenile local-responsible population. The juvenile detention home population declined from an average of 1,058 in FY2007 to an average of 726 in FY2013. Lower numbers of intakes at court services units and procedures to reduce detention of low-risk juveniles have contributed to the downward trend. The population increased slightly to 734 in FY2014 due to longer lengths-of-stay, but decreased to 642 in FY2016 due to drop in detainments (admissions). The average detention home population is projected to drop to 408 juveniles in FY2022 (see table below).

Offender Population Forecasts
FY2016 – FY2022

Fiscal Year	Adult State-Responsible Offender Population (June 30)	Technical Probation Violators within the Adult State-Responsible Offender Population (June 30)*	Adult Local-Responsible Jail Population (FY Average)	Juvenile Direct Care Population (FY Average)	Juvenile Detention Home Population (FY Average)
FY2016	38,224 (Projected)	1,720 (Projected)	18,120** (Projected)	406 (Actual)	642 (Actual)
FY2017	38,529	1,732	18,285	325	603
FY2018	38,804	1,719	18,456	253	557
FY2019	38,619	1,723	18,615	245	516
FY2020	38,615	1,733	18,784	248	477
FY2021	38,817	1,738	18,951	254	441
FY2022	38,977	1,744	19,120	258	408

*** The Technical Probation Violator forecast is a subgroup of, and not in addition to, the Adult State-Responsible Offender Forecast.**

Since the proportion of violators identified as technical violators declines as criminal histories are updated with new conviction information, this forecast should be considered a maximum.

Based on previous study, the Department of Corrections has estimated that 53% of technical violators sentenced to a state-responsible term may be suitable for alternative sanctions.

**** The FY2016 average local-responsible jail population is an average of six months of historical data (Jul-Dec 2015) and six months of forecasted data (Jan-Jun 2016).**

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Virginia's Offender Forecasting Process

Each year, the Secretary of Public Safety and Homeland Security oversees the offender forecasting process. These forecasts are essential for criminal justice budgeting and planning in the Commonwealth. They are used to estimate operating expenses and future capital needs for state prisons, local and regional jails, and juvenile correctional facilities. In addition, the forecasts provide critical information for assessing the impact of current and proposed criminal justice policies. The Secretary's Office utilizes an approach known as "consensus forecasting." First implemented in Virginia in the late 1980s, consensus forecasting is an open, participative approach that brings together policy makers, administrators, and technical experts from many state agencies across all branches of state government. The objective is to ensure that key policy makers and administrators in the criminal justice system have input into the forecast. Moreover, the process is intended to promote general understanding of the forecast and the assumptions that drive it.

The process is structured through committees. The Technical Advisory Committee is composed of experts in statistical and quantitative methods from several agencies. Analysts from particular agencies are tasked with developing offender forecasts. Typically, two forecast models are developed for each of the adult and juvenile populations by two analysts from separate agencies working independently of one another. Confidence in the forecast can be bolstered if different methods used by multiple agencies converge on the same future population levels. While individual members generate the various prisoner forecasts, the Technical Advisory Committee as a whole carefully scrutinizes each forecast according to the highest statistical standards. Select forecasts are recommended by the Technical Advisory Committee for consideration by the Secretary's Work Group. Work Group members include deputy directors and senior managers of criminal justice and budget agencies, as well as staff of the House Appropriations and Senate Finance Committees. Meeting throughout the development of the forecasts, the Work Group provides guidance to the Technical Advisory Committee, discusses detailed aspects of the projections, and directs technical staff to provide additional data needed for decision making. The diverse backgrounds and expertise of Work Group members promote in-depth discussions of numerous issues and trends in Virginia's criminal justice system. After thorough evaluation of each forecast, the Work Group makes recommendations to the Secretary's Policy Committee. Led by the Secretary, the Policy Committee reviews the various forecasts and selects the official forecast for each population. This Committee also considers the effects of emerging trends or recent policy changes, making adjustments to the forecasts as it deems appropriate. The Policy Committee is made up of agency directors, members of the General Assembly, and top-level officials from Virginia's executive, legislative, and judicial branches. Each year, at least one prosecutor, sheriff, police chief, and jail administrator are invited to serve on the Policy Committee to represent their respective associations.

The forecasting process benefits from rigorous quantitative analysis by the Technical Advisory Committee, detailed scrutiny by the Work Group, and high-level review by the Policy Committee. Through the consensus process, a separate forecast is produced for each of the four major correctional populations.

Forecasting Methodologies

Members of the Technical Advisory Committee utilize two types of methodologies to develop offender forecasts: time-series forecasting and computer simulation modeling. Time series forecasting is a set of statistical techniques that apply specifically to the analysis of data points that occur over time. Time-series forecasting assumes that there is a pattern in the historical values that can be identified. The goal is to define the pattern, understand the short-term and long-term trends, and pinpoint any seasonal fluctuations. Significant policy changes made in past years can be included in the statistical model and the impacts quantified. Time-series models then utilizes the pattern, trend, and seasonal variation identified in the historical data to project future values. Models developed from the same set of data can differ based on the statistical parameters included, external factors tested (factors that may be correlated with population changes), how many years of historical data are included in the analysis, etc. To develop time series models, analysts often withhold the most recent data points (e.g., the last 12 months). When a particular model is identified, the model is used to project population values for the period of data withheld from the model development. The projected values are compared to the actual values during the holdout period to assess the model's accuracy. Models can then be compared based on a variety of accuracy statistics so that the model with the best set of statistical properties can be selected. Analysts then re-run the selected model using all of the historical data, including data originally withheld during the model development stage. This is done to ensure that the most recent data are included when generating the actual forecast. Analysts on the Technical Advisory Committee follow this process when developing offender forecasts using time series techniques.

In addition, DOC and DJJ use computer simulation modeling to forecast the adult state-responsible confined population and the state's juvenile direct care population, respectively. Computer simulation models are designed to mimic the flow of offenders through a system over the forecast horizon. Both DOC and DJJ use Simul8 forecasting software for this purpose. Simul8 is a standard software package made specifically for creating simulation models. It is flexible in that users can structure a simulation model to accurately portray their particular system and it can be easily modified to capture policy changes. Simul8 models can also be adapted to produce forecasts of important subpopulations. To accurately simulate the movement of offenders through a system, data describing the offenders admitted to, confined in, and released from the population are compiled and programmed into the simulation model. Use of simulation forecasting often requires assumptions to be made, for example, regarding the characteristics of future commitments/admissions to the system.

Members of the Technical Advisory Committee from particular agencies are assigned the task of generating the offender forecasts. These are presented to this Committee. Typically, this Committee examines two forecast models for each offender population. The models are developed by two analysts from different agencies working independently of one another. Each forecast is carefully scrutinized. The forecasts selected by the Technical Advisory Committee are recommended to the Secretary's Work Group.

Adult State-Responsible Confined Population

The largest of the forecasted populations, the state-responsible (SR) confined population includes offenders incarcerated in state prisons, as well as SR offenders housed in local and regional jails around the Commonwealth. For forecasting purposes, state-responsibility begins on the day an offender receives an SR sentence (i.e., a sentence of one year or more for a felony offense). If the offender has multiple court cases, state-responsibility starts on the most recent sentencing date that occurs prior to the offender's classification by the Department of Corrections (DOC).

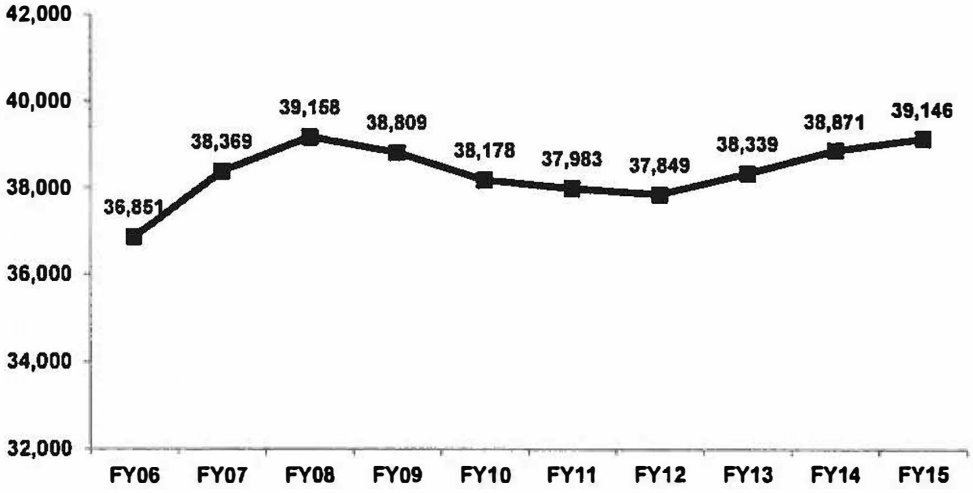
The SR confined population is a combination of the number of SR offenders in DOC facilities as listed in the DOC Facility Population Summary Report for the last day of each month plus the number of SR offenders in local and regional jails reported to the State Compensation Board (SCB). Jail data that is reported to the SCB is complex as offenders in jails can have many statuses such as awaiting trial, awaiting sentencing, serving a local-responsible or local ordinance sentence, or serving a state-responsible sentence. Thus, for individuals held in the jails, it is not just a matter of reporting head count figures, but also determining the legal status of the offender on the last day of the month. This process can be complicated as offenders may have multiple legal actions occurring and court records need to be received and interpreted to enter in the final statuses. Due to the dynamic nature of this jail data, it takes some time for it to stabilize. Given the uncertainty regarding the time lag needed for LIDS-CORIS data to mature and stabilize, only data through December 2015 were used to generate the adult state-responsible confined population forecast presented in this section.

Population Change

After peaking at 39,158 in June 2008, the SR population averaged an annual decline of 327 (0.8%) through June 2012 (Figure 1). Much of the decline during that period can be attributed to a decrease in the annual number of SR New Court Commitments (NCC) which dropped by an average of 228 (2.4%) per year during this time. This shift was consistent with observed changes in arrest patterns, a decline in felony sentencing events in circuit court, and a return to pre-2004 levels in the backlog of drug cases awaiting analysis at the Department of Forensic Science. Between June 2012 and June 2015, the SR population grew by an annual average of 432 (1.1%), reaching 39,146 offenders in June 2015. During this same time period, the female SR population grew by an annual average of 173 (5.8%), reaching 3,343 offenders in June 2015.

Population figures for June 2016 are not shown in this section, as data for that time period are not considered mature.

Figure 1
Adult State-Responsible Confined Population (on June 30 of each year)

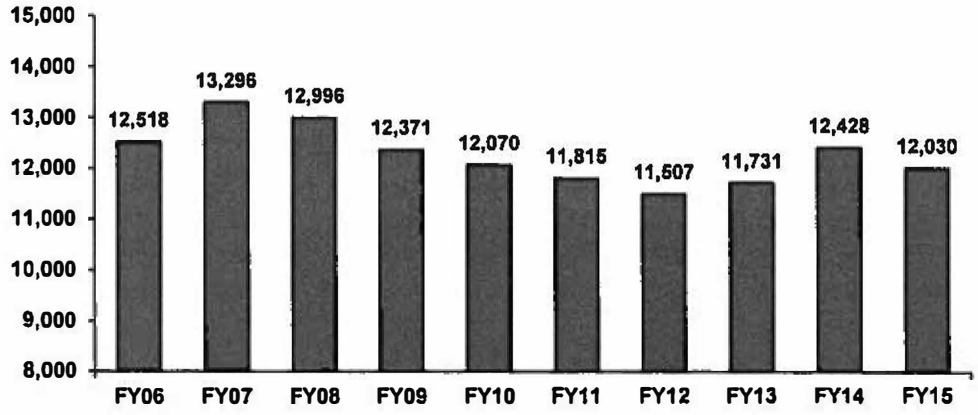


Based on improvements in the LIDS-CORIS data system and associated computer programming, along with corrections and updates entered into the system by jail staff, the Compensation Board has released revised figures for the number of state-responsible confined offenders held in jails. Figures for the state-responsible confined population have been revised accordingly and, therefore, are not comparable to those provided in previous offender forecasting reports.

Factors Affecting the Population

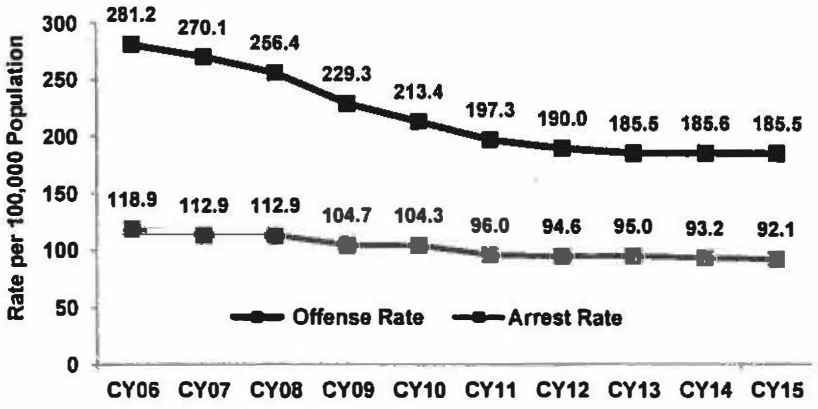
The number of offenders entering the SR confined population each year is a critical factor affecting population growth. The number of SR NCC increased sharply in FY2006 and FY2007. After peaking in FY2007, the number of SR NCC fell each year through FY2012 (Figure 2). The drop in commitments during those years is the principal reason for the downward trend in the overall population during that time period. Likewise, the growth in the SR population in FY2013 and FY2014 is due, in large part, to recent increases in the number of SR NCC which grew by 1.9% and 5.9% in FY2013 and FY2014, respectively, before declining 3.2% in FY2015.

Figure 2
State-Responsible New Court Commitments



There are numerous factors that may have an impact on the number and types of offenders sentenced to an SR term of incarceration. Both the offense rate and arrest rate (per 100,000 population) for violent index crimes (murder/non-negligent manslaughter, forcible rape, robbery and aggravated assault) declined from CY2006 through CY2013. The offense rate has since remained stable through CY2015 while the decline in the arrest rate has slowed (Figure 3).

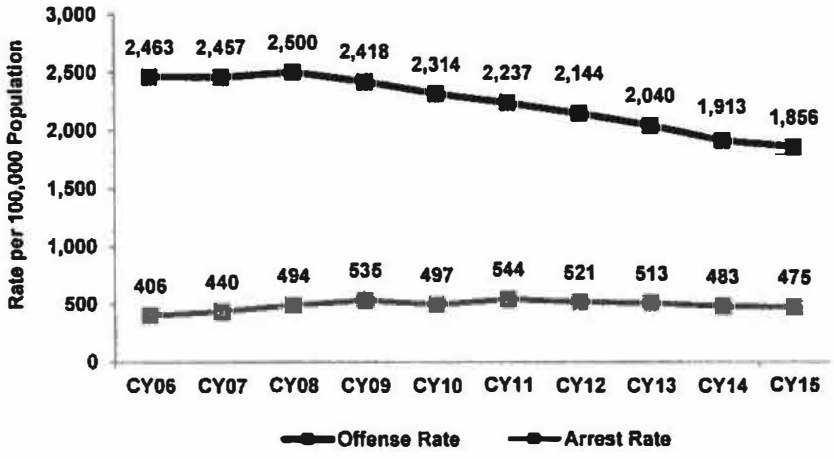
Figure 3
Violent Index Crime Offense Rates & Arrest Rates in Virginia



Violent index crimes are murder/non-negligent manslaughter, forcible rape, robbery and aggravated assault.

The offense rate (per 100,000 population) for property index crimes (burglary, larceny and motor vehicle theft) has declined by more than one quarter (26%) since CY2008 (Figure 4). The arrest rate (per 100,000 population) for property index crimes increased by almost one third (32%) from CY2006 through CY2009 and declined by 13% from CY2011 through CY2015. Larceny arrests account for the vast majority of arrests for property offenses.

Figure 4
Property Index Crime Offense Rates & Arrest Rates in Virginia

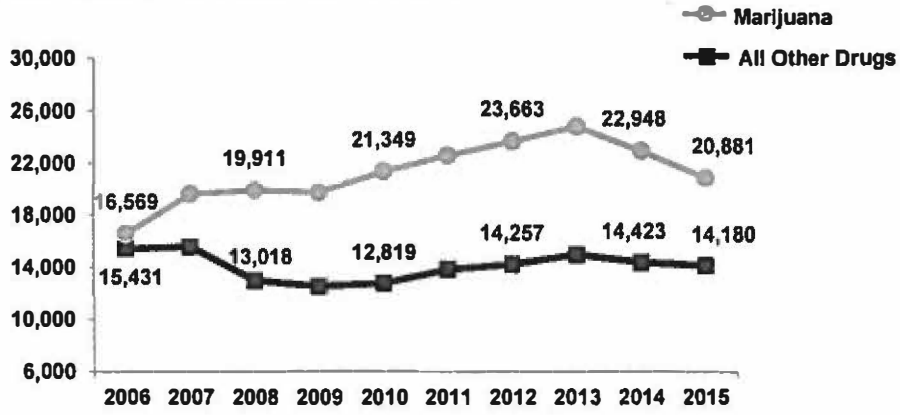


Property index crimes are burglary, larceny, and motor vehicle theft.

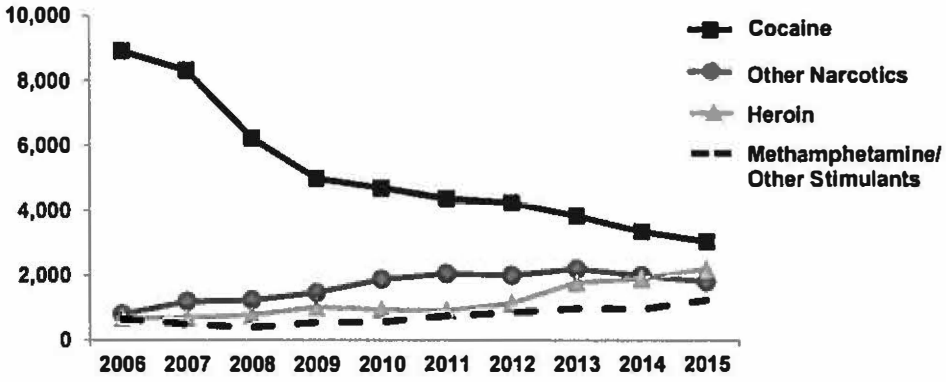
Overall, the number of adults arrested for drug offenses grew from the early 2000s through 2007. In 2008 and 2009, Virginia experienced a decline in the number of drug arrests. These decreases were largely attributable to substantial reductions in persons arrested for cocaine offenses. Federal data suggest reduced availability of cocaine in the United States during that time. Law enforcement efforts (e.g., seizures, crop eradication, and border security) and the drug war in Mexico appear to have impacted the ability of traffickers to deliver drugs to the U.S. During 2010 through 2013, however, the rate of decline in cocaine arrests slowed and the total number of drug arrests rose. Much of the increase during this period was associated with larger numbers of marijuana arrests (Figure 5 upper panel). The vast majority of marijuana arrests are for misdemeanor-level offenses for which an offender could not receive a prison sentence unless also convicted of a felony. In contrast, many of the arrests involving drugs other than marijuana are for felony-level offenses. For example, possession of cocaine, heroin, methamphetamine or other Schedule I or II drug is a Class 5 felony in Virginia. While cocaine arrests continued to fall, arrests for other Schedule I or II drugs increased during 2010-2013 (Figure 5 lower panel). Since 2013, drug arrests have decreased for many drug types, while heroin arrests continue to rise steadily. In 2015, arrests dropped for all drugs except heroin and methamphetamine/other stimulants.

Figure 5
Number of Adult Arrests for Drug Crimes in Virginia (by Calendar Year)

Total Drug Arrests: Marijuana versus All Other Drugs



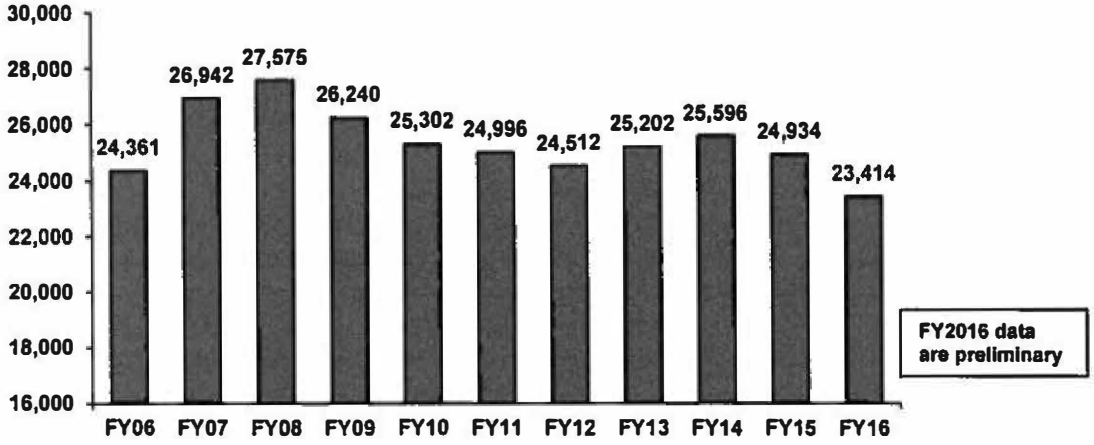
Arrests for Cocaine, Heroin, Other Narcotics & Methamphetamine/Other Stimulants



Other Narcotics include opiates other than heroin, along with morphine and other drugs that dull the senses and may become addictive after prolonged use.

Offenders convicted of felonies are sentenced in Virginia's circuit courts. According to the Virginia Criminal Sentencing Commission, the number of felony sentencing events declined after FY2008, which contributed to the downturn observed in commitments to DOC. After peaking in FY2008, the number of felony sentencing events fell each year through FY2012 (Figure 6). In contrast, felony sentencing events increased by 2.8% in FY2013, which was followed by a 1.6% increase in FY2014. These increases in felony sentencing events correspond with the higher number of SR NCCs recorded during those years. Felony sentencing events fell in FY2015, as did SR NCCs to DOC. While FY2016 new commitment data are not available from DOC, preliminary data from the Sentencing Commission suggest felony sentencing events will likely decline in FY2016 (reflecting the decrease in adult arrests recorded in 2014 and 2015).

Figure 6
Felony Sentencing Events in Circuit Court

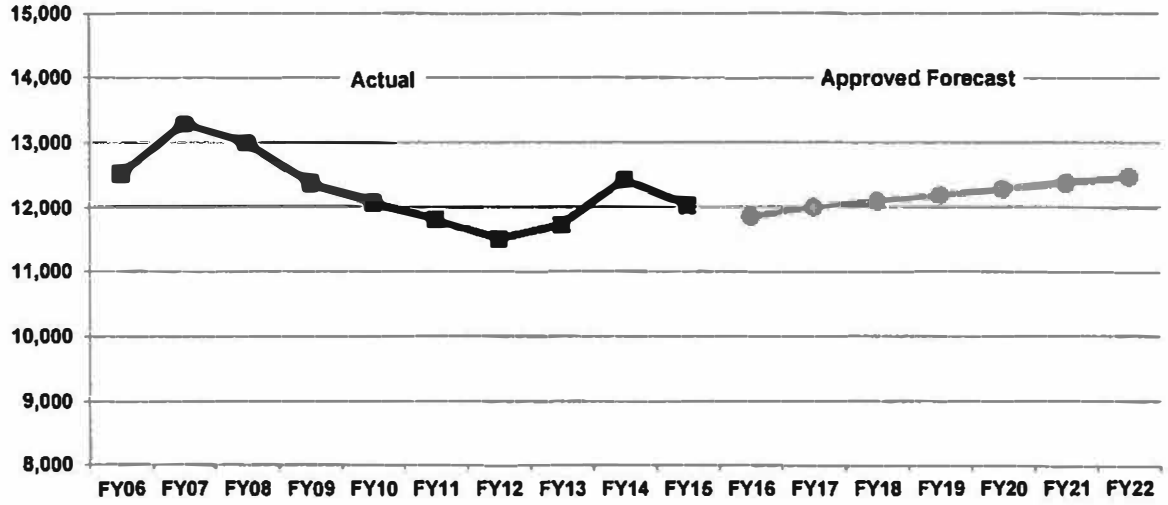


New Commitment Forecast

As noted previously, the number of SR NCC sentenced each year is a critical factor affecting population growth. To aid in the development of the population forecast, analysts first develop a projection of future SR NCC. This forecast is the total of six separate based on gender and the type of offense for which the offender sentenced. Generating commitment forecasts by gender and offense type can account for differences in short and long-term trends across categories. New commitment forecasts are developed using statistical time-series forecasting techniques. These are described in the *Forecasting Methodologies* section of this report.

The SR NCC forecast approved by the Secretary's Policy Committee expects the decline seen in FY2015 will continue through FY2016 before increasing less than one percent per year throughout the forecast horizon (Figure 7). The 2016 SR NCC forecast is lower than the forecast approved last year by an average of 717 (5.6%) per year for the five years that the two forecasts overlap.

Figure 7
Forecast of State-Responsible New Commitments



Actual:	Year	Commitments	Change
	FY09	12,371	-4.8%
	FY10	12,070	-2.4%
	FY11	11,815	-2.1%
	FY12	11,507	-2.6%
	FY13	11,731	1.9%
	FY14	12,428	5.9%
	FY15	12,030	-3.2%
		Avg. change	-1.0%

Forecast:	Year	Commitments	Change
	FY16	11,848	-1.5%
	FY17	11,999	1.3%
	FY18	12,094	0.8%
	FY19	12,180	0.8%
	FY20	12,283	0.8%
	FY21	12,378	0.8%
	FY22	12,473	0.8%
		Avg. change	0.5%

Assumptions for Department of Corrections' Simulation Model

DOC utilizes a computer simulation model to develop its forecast of the adult state-responsible confined population. A description of simulation modeling can be found in the *Forecasting Methodologies* section of this report. Use of simulation forecasting requires several assumptions regarding commitments and releases. The important assumptions incorporated into DOC's simulation model include those listed below.

- The number of future commitments is based on the new commitment forecast approved by the Policy Committee (see above);
- Future commitments will have the same characteristics (e.g., gender, offense type, sentence length) as recent commitments to the Department;
  - For male commitments, characteristics of the FY2014 SR NCC were used for the simulation model; this is further back in time than data used for forecasts in prior years due to a change in court order processing time procedures, meaning

sentence information for longer sentenced offenders in the FY2015 SR NCC was preliminary and not sufficiently mature to use in the forecast model.

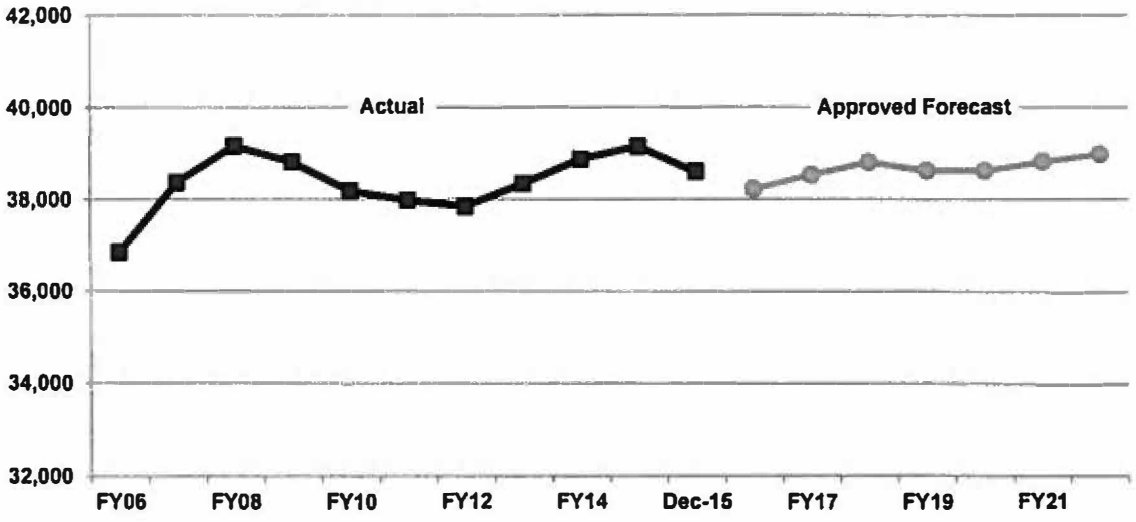
- For female new commitments, two years of data are typically used because of the smaller number of female commitments and the variability of the data. Characteristics of the FY2013-FY2014 female SR NCC were used for the simulation model; this is further back in time than data used for forecasts in prior years due to a change in court order processing time procedures, meaning sentence information for longer sentenced offenders in the FY2015 SR NCC was preliminary and not sufficiently mature to use in the forecast model.

- Future parole violator admissions are projected based on the trend observed during the most recent three years of available data (i.e., the average annual change over the last three fiscal years is applied for each year of the forecast horizon);
- Due to declining numbers, characteristics of parole violators, such as length of stay, are based on analysis of five years of data;
- For truth-in-sentencing/no-parole offenders, release dates are computed based on the sentence and the rate at which offenders earn sentence credits;
- For discretionary parole releases, parole grant rates by gender and crime type are based on the most recent year of available data (since release rates have been declining over time);
- For parole-eligible confined offenders not released by the model to discretionary parole, the release date is assumed to be the offender's mandatory parole release date;
- For indeterminate sentences to DOC's youthful offender program, expected length-of-stay is assumed to be 45.2 months (based on releases of these offenders in FY2016);
- To account for offenders who die in custody, three-year average rates are applied (for male confined offenders these rates are disaggregated by race and age groups);
- Offenders with sentences of life or death, and offenders given sentences pursuant to § 19.2-297.1 (three-time loser provision) will remain confined throughout forecast horizon and, based on the extremely small numbers sentenced to death since FY2009, no new offenders will enter death row during the six-year forecast period; and
- The proportion of offenders who exit the state-responsible population in other ways (e.g., pardon), and their associated length-of-stay, is based the most recent 12 months of available data.

Forecast of the Adult State-Responsible Confined Population

The Secretary's Policy Committee examined the SR population forecasts produced by the DOC simulation model and the DPB time series model (see the *Forecasting Methodologies* section of this report for a description of these techniques). The Policy Committee approved DOC's projection forecast for both the male and female SR offenders. Based upon the approved male and female forecasts, the total offender population is projected to increase by 580 (1.5%) between the end of FY2016 and the end of FY2018 (Figure 8). After a decline of 0.5% through FY2020, the population is expected to begin growing again at a rate of 0.4% to 0.5% annually. By the end of FY2022, the number of state-responsible confined offenders is expected to reach 38,977.

Figure 8
Adult State-Responsible Confined Population Forecast (for June 30 of each year)



Actual:	Year	Population	Change
	FY10	38,178	-1.6%
	FY11	37,983	-0.5%
	FY12	37,849	-0.4%
	FY13	38,339	1.3%
	FY14	38,871	1.4%
	FY15	39,146	0.7%
	Dec-15	38,599	-1.4%
		Avg. change	-0.1%

Forecast:	Year	Population	Change
	FY16	38,224	-1.0% →
	FY17	38,529	0.8%
	FY18	38,804	0.7%
	FY19	38,619	-0.5%
	FY20	38,615	0.0%
	FY21	38,817	0.5%
	FY22	38,977	0.4%
		Avg. change	0.1%

The FY2016 population change reflects change from December 15, 2015 to June 30, 2016.

The 2016 SR population forecast is lower than the forecast presented to the Governor and General Assembly last year (Figure 9). This is primarily driven by the forecast of SR NCC, which calls for slow growth of less than one percent per year throughout the forecast horizon.

Figure 9
Comparison of 2015 and 2016 Forecasts of the Adult State-Responsible Confined Population

Year	2015 Forecast	2016 Forecast
FY2016	38,840	38,224
FY2017	39,646	38,529
FY2018	39,824	38,804
FY2019	39,338	38,619
FY2020	39,554	38,615
FY2021	39,702	38,817
FY2022		38,977

Figures represent the population on June 30 of each year.

The SR population forecast is disaggregated by gender below (Figure 10). Between FY2010 and FY2015, the number of females in the SR population grew by 17.1%, compared to a 0.3% increase in the number of SR males during that same time period. Based on the approved forecast, the females will continue to grow faster than their male counterparts. During FY2017 through FY2022, the male population is expected to grow at an average rate of 0.2% annually, compared to the 2.1% average annual growth for the female population.

Figure 10
Adult State-Responsible Confined Population by Gender (for June 30 of each year)

Year	Males	Change
FY17	35,179	0.4%
FY18	35,371	0.6%
FY19	35,132	-0.7%
FY20	35,129	-0.0%
FY21	35,256	0.4%
FY22	35,391	0.4%

Projected average growth FY2017 – FY2022: 0.2%

Year	Females	Change
FY17	3,350	5.4%
FY18	3,433	2.5%
FY19	3,487	1.6%
FY20	3,486	-0.0%
FY21	3,561	2.2%
FY22	3,586	0.7%

Projected average growth FY2017 – FY2022: 2.1%

As required by Item 383 of Chapter 780 of the 2016 Acts of Assembly, the forecast has been disaggregated to identify the number of probation violators within the overall population who may be appropriate for punishment via alternative sanctions. By the end of FY2022, it is projected that the state-responsible population will include 1,744 technical probation violators (Figure 11 below). Technical violators are offenders who violated the rules of probation but have not been convicted of a new crime. This forecast is similar to the forecast presented last year. However, the forecast should be considered a maximum, as DOC will continue to analyze this subpopulation. As the criminal history repository is updated with new conviction information, the proportion of violators identified as technical violators (i.e., those with no new convictions) may decrease.

Based on previous study, DOC has estimated that 53% of technical violators with a state-responsible sentence may be suitable for alternative sanctions such as its detention and diversion center programs. DOC concluded that approximately 47% of technical violators entering DOC are likely not good candidates for such alternatives due to convictions for violent offenses (22%), mental health issues (15%), or medical conditions (10%).

Figure 11
Technical Probation Violator Population Forecast

Year	Forecast
FY17	1,732
FY18	1,719
FY19	1,723
FY20	1,733
FY21	1,738
FY22	1,744

The Technical Probation Violator forecast is a subgroup of, and not in addition to, the State-Responsible Confined Offender Forecast.

Adult Local-Responsible Jail Population

The adult local-responsible jail population is defined as the number of persons confined in local and regional jails across the Commonwealth, excluding state and federal inmates and ordinance violators. Because jail populations fluctuate daily (with higher numbers on weekends) and seasonally (with peaks during late summer and early fall and lows during the winter months), the average daily population traditionally is used for reporting and forecasting purposes.

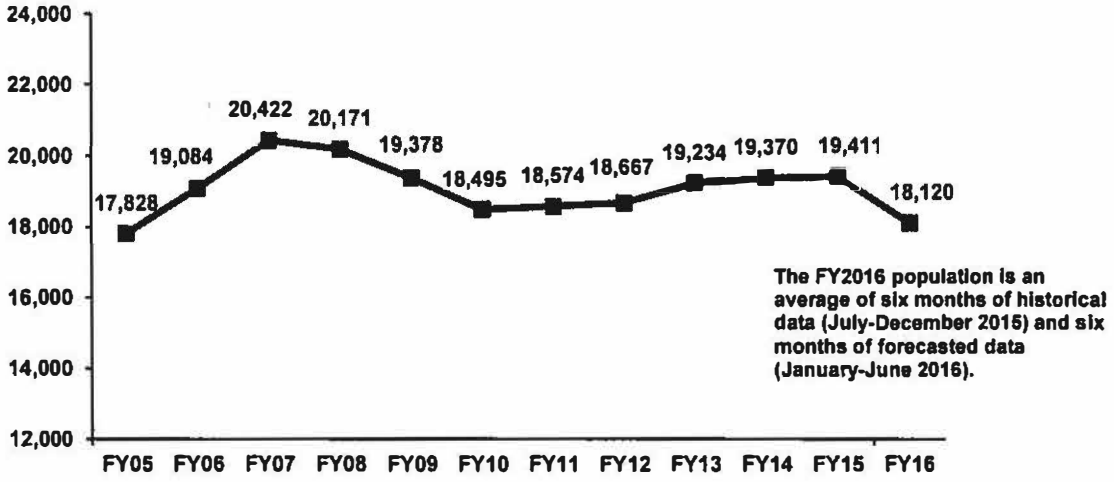
A new jail data system, known as LIDS-CORIS, was implemented in June 2013. Improvements in the LIDS-CORIS system and support programming, along with corrections and updates entered into the system by jail staff, led to subsequent updates of the data in June 2015 and September 2016. Therefore, the figures in this report are not comparable to those provided in previous offender forecasting reports.

Population Change

Following substantial growth in FY2006 and FY2007, the average local-responsible jail population declined each succeeding year through FY2010 (Figure 12). The population rose by approximately one-half of 1% in FY2011 and FY2012, and then increased by 3% in FY2013, followed by less than 1% increase in FY2014. In FY2015, the local-responsible jail population fell by a little over 1%. However, this FY2015 drop has only recently been identified, as improvements to the jail data showed that a portion of inmates identified as local-responsible were actually state-responsible. This correction to the FY2015 has brought to light a previously undetected characteristic of the LIDS-CORIS data system. As jails receive new information, changes are made to the database that can result in significantly different population numbers. It appears that the data entered into LIDS-CORIS may not be ready for analysis until after a few months of adjustment. For this year's forecast, analysts assumed that data for the most recent six months are not sufficiently mature. Therefore, the FY2016 population data in Figure 12 includes six months of historical data (July to December 2015) and six months of forecasted data (January to June 2016). The combined historical-projected FY2016 population of 18,120 is more than 5% below the FY2015 population average.

During calendar year 2015, the seasonal pattern of the data varied somewhat from prior years. On average, from 2006 to 2014, the average daily population (ADP) typically rose in February, March, and April. In 2015, the ADP dropped in each of those months. The same thing again occurred in June and July. While it is not unusual for one of those months to have negative growth, in no year between 2005 and 2014 did more than one have negative growth. From August through December 2015, the seasonal fluctuations were consistent with past trends. However, the unusual drop in other months reduced the overall level of the ADP. This impacted the forecast because it represented a lower "jumping off" point for the projection models than would have been expected.

Figure 12
Adult Local-Responsible Jail Population (Fiscal Year Average)



Based on improvements in the LIDS-CORIS data system and associated computer programming, along with corrections and updates entered into the system by jail staff, the Compensation Board has released revised figures for the number of local-responsible offenders held in jails. Figures have been updated accordingly and, therefore, are not comparable to those provided in previous offender forecasting reports.

Factors Affecting the Population

Numerous factors have an impact on the local-responsible jail population, such as arrests, bail release decisions, case processing time in the courts (which affects the time served awaiting trial), and lengths-of-stay for convicted offenders serving a sentence.

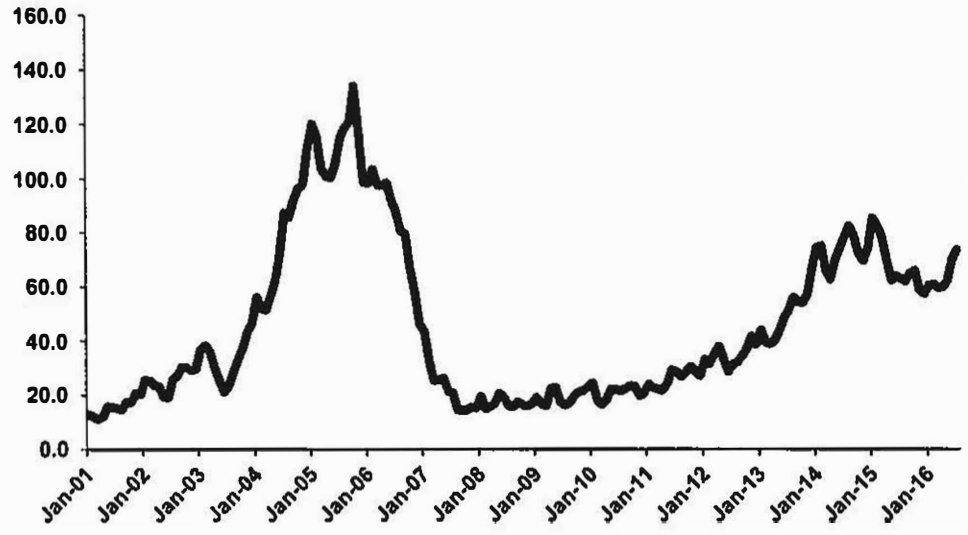
Despite reductions in the crime rate (crimes per 100,000 population) since the early 1990s, the total number of adult arrests in Virginia (based on arrests reported to the Federal Bureau of Investigation) had been climbing from 2007 through 2013. In 2014 and 2015, the number of adults arrested declined across all three offense categories (violent, property and drug). Shifts in arrest patterns, both in number and types of arrests, can have a significant impact on the local-responsible population, including individuals in the awaiting trial and the number of sentenced offenders in jail. The number of adults arrested for violent index crimes (murder/non-negligent manslaughter, forcible rape, robbery and aggravated assault) has fluctuated from year to year but has not exhibited an overall trend. Most recently, the number of adults arrested for violent offenses decreased by 6.3% from 2014 to 2015. The number of adults arrested for property offenses (burglary, larceny and motor vehicle theft) grew between 2006 and 2011, before leveling off during 2012 and 2013 (Figure 5). The number of these arrests declined by 4.9% in 2014, and by 5.7% in 2015. The number of arrests for drug offenses increased more than 43% between 2002 and 2007. In 2008 and 2009, Virginia experienced a decline in drug arrests. Data reveal that this dramatic shift was driven by a steep drop in arrests for cocaine offenses, which have fallen by 62% since 2006. Federal data suggest reduced availability of cocaine in the U.S. today compared to 2006. However, the rate of decline in cocaine arrests has slowed. The total number of drug arrests has been rising since 2010 due to increases in arrests for marijuana, heroin and other drugs. For example, between 2009 and 2013, arrests for heroin grew by 76%, while arrests for methamphetamine and other stimulants

drugs together increased by 83%. Marijuana arrests have significantly increased between 2006 and 2013, but decreased in 2014 and 2015. In 2015, total adult drug arrests dropped 6.1%.

One factor that almost certainly has had an impact on the awaiting trial population in the last ten years is the backlog of drug cases awaiting analysis at the Department of Forensic Science (DFS). Beginning in 2003, the average number of days to complete a drug analysis rose sharply (Figure 13). The backlog is suspected to have resulted in delays in criminal case processing for those offenders charged with drug crimes. The effect of these delays could be seen in the dramatic rise from FY2004 through FY2007 in the number of persons in jail awaiting trial and those in jail with additional charges pending. Once given additional resources, DFS was able to swiftly reduce the backlog of drug cases. With analysis for thousands of drug cases completed, a large number of open court cases could be concluded and the offenders convicted and sentenced. Consequently, the number of offenders in jail awaiting trial declined and several categories of sentenced offenders increased through FY2008.

Since FY2013, the average number of days to complete a drug analysis has been increasing and the drug case backlog has been rising once again. DFS has indicated that there are several reasons for this. The number of non-marijuana drug samples submitted to the Department has been increasing recently and many of the samples involve chemically complex drugs that take longer to analyze. Moreover, the 2009 U.S. Supreme Court decision in Melendez-Diaz has had a long-term impact on the agency. In the Melendez-Diaz case, the Supreme Court ruled that a forensic analyst generally must testify in person, unless waived by the defendant. This has required DFS analysts to spend additional time in court, decreasing time spent in the lab. Finally, when DFS hires new analysts, the training and certification process takes many months; thus, new analysts are not available to take on the more complex types of cases for quite some time.

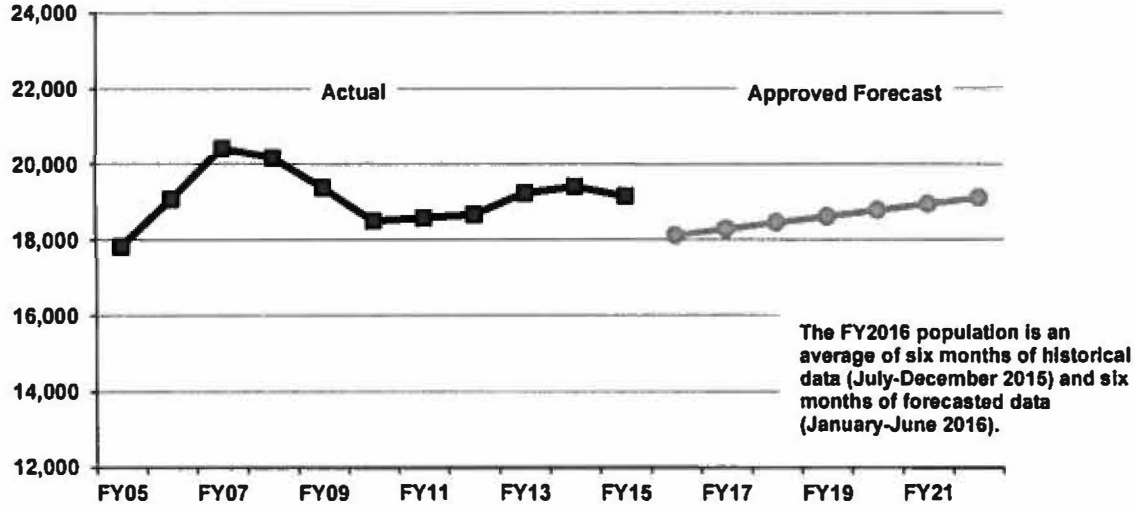
Figure 13
Department of Forensic Science
Average Days to Complete Drug Analysis



Forecast of the Adult Local-Responsible Jail Population

Forecasts of the local-responsible jail population were produced by the Department of Criminal Justice Services (DCJS) and DPB. Both agencies used time series techniques to forecast this population (time series forecasting techniques are described in the *Forecasting Methodologies* section of this report). Both agencies used December 2015 as the last month of historical population data, to account for time needed for the LIDS-CORIS data to mature. Both models fit the historical data well. After carefully scrutinizing both proposed local-responsible jail forecasts, the Technical Advisory Committee and the Work Group recommended that the two models be averaged together. The Policy Committee approved this forecast. The local-responsible jail population is projected to decline by 5.4% from an average of 19,152 in FY2015 (the last complete fiscal year of historical data) to an average of 18,120 in FY2016 (using six months of historical data and six months of forecasted data). Beginning in FY2017, the population is projected to increase slowly, at less than 1% per year, to an average of 19,120 in FY2022 (Figure 14).

Figure 14
Local-Responsible Jail Population Forecast (Fiscal Year Average)



Actual:	Year	Population	Change
	FY10	18,495	-4.6%
	FY11	18,577	0.4%
	FY12	18,667	0.5%
	FY13	19,235	3.0%
	FY14	19,407	0.9%
	FY15	19,152	-1.3%
		Avg. change	-0.2%

Forecast:	Year	Population	Change
	FY16	18,120	-5.4%
	FY17	18,285	0.9%
	FY18	18,456	0.9%
	FY19	18,615	0.9%
	FY20	18,784	0.9%
	FY21	18,951	0.9%
	FY22	19,120	0.9%
		Avg. change	0.9%

Figures represent the average population for each fiscal year.

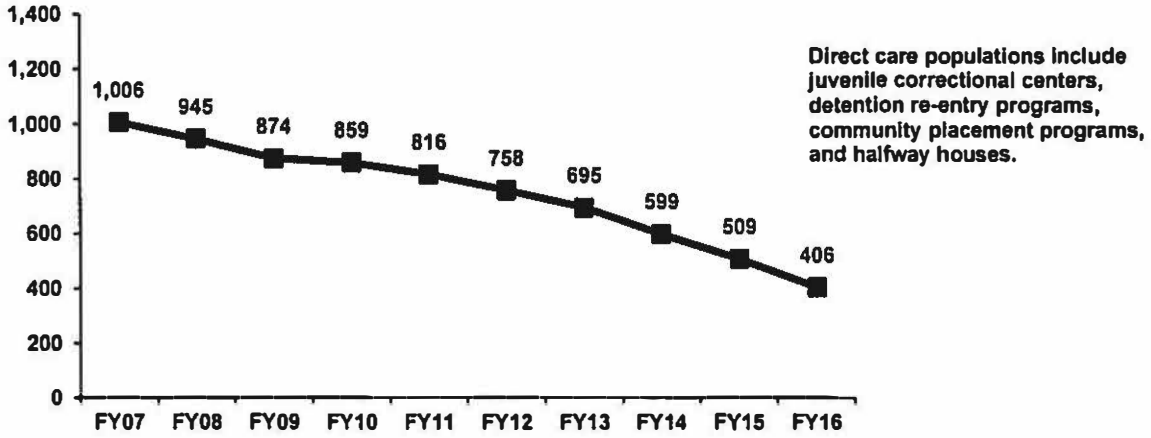
Juvenile Direct Care Population

Juvenile state-responsible offenders are committed by a court to Virginia's Department of Juvenile Justice (DJJ). They are housed in juvenile correctional facilities around the state or they are placed in re-entry, community placement, or halfway house programs[2]; collectively, these make up DJJ's direct care population. Virginia's juvenile justice system differs substantially from the adult system. While Virginia has moved to a more determinate sentencing system for its adult offenders, dispositions involving commitment in the juvenile justice system remain largely indeterminate. Approximately 78% of commitment orders to DJJ in FY2016 were for an indeterminate period of confinement.[3] This means that DJJ, rather than a judge, determines the length of the juvenile's commitment which is governed by guidelines approved by the Board of Juvenile Justice. The courts commit a smaller percentage of juvenile offenders to DJJ with a determinate, or fixed length, sentence; a juvenile given a determinate commitment may be reviewed by the judge at a later date and may be released at the judge's discretion prior to serving the entire term. In Virginia, juveniles tried and convicted as adults in circuit court may also be committed to DJJ, at the judge's discretion.

Population Change

The juvenile direct care population has been declining since FY2000. The population fell from an average of 758 juveniles in FY2012 to an average of 695 juveniles in FY2013, a decrease of 8.3% (Figure 15). From FY2014 to FY2016, the downward trend accelerated and the population decreased by 13.9%, 15.0% and 20.2%, respectively. For FY2016, the average daily population was 406 juveniles.

Figure 15
Juvenile Direct Care Population (Fiscal Year Average)



[2] DJJ operated halfway houses for the direct care population beginning in July 2012. Due to budget reductions, the halfway houses were closed in January 2014.

[3] In FY2016, 78% of the commitment orders for DJJ received indeterminate commitments. However, juvenile may have more than one commitment order. In FY2016, 76% of juveniles committed to the DJJ received indeterminate commitments only (this excludes any juveniles that had indeterminate and determinate sentences or indeterminate and blended sentences; it is strictly an indeterminate commitment orders).

Accuracy of the Forecast Adopted in 2015

The juvenile direct care population forecast adopted in 2015 was higher than the actual population during FY2016 (Figure 16). The previous forecast had projected a decline in the population; however, the population decreased more than had been anticipated based on the forecast. For FY2016, the average daily population was 23 juveniles (or 5.7%) lower than the forecast.

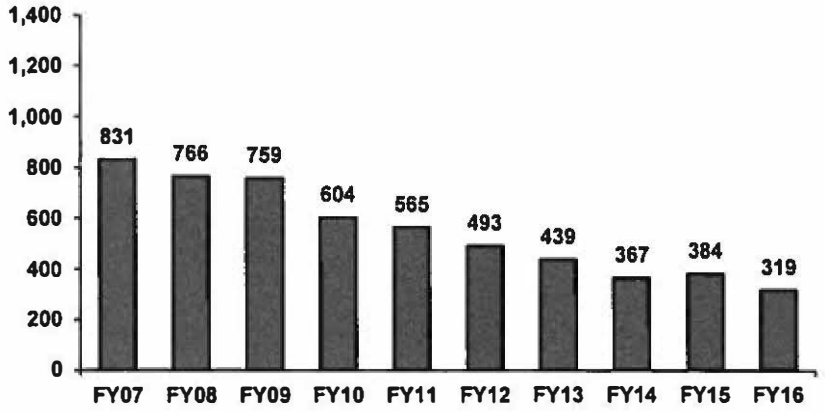
Figure 16
Accuracy of the Juvenile Correctional Center/Direct Care Population Forecast Adopted in 2015

	Actual	Projected	Difference	Percent
FY2016 Average Population	406	429	23	5.7%

Factors Affecting the Population

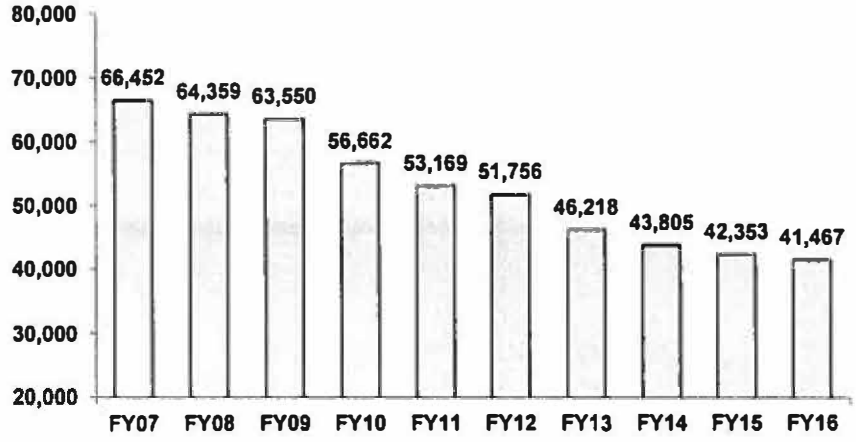
The number of juveniles in direct care population has been declining. The decline has largely been driven by a decrease in the number of admissions (Figure 17). There have been several statutory and policy changes related to juvenile offenders. The General Assembly changed the minimum criteria for a juvenile to be committed to DJJ (from a felony or two Class 1 misdemeanor adjudications to a felony or four Class 1 misdemeanor adjudications) beginning July 1, 2000. In 2002, the General Assembly required DJJ to establish objective guidelines for use by intake officers when deciding whether to place a juvenile in a juvenile detention home at intake. In 2004, DJJ successfully implemented, statewide, the use of the Detention Assessment Instrument (DAI), a validated detention screening tool. In 2004, the General Assembly afforded juveniles the right to counsel in their initial detention hearing. The legislation also provided that, when a juvenile is not detained, but is alleged to have committed an offense that would be a felony if committed by an adult, that juvenile may waive his right to an attorney only after he or she consults with an attorney. Additionally, in 2004 and 2009, the *Code of Virginia* was amended to expand the use of diversion by intake officers by allowing intake officers greater discretion to divert lesser offenses such as any misdemeanors, child in need of services, and child in need of supervision offenses from going to court. These policy changes, alone, however, cannot explain the trend in admissions that persisted through FY2014. Between FY2007 and FY2014, yearly admissions to DJJ dropped by 56%. In FY2015, the number of admissions increased for the first time in 15 years. The number of admissions dropped again in FY 2016 from 384 to 319, a 17% decrease.

Figure 17
Admissions to the Department of Juvenile Justice



The state's court services units serve as the point of entry into the juvenile justice system. A "juvenile intake" occurs when a juvenile is brought before a court services unit officer for one or more alleged law violations. DJJ data reveal that the total number of juvenile intake cases has been falling over the last decade (Figure 18). Between FY2007 and FY2016, juvenile intake cases at court services units declined by nearly 38%.

Figure 18
Juvenile Intake Cases at Court Services Units



DJJ procedures and practices may have affected intakes and admissions. DJJ has implemented approaches that include the use of validated, structured decision making tools in numerous aspects of community and facility operations. Critical decision points include the initial decision to detain, the assignment to various levels of community probation or parole supervision, and the classification of committed juveniles within the facility setting. Tools include the DAI, described above, a court services unit risk assessment instrument, and the juvenile correction center classification instrument. The DAI is designed to enhance consistency and equity in the detention decisions and to ensure that only those juveniles who represent a serious threat to public safety and those most at risk for failing to appear in court are held in secure pre-trial detention. In

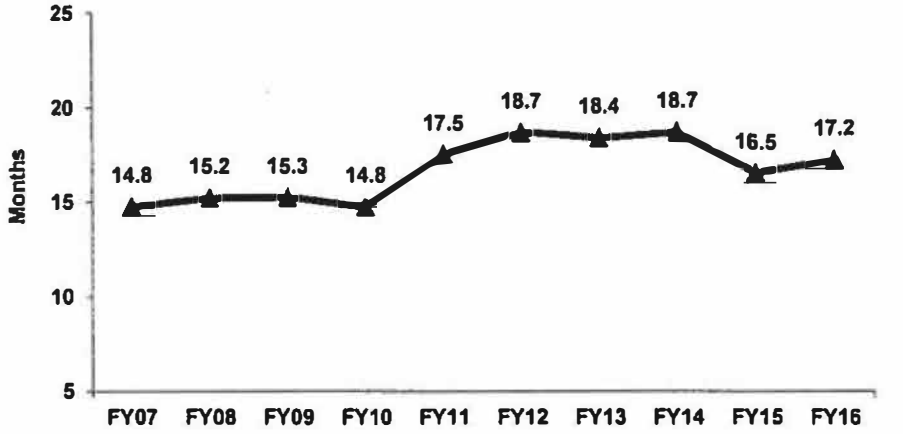
2008, DJJ began the process of implementing an enhanced risk/needs assessment tool, called the Youth Assessment & Screening Instrument (YASI), in the court services units. Finally, DJJ has implemented procedures and practices to address juvenile probation and parole violators. The goal is to enhance consistency and equity in the handling of violators and to ensure that only those juveniles who represent a serious threat to public safety are confined.

The composition of commitments to DJJ has continued to change as well. Many less serious juvenile offenders are no longer committed to DJJ. Thus, juveniles with longer commitment lengths of stay now make up a larger share of those received by DJJ. There are three categories of juvenile commitments: indeterminate commitments, determinate commitments, and blended sentences. For a juvenile with an indeterminate commitment, DJJ determines how long the juvenile will remain in direct care, up to his or her statutory release date which is 36 continuous months or the juvenile's 21st birthday, whichever occurs first, for most offenses. These juveniles are assigned a length-of-stay range based on the Board of Juvenile Justice's guidelines. The guidelines in use through October 2015 considered the juvenile's current committing offenses, prior offenses, and chronicity of prior delinquency or criminal offense record to project the estimated length of stay. In FY2015, the most common assigned length-of-stay categories for court-ordered indeterminate commitments were 12-18 months. Failure to complete a mandatory or recommended treatment program, such as substance abuse or sex offender treatment, or the commission of institutional offenses, could prolong the actual length of stay beyond the assigned range. The guidelines used since October 2015 consider the juvenile's current committing offenses and risk for reoffending, as determined by a YASI assessment, to project the estimated stay. The YASI includes information on the juvenile's contacts with the criminal justice system. The highest range of the new length-of-stay guidelines is 9 to 15 months, compared to a high-end range of 24 to 36 months under the previous length-of-stay guidelines. It is expected that the new length-of-stay guidelines will result in shorter lengths-of-stay for most juveniles committed to DJJ. In FY2016, the most common assigned length-of-stay category for court-ordered indeterminate commitments was 6-9 months. However, a juvenile may remain in direct care after the projected range and until his or her statutory release date through a series of case-specific reviews of progress in treatment and behavior in the facilities.

For a juvenile given a determinate commitment to DJJ, the judge sets the commitment period to be served (up to age 21), although the juvenile can be released at the judge's discretion prior to serving the entire term. Nonetheless, determinately-committed juveniles remain in DJJ facilities longer, on average, than juveniles with indeterminate commitments to DJJ. The average assigned-of-stay for a court-ordered determinate sentence to DJJ is approximately 38 to 42 months. Finally, a juvenile given a blended sentence from a circuit court after transfer from juvenile court for trial as an adult can serve up to age 21 at a DJJ facility before being transferred to DOC to serve the remainder of his term in an adult facility. One juvenile may be subject to more than one commitment order and type of commitment order. Compared to FY2004, the percentage of commitment orders for determinate commitments and blended sentences now make up a larger share of admissions. Together, orders for these two commitment types increased from roughly 10% of the total in FY2004 to as high as 22% in FY2016.

Along with admissions, the actual lengths-of-stay are a critical factor affecting the direct care population. In FY2014, the average length-of-stay was 18.7 months, compared to 14.8 months in FY2007 (Figure 19). Average length-of-stay decreased to 16.5 months in FY2015. The drop in length-of-stay in FY2015 was the primary driver of the population decline during the year. Average length-of-stay increased slightly to 17.2 in FY2016.

Figure 19
Average Length-of-Stay in the Juvenile Direct Care Population (in months)

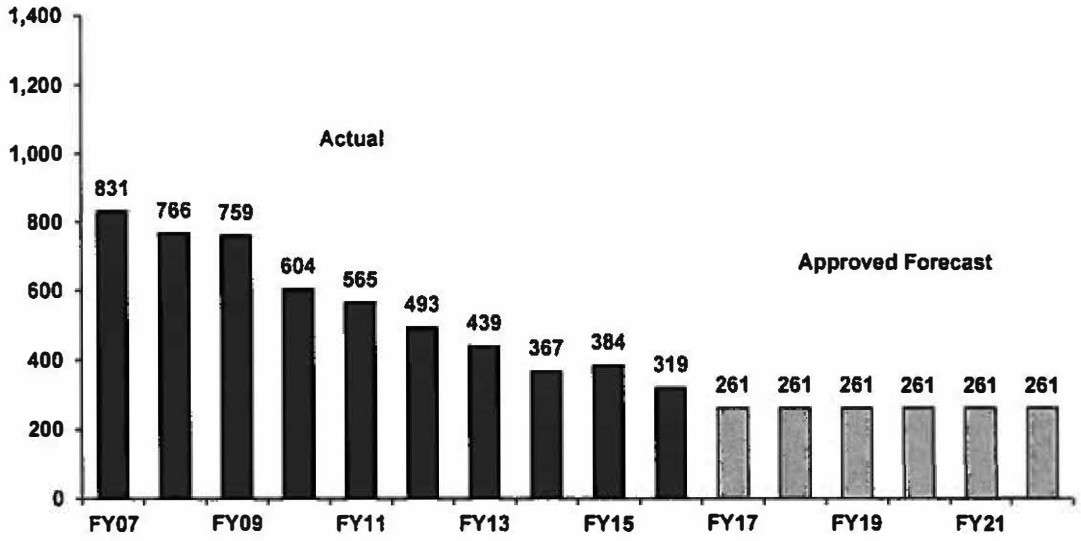


New Admissions Forecast

The admissions forecast is one of the key inputs into DJJ's simulation model. Given the long-term downward trend in juvenile admissions, statistical models based on historical data are not useful tools in projecting future admissions because the models will continue the downward trend to zero, which is not a realistic assumption for future admissions to DJJ. As in previous years, the Policy Committee concluded that the decrease in admissions will not continue indefinitely. In four of the last eight years, the Policy Committee elected not to use the statistical forecast of juvenile admissions and instead set a level admissions forecast equal to the number of actual admissions during the most recent fiscal year. In the other years, the Policy Committee utilized the statistical projection for the early years of the forecast horizon and then assumed a flat admissions forecast for the remaining years of the forecast period.

For this year's forecast, the Policy Committee approved the use of the DJJ admissions forecast for FY2017 and set a flat admissions forecast from FY2018 through FY2022 (Figure 20). Under this forecast, it is assumed that admissions will continue to fall through FY2017 and then will level off for the remainder of the forecast horizon.

Figure 20
Juvenile Direct Care Admissions Forecast



Assumptions for Department of Juvenile Justice's Simulation Model

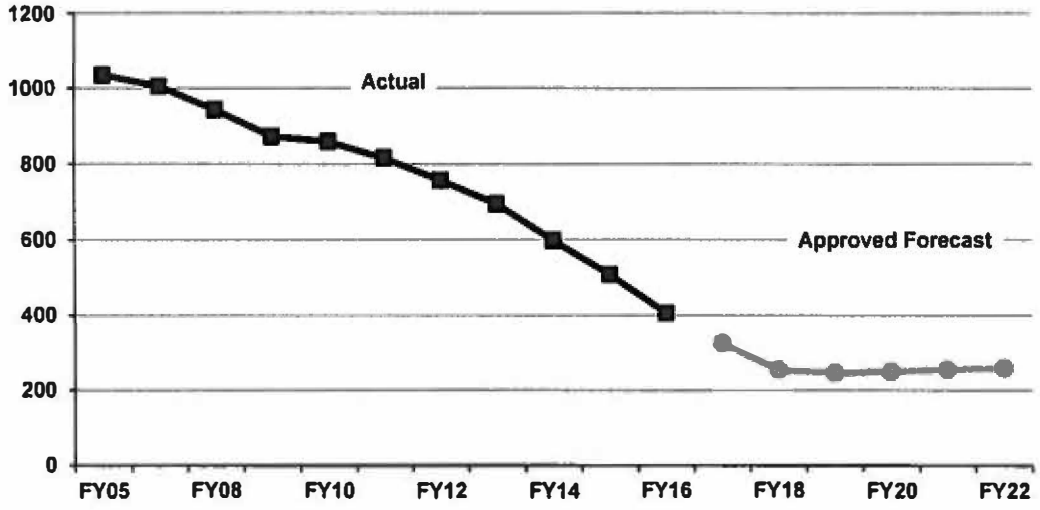
DJJ utilizes a computer simulation model to develop its forecast of the juvenile direct population. A description of simulation modeling can be found in the *Forecasting Methodologies* section of this report. Use of simulation forecasting requires several assumptions regarding commitments and releases. The following are the important assumptions incorporated into DJJ's simulation model:

- The number of future admissions will reflect the admissions forecast approved by the Policy Committee (see above);
- Future admissions will have the same characteristics (e.g., offenses, prior record adjudications, treatment assignment, institutional offenses, etc.) as admissions during FY2016;
- Juveniles given a determinate commitment or blended sentence will comprise the same percentage of admissions as they did during FY2016;
- Juveniles with indeterminate commitments will be assigned length-of-stay categories according to DJJ's new length-of-stay guidelines; based on FY2016 admissions characteristics, future admissions will be assigned to one of the new length-of-stay categories; and
- Because it is not known how long juveniles will actually serve under the new guidelines, DJJ examined historical data to determine how long juveniles in each length-of-stay category actually served under the previous guidelines, and applied that proportion to the juveniles assigned to the new length-of-stay categories.

Juvenile Direct Care Population Forecast

The Policy Committee examined the juvenile direct care population forecasts produced by the DJJ simulation model and the DPB time series model (see the *Forecasting Methodologies* section of this report for a description of these techniques). After reviewing both the DJJ and DPB population projections in detail, the Policy Committee approved the DJJ simulation model forecast. The approved forecast suggests that the population will continue to decline in the short term (Figure 21). The forecast projects a decrease through FY2018, when the population is expected to reach 253 juveniles. Beginning in FY2018, however, the population is expected to level off. This leveling can be attributed to the flat admissions forecast. By FY2022, the total juvenile correctional center/direct care population is projected to be 258. This forecast is roughly 50 juveniles lower than the forecast submitted to the Governor and General Assembly in 2015.

Figure 21
Juvenile Direct Care Population Forecast (Fiscal Year Average)



Actual:	Year	Population	Change
	FY11	816	-5.0%
	FY12	758	-7.1%
	FY13	695	-8.3%
	FY14	599	-13.9%
	FY15	509	-15.0%
	FY16	406	-20.2%
		Avg. change	-11.6%

Forecast:	Year	Population	Change
	FY17	325	-19.9%
	FY18	253	-22.2%
	FY19	245	-3.3%
	FY20	248	1.3%
	FY21	254	2.1%
	FY22	258	1.8%
		Avg. change	-6.7%

Figures represent the average population for each fiscal year.

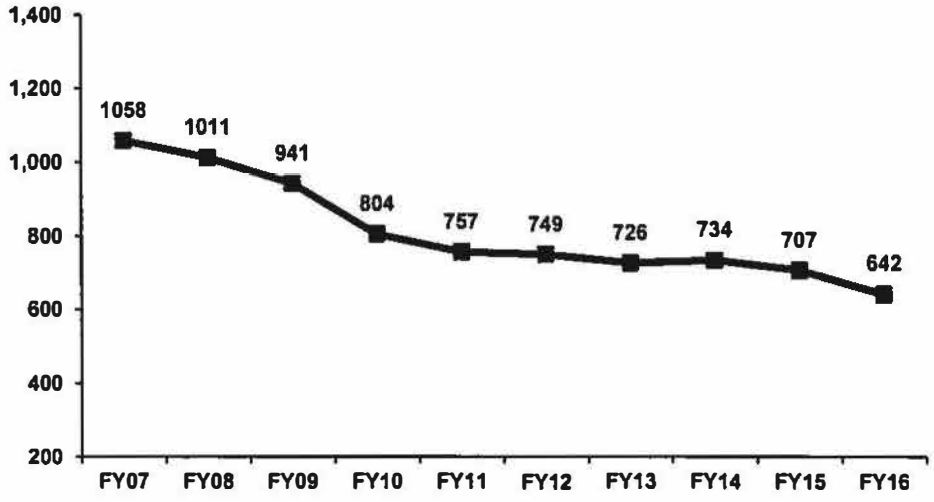
Juvenile Detention Home Population

Local governments or multi-jurisdictional commissions operate secure juvenile detention homes throughout the Commonwealth. The Board of Juvenile Justice promulgates regulations and the Director of the Department of Juvenile Justice is responsible for the certification of these facilities. To be eligible for pre-dispositional detention, there must be probable cause to establish that the juvenile committed a Class 1 misdemeanor or a felony offense. A judge may order a juvenile charged with a felony-level offense or a Class 1 misdemeanor to be held in detention pending adjudication, disposition, or placement. To be eligible for post-dispositional detention, the juvenile must be 14 years or older and been found to have committed a non-violent juvenile felony or Class 1 or Class 2 misdemeanor offense. A judge may order an adjudicated juvenile to be held in post-dispositional detention up to 30 days or, if the juvenile detention home operates a post-dispositional detention program, up to 6 months. Historically, the majority of the juvenile detention home population has been comprised of juveniles in pre-dispositional status.

Population Change

Overall, the juvenile detention home population declined by 39% between FY2007 and FY2016. The rate of decline slowed after FY2011 until FY 2015 but accelerated in FY2016 (Figure 22). In FY2016, the detention home population averaged 642 juveniles statewide. While individual facilities may be experiencing crowding, juvenile detention home capacity statewide has not been fully utilized in recent years.

Figure 22
Juvenile Detention Home Population (Fiscal Year Average)



Accuracy of the Forecast Adopted in 2015

The forecast of the juvenile detention home population adopted in 2015 was very accurate throughout FY2016. On average for the year, the forecast was only one juvenile (or 0.2%) higher than the actual population (Figure 23). The population had been projected to decrease from 707 in FY2015 to 643 in FY2016. The actual population declined by 9.1% during the fiscal year.

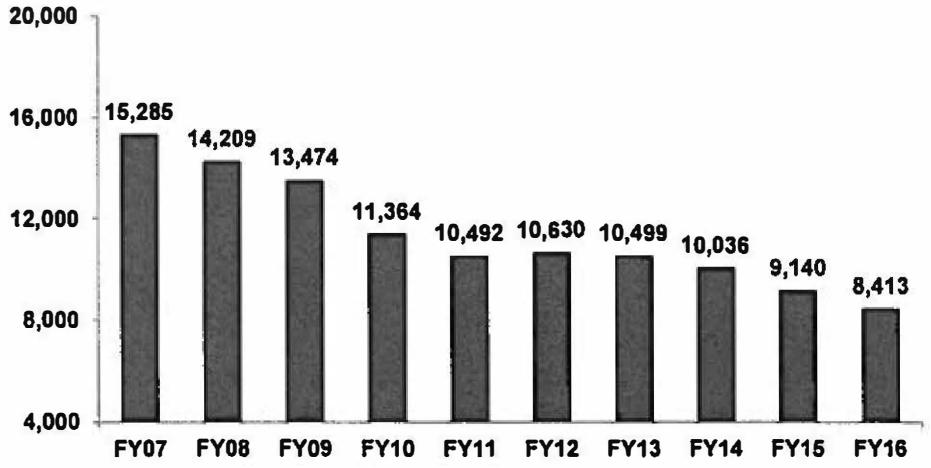
Figure 23
Accuracy of the Juvenile Detention Home Forecast Adopted in 2015

	Actual	Projected	Difference	Percent
FY2016 Average Population	642	643	1	0.2%

Factors Affecting the Population

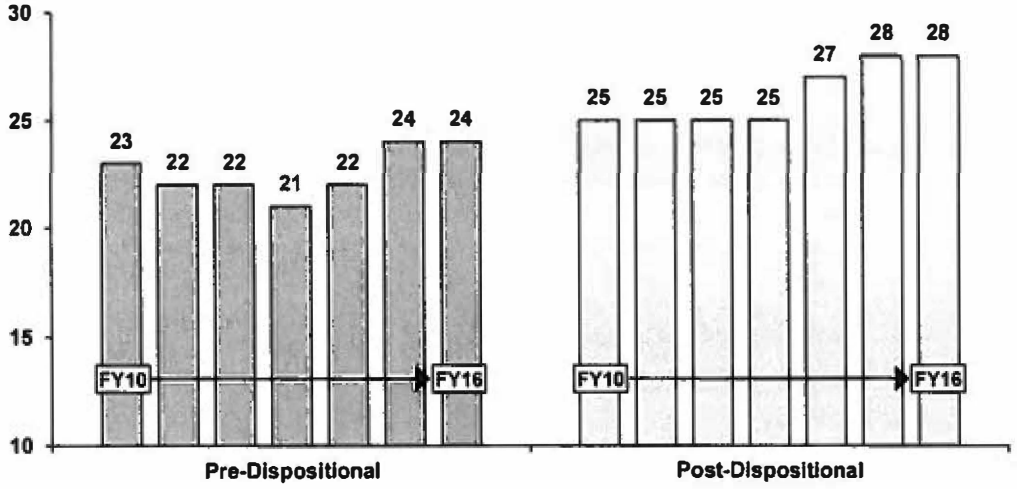
As described in the previous chapter, the number of juvenile intake cases at the state's court services units has declined significantly since FY2007. Reflecting this downward trend in intakes, detention home admissions (first-time detainments, excluding transfers) dropped 31.4% between FY2007 and FY2011 (Figure 24). After remaining relatively flat from FY2011 to FY2013, detainments dropped by 4.4% in FY2014 and by 8.9% in FY 2015. This was followed by an 8.0% decrease in detainments in FY2016.

Figure 24
Juvenile Detention Home Admissions – First-Time Detainments (excluding Transfers)



Shorter lengths-of-stay for a large share of those in juvenile detention homes was an important factor in reducing the population between FY2008 and FY2012, during which time the average length-of-stay for the pre-dispositional juveniles fell from 26 to 22 days (Figure 25). The next year, average pre-dispositional length-of-stay decreased to 21 days. Lengths-of-stay for juveniles placed in post-dispositional detention, who account for a smaller share of the population, remained at 24 or 25 days until FY2013. In FY2014, both pre-dispositional and post-dispositional length-of-stay increased. This increase in length-of-stay offsets the decrease in admissions and resulted in a small increase in the population, overall, for the FY2014. Lengths-of-stay for pre-dispositional and post-dispositional juveniles continued to increase in FY2015. The increase in the average length-of-stay in FY2015, however, was offset by a significant decrease in admissions to the juvenile detention homes, resulting in decline in the population for the year. The lengths-of-stay for pre-dispositional and post-dispositional juveniles remained level in FY2016.

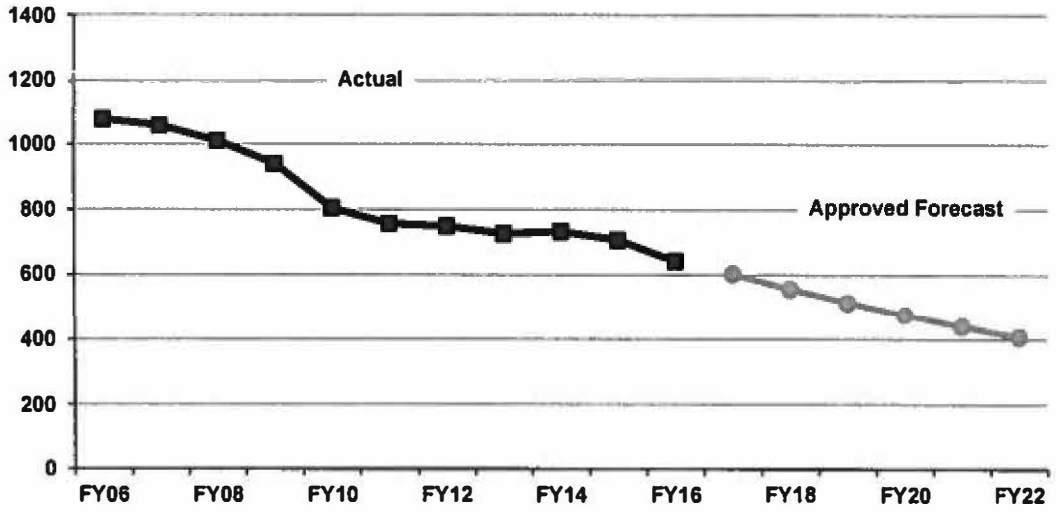
Figure 25
Average Length-of-Stay in Juvenile Detention Homes, FY2010-FY2016
(in days)



Juvenile Detention Home Population Forecast

Forecasts of the juvenile detention population were produced, one by DJJ and the other by DPB. Both agencies used time series techniques to forecast this population (time series forecasting techniques are described in the *Forecasting Methodologies* section of this report). After careful evaluation of both the DJJ and DPB projections, the Policy Committee approved the DJJ model as the official forecast of the juvenile detention home population. Under the approved forecast, the detention home population is expected to decline over the next six years by an average of 7.3% annually, reaching an average population of 408 in FY2022 (Figure 26).

Figure 26
Juvenile Detention Home Population Forecast (Fiscal Year Average)



Actual:	Year	Population	Change
	FY11	757	-5.9%
	FY12	749	-1.0%
	FY13	726	-3.1%
	FY14	734	1.0%
	FY15	707	-3.7%
	FY16	642	-9.1%
		Avg. change	-3.6%

Forecast:	Year	Population	Change
	FY17	603	-6.1%
	FY18	557	-7.5%
	FY19	516	-7.5%
	FY20	477	-7.5%
	FY21	441	-7.5%
	FY22	408	-7.6%
		Avg. change	-7.3%

Figures represent the average population for each fiscal year.

Appendices

Appendix A
Legislative Directive

Item 383 of Chapter 780 of the 2016 Acts of Assembly

Authority: Title 2.2, Chapter 2, Article 8, and § 2.2-201, Code of Virginia.

A. The Secretary of Public Safety and Homeland Security shall present revised state and local juvenile and state and local responsibility adult offender population forecasts to the Governor, the Chairmen of the House Appropriations and Senate Finance Committees, and the Chairmen of the House and Senate Courts of Justice Committees by October 15, 2016, for each fiscal year through FY 2022 and by October 15, 2017, for each fiscal year through FY 2023. The secretary shall ensure that the revised forecast for state-responsible adult offenders shall include an estimate of the number of probation violators included each year within the overall population forecast who may be appropriate for alternative sanctions.

B. The secretary shall continue to work with other secretaries to (i) develop services intended to improve the re-entry of offenders from prisons and jails to general society and (ii) enhance the coordination of service delivery to those offenders by all state agencies. The secretary shall provide a status report on actions taken to improve offender transitional and reentry services, as provided in § 2.2-221.1, Code of Virginia, including improvements to the preparation and provision for employment, treatment, and housing opportunities for those being released from incarceration. The report shall be provided to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees no later than November 15 of each year.

Appendix B
Committee and Work Group Members

2016 Policy Committee Members

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Robyn deSocio
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Compensation Board

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Virginia Department of Criminal Justice Services

John R. Kuplinski
Superintendent
Virginia Peninsula Regional Jail
Representing the Virginia Association of Regional Jails

The Honorable L. Scott Lingamfelter
Virginia House of Delegates –
House Appropriations Committee
(represented by Legislative Fiscal Analyst David Reynolds)

The Honorable Jennifer L. McClellan
Virginia House of Delegates –
House Courts of Justice Committee

Cyril W. Miller, Jr.
Director, Judicial Planning
Supreme Court of Virginia

The Honorable Gabriel Morgan
Sheriff, City of Newport News
Representing the Virginia Sheriff's Association

The Honorable Bryce E. Reeves
Senate of Virginia –
Senate Courts of Justice Committee

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Deputy Superintendent
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The Technical Advisory Committee would like to acknowledge the assistance of **Warren McGehee** and **Yan Jin** of the Virginia Department of Corrections.