

Correctional Population Forecast 2002-2012

A Study of the State's Prison Population

West Virginia Division of Criminal Justice Services
Criminal Justice Statistical Analysis Center

&

The George Washington University
Institute on Crime, Justice and Corrections

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Executive Summary

The Division of Criminal Justice Services' (DCJS) Statistical Analysis Center partnered with The George Washington University's Institute on Crime, Justice and Corrections to provide the state with a forecast of the prison population for the next ten years. This report describes the methods and statistics used to generate the forecast, not only to inform the reader about the outcome of the forecast but also the various factors influencing the forecast. This report is intended to inform decision-makers as they respond to the growing prison population. The authors of this report are available at the request of the Legislature to assess the impact of policies and practices on the forecast.

◆ **Between 2000 and 2001, West Virginia had the fastest growing prison population of any state.** During this time period, the population increased by about 350 inmates, about one additional inmate every day of the year. This growth, at about 9%, was greater than any other state.

The population more than doubled in size from 2,110 inmates in 1993 to 4,544 in 2002. This represents an average increase of 270 inmates per year. These figures include inmates held in DOC facilities and those waiting in jails to be transferred to DOC facilities.

◆ **Over the past 3 years, the actual prison population grew at a slightly higher rate than forecasted by DCJS.** The original forecast released by DCJS in January 2001 performed extremely well. By 2002, the forecast underestimated the actual population by only 2.0%.

◆ **More offenders were committed to the Division of Corrections each year from 1993 to 2002.** Commitments more than doubled from 938 in 1994 to 2,161 in 2002. With the exception of inmates sentenced to Anthony Center who serve sentences from 6 months to 2 years, each offender is sentenced to a minimum of 1 year. While other states are experiencing a decline in offenders sentenced by the courts, West Virginia continues to increase.

◆ **No particular offender group has shown rapid growth in admissions to prison.** The inmates entering DOC facilities continue to be a consistent blend of offenders including burglary, property, DUI, drug, sex crimes, other, assault, robbery, and murder offender groups.

◆ **Between 1999 and 2001, the average maximum sentences increased each year for burglary offenders.** Offenders admitted in 2001 in other offender groups also received longer or equivalent sentences, on average, but none received shorter sentences than those admitted in 1999.

◆ **Parole grant rates were higher in the 1990's than in 2000, 2001, and 2002.** Parole grant rates between fiscal years 2000 and 2002 averaged 32.5%. Between fiscal years 1990 and 1999 the average grant rate was 46.4%.

◆ **West Virginia has one of the smallest inmate populations and one of the lowest per capita rate of incarceration.** In 2001, there were only 9 states with fewer incarcerated inmates. In 2001, there were only 8 states with fewer persons incarcerated per capita. There were 231 incarcerated persons per 100,000 state residents.

◆ **If current trends continue unchanged, the inmate population will grow to 5,853 by the end of 2007 and 6,774 by the end of 2012.**

Background

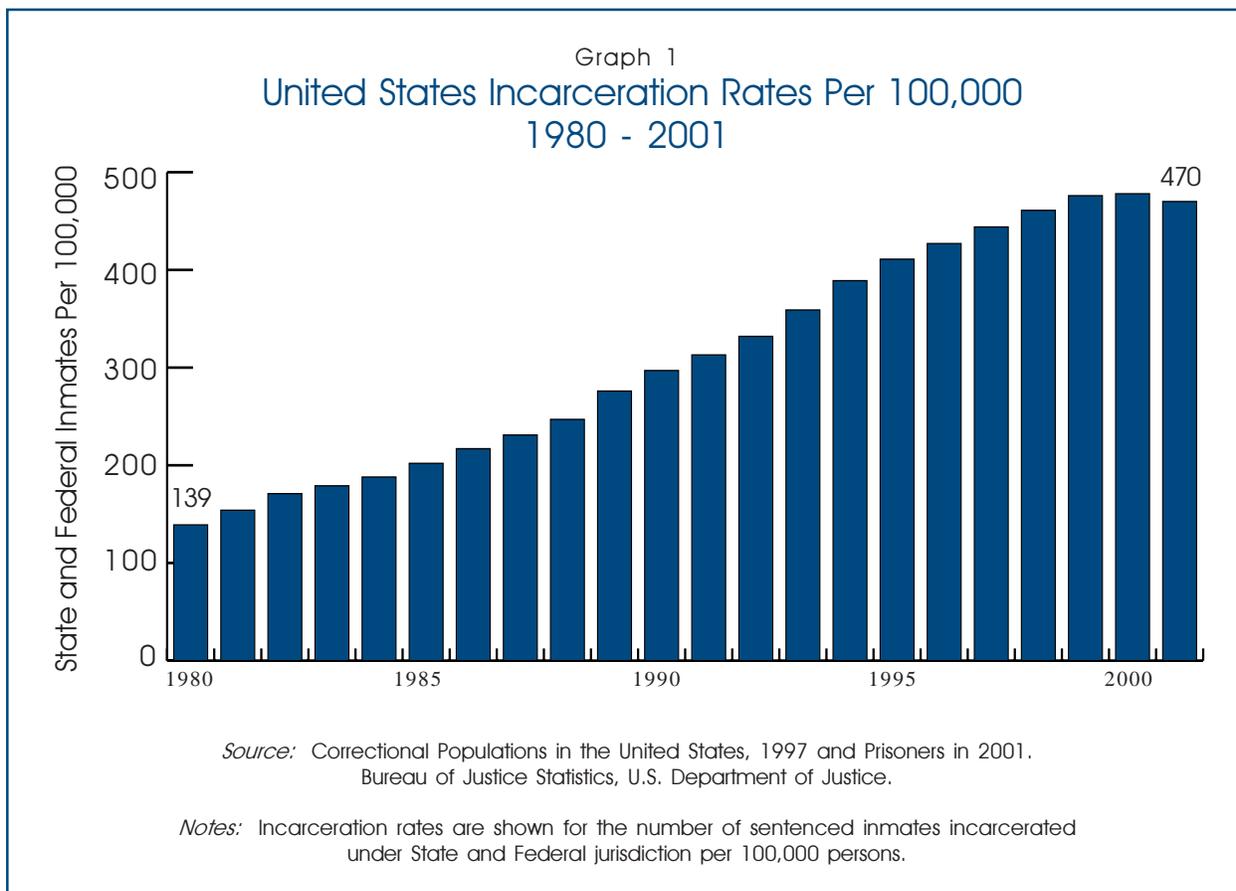
Nationally, the number of adults under correctional supervision has grown tremendously in the past 20 years. In 1980, approximately 1.8 million adults were under the control of correctional agencies in the United States. By the end of 2001, that number had grown to just over 6.5 million adults. Approximately 1.3 million, or 19%, of these adults were held in state prisons.^{1,2} The incarceration rate during this time period has grown from 139 per 100,000 in 1980 to 470 per 100,000 in 2001.

In recent years, however, inmates incarcerated in state prisons has declined. “Between July 1, 2001 and December 31, 2001, the number of inmates under State jurisdiction declined by 3,705 inmates (down 0.3%), repeating the same pattern of decline first observed in the last 6 months of 2000.”²

Trends in West Virginia’s prison population, however, are different. The state prison population is growing at one of the fastest rates. Between 2000 and 2001 the state prison population grew by about 9%, the highest growth rate of any state. Since 1995, only 3 states have faster rates of growth.

West Virginia has one of the smallest prison populations (4,215 in 2001) and one of the smallest incarceration rates per state residents (231 per 100,000).² If West Virginia’s prison population continues to grow as forecasted, it will still be a small population and will most likely still have a relatively low per capita incarceration rate.

Compared with national trends, West Virginia’s state prison population currently contains a greater percentage of violent offenders and property offenders than the nation as a whole.³



¹ “Correctional Populations in the United States, 1997” Bureau of Justice Statistics, U.S. Department of Justice. www.ojp.usdoj.gov/bjs.

² “Prisoners in 2001” Bureau of Justice Statistics, U.S. Department of Justice. www.ojp.usdoj.gov/bjs.

³ Key Facts at a Glance, Bureau of Justice Statistics, U.S. Department of Justice. www.ojp.usdoj.gov/bjs.

Given the growth of West Virginia’s prison population and its associated costs, state officials are concerned with how best to respond, both in the short term and the long term. To aid these state officials in planning for the future, the Division of Criminal Justice Services released a 10-year forecast of the state’s prison population in January 2001. The micro-simulation of the state’s prison population was conducted with The George Washington University’s (GWU) Institute on Crime, Justice, and Corrections. Since the forecast was released, the actual prison population has continued to grow, at a rate extremely close to that forecasted in early 2001, making state officials even more concerned with how to respond.

To continue to inform these officials, the Division of Criminal Justice Services has once again partnered with GWU to release an updated forecast. This report summarizes the current data and presents a new 10-year forecast. The report is intended to inform decision-makers about what to expect in the future. It also describes the factors that impact the population and provides baseline statistics useful when assessing the impact of proposed legislation.

For this forecast, a group of key persons were brought together to form a Forecast Consensus Group. The group was formed to review the data and, when data are not available, advise the forecasters in developing assumptions.

The most influential factors in forecasting an offender population are sentencing laws and their application procedures. These factors often vary from state to state and are usually complex in nature. State criminal justice systems often give considerable discretion to the legislators, judges, and administrators who construct and implement these sentencing laws and procedures. A complete understanding of these complex systems is essential to develop an accurate planning and forecasting model.

The rate of admissions is another influential factor in determining the offender population forecast. Increases and decreases in the number of offenders entering a criminal justice system create the most immediate impact in the resulting offender population. For example, a decrease of 75 offenders every month for a period of five months would result in an immediate decrease in the offender population by nearly 400 offenders. Conversely, changes in the type or characteristics of offenders entering a criminal justice system will create more of a long-term effect on the resulting population. For example, a decrease in the number of life-sentenced offenders admitted every year from 100 to 10 may not have a noticeable immediate impact on the offender population, but in 10 years the impact would be of considerable magnitude.

Table 1
Percent of Sentenced Inmates by Offender Group
United States and West Virginia

	US	WV
Violent	49%	56%
Property	20%	25%
Drug	21%	7%
Public Order	10%	8%
Anthony Center	NA	4%
Total	100%	100%

Sources:

US Data: Key Facts at a Glance, Bureau of Justice Statistics, U.S. Department of Justice. www.ojp.usdoj.gov/bjs.
WV Data: Automated Inmate Information System.

Notes:

Violent: Murder, Manslaughter, Rape, Sexual Assault, Robbery, Assault, Extortion, Intimidation, Criminal Endangerment.
Property: Burglary, Larceny, Motor Vehicle Theft, Fraud, Possessing and Selling Stolen Property, Destruction of Property, Trespassing, Vandalism, Tampering.
Public Order: Weapons, DUI, Escape, Ostruction, Vice, Moral/Decency, Liquor Laws.

A third and often overlooked factor in determining future prison population levels is use of community placement programs. As a state passes or implements a diversionary prison program or early release mechanism, the need for prison or confined beds may decrease. To adequately determine how many beds are saved by these programs, a full understanding of the program and expected failure rates must be achieved.

The most pressing issue facing decision-makers in the earliest 21st century, however, is the rate at which offenders repeat their crimes. In the year 2001, more than one-half million convicted felons were released from prisons in the United States. This will be the

largest number of prison releases ever in the United States. As a result, issues of repeat offenders, revocations and impact upon public safety are natural concerns that lead to questions such as: What will happen to these offenders? How will they behave? and What programs will help ensure their successful integration into society? To answer these questions and adequately prepare for the future, an understanding of offender crimes and behavior is crucial.

An examination of the complex interplay of these factors explains the demand for correctional population forecasts. Sentencing practices, policy decisions and admissions to prison all play key roles in the underlying causes of population growth.

Table 2
Top Ten Highest and Lowest Jurisdictions
for Selected Characteristics of the Prison Population, Yearend 2001

Prison Population	Number of Inmates	Incarceration Rates, 2001	Rate Per 100,000 State Residents ^a	1-Year Growth, 2000-2001	Percent Change	Growth Since 1995	Average Percent Change ^b
Ten Highest							
TX	162,070	LA	800	WV	9.3%	ND	11.0%
CA	159,444	MS	715	AK	8.9%	ID	10.3%
Federal	156,933	TX	711	ID	8.5%	OR	9.8%
FL	72,406	OK	658	OR	8.3%	WV	9.0%
NY	67,534	AL	584	Federal	8.0%	MT	8.9%
MI	48,849	GA	542	HI	7.9%	MS	8.9%
GA	45,937	SC	529	SD	7.5%	Federal	8.5%
OH	45,281	MO	509	MT	7.2%	CO	7.9%
IL	44,348	DE	504	TN	6.8%	TN	7.7%
PA	38,062	AZ	492	NM	6.1%	UT	7.3%
Ten Lowest							
ND	1,111	ME	127	NJ	-5.5%	MA	-1.8%
WY	1,684	MN	132	UT	-5.2%	AK	-1.0%
ME	1,704	ND	161	NY	-3.8%	NY	-0.2%
VT	1,741	RI	181	TX	-2.8%	OH	0.2%
NH	2,392	NH	188	CA	-2.2%	NJ	0.7%
SD	2,812	VT	213	IL	-2.1%	RI	0.8%
RI	3,241	NE	225	OK	-1.7%	MD	1.9%
MT	3,328	UT	230	RI	-1.4%	FL	2.1%
NE	3,937	WV	231	OH	-1.2%	SC	2.2%
WV	4,215	MA	243	MA	-1.1%	VA	2.3%

Source:
Bureau of Justice Statistics, Prisoners in 2001 Bulletin, July 2002, NCJ 195189.
Paige M. Harrison and Allen J. Beck, Ph.D., BJS Statisticians

Notes:
^a The number of prisoners with a sentence of more than 1 year per 100,000 residents in the State Population. The Federal Bureau of Prisons and the District of Columbia are excluded.
^b The average annual percent change from 1995 to 2001 in sentenced prisoners.

Consensus Group

Objectives

1. To attempt to understand the actual prison population and the factors that impact the population.
2. To come to consensus when historical data are not available or appropriate.
3. To aid in the forecasting process by providing professional guidance and information.

Members

<u>Name</u>	<u>West Virginia Agency</u>	<u>Title</u>
Tom Smith	Senate Judiciary Committee	Counsel
Dan Kimble	House Judiciary Committee	Counsel
Evelyn Moore	Senate Finance Committee	Chief Clerk
Fred Lewis	House Finance Committee	Fiscal Analyst
Barbara Allen	Supreme Court of Appeals	Administrative Director
F. Douglas Stump	Parole Board	Chairman
Steven D. Canterbury	Regional Jail Authority	Executive Director
John L. King, II	Regional Jail Authority	Chief of Operations
Jim Rubenstein	Division of Corrections	Commissioner
Wyetta Fredericks	Division of Corrections	Deputy Commissioner
Brad Douglas	Division of Corrections	Research Analyst

Methods

Research team analysts were able to complete this report by reviewing current inmate population trends and analyzing several data extract files provided by the Division of Corrections. This report contains a description of the methodology and model used, a summary of recent offender trends and profiles, an explanation of the primary assumptions on which the projections are based, projections for the West Virginia adult inmate population through the year 2012, recommendations for expanding and continuing these research efforts for the future, and a summary of the data sources used.

Methodology

The forecast of the state prison population was completed using Wizard 2000 projection software. This computerized simulation model mimics the flow of offenders through the state's prison system over a ten-year forecast horizon and produces monthly projections of key inmate groups.

Technical Description of the Model

The Wizard 2000 simulation model utilizes a technique that is consistent with that of a stochastic entity simulation model. It is stochastic, or probabilistic, in the sense that random numbers are used in the modeling process, and an entity simulation in the sense that the model is conceptually designed around the movement of individuals through the correctional system. The model is also generally an example of a Monte Carlo simulation technique, again because random numbers are used in the process of simulating the system. Individual cases (offenders admitted to supervision in West Virginia) are processed by the model through a series of possible statuses, awaiting trial, prison, parole, parole violation, based upon the transition probabilities fed in by the researcher.

If, for example, under current practice 10% of all eligible burglary offenders are released at their first parole hearing, 10% of the cases eligible in that subgroup will be released within the model at their first hearing. Once the next status (parole supervision) has been selected (based upon actual inmate movements during a recent twelve month period) a length of stay in the initial status (prison inmate) is generated, based in the minimum and average length of stay determined for the selected type of transition.

The case in question is then "held" accordingly in that status before it is moved on to the new status determined.

Once the simulation model has moved the case to its new status, the process is repeated over and over until the case either reaches the end of the projection period, or enters what is referred to as a terminal. Terminal status signifies a complete exit from the system being modeled.

When a model is loaded with accurate data, it will prove to be quite reliable in forecasting a population, as it will mimic the actual flow of cases through the correctional system being modeled. In order for the simulation model to work to its full potential, information must be gathered describing all of the entries and exits from the system for a previous one-year period. Additional data must be gathered describing parole hearings outcomes, confined population characteristics, and parole revocation information.

Various data sources were utilized and are described on the following page.

West Virginia Model

The Wizard 2000 simulation model for West Virginia was used to generate a ten-year prison population forecast. After several preliminary models, one model was produced to model the population accurately. The resulting model forecasts the state sentenced offender population by most serious offense; murder, sex crimes, robbery, assault, burglary, property, drug, other, DUI, Anthony Center inmates, and Diagnostic inmates.

Felony offenders are sentenced one of two ways in West Virginia, either under a determinate system of sentencing or an indeterminate system. In 1999 approximately 26.6 % of the inmate population was serving a determinate sentence (13.9 % for a life sentence and 12.7 % for other determinate sentencing time) and 73.4 % were serving a sentence under an indeterminate sentencing structure.

Offenders in West Virginia sentenced under the indeterminate structure are given a maximum and a minimum sentence and are required to serve their minimum sentence before a discretionary parole release hearing is held. Offenders released at their discretionary hearing are released to a period of parole supervision. Those offenders not granted discretionary

Data Sources and Providers

The data sources described below are provided by the Division of Corrections, Office of Research. Jim Phillips serves as the Director of this office.

Commitments and Releases Log (1998-2002)

The Division of Corrections (DOC) Office of Research maintains a Commitments and Releases Log (CRL). It includes information on the commitments to DOC, the releases from DOC, and parole hearings held for DOC inmates.

Commitments to DOC are tallied by month, type, and gender. Types of commitments include regular, diagnostic, technical parole violators, felony parole violators, Anthony Center, and escapees returned to DOC. The commitment information is obtained monthly from the County Jail Inmates Sentenced to DOC (CJISD) database. Court orders sentencing new inmates or revoking parole are provided to the Division of Corrections Central Office and entered into the CJISD database. The database, therefore, includes information on all inmates sentenced to DOC, regardless of their physical location.

Releases from DOC are tallied by month and type. Types of releases include paroles, medical respite, conditional parole, full pardon, diagnostic releases, escape, death, discharge, successful Anthony Center, unfit Anthony Center, court ordered probation, court ordered overturn of conviction, court ordered time served, court ordered treatment center, court ordered home confinement, and releases from regional/county jails. This information is collected by the Division of Corrections Office of Research from the facilities housing DOC inmates in a monthly report titled "Monthly Report of Activities."

Parole hearings are tallied by month and outcome. Parole hearing outcomes include grants and denials. This information is provided by the WV Parole Board through their monthly report.

National Corrections Reporting Program (1995-2001)

The National Corrections Reporting Program (NCRP) is a federal program coordinated by the U.S. Department of Justice, Bureau of Justice Statistics used to collect data from state correctional systems. Each Records Clerk submits standard NCRP forms for every inmate admitted to and released from physical custody of the DOC. These forms are collected and entered by Kathleen Shirkey of the DOC Office of Research, then forwarded to U.S. Department of Commerce, Bureau of the Census.

A variety of pieces of information are collected on these legal-sized forms. The information collected on the Prisoner Admission Report includes the sentencing county, the inmate name, date-of-birth, sex, race, highest grade level completed, date of admission, type of admission, prior jail time earned, offenses committed, longest single maximum sentence, total maximum sentence length for all offenses, minimum time until release, and location of the inmate. The information collected on the Prisoner Release Report includes additional sentences imposed since admission, additional sentence time, prior felony incarcerations, history of escapes, history of community release, date of release, agencies assuming control, and type of release. The information collected on the Parole Release Report includes the type of parole, the date of release from parole, the type of release from parole, and supervision status prior to release.

End-of-Month Log (1990-2002)

The DOC Office of Research maintains an End-of-Month Log (EML). It includes the number of inmates in DOC custody at the end of each month by gender, physical location, and commitment type. Two types of physical locations are recorded, either jail or DOC prison. The commitment types include normal, Anthony Center, and diagnostic. The information is submitted to the Office of Research by each institution housing DOC inmates.

Parole Hearing Database (2001-2002)

The DOC Office of Research maintains a Parole Hearing Database (PHD). It includes the inmate name, inmate number, interview number of the inmate, parole revoked, times parole revoked, interview date, months until next interview, parole decision, offenses committed, minimum sentence, maximum sentence, race, gender, and institution. Each Institutional Parole Officer provides this information to the Office of Research after each visit by the Parole Board. Karen Nichols of the Office of Research maintains this database. The information obtained from this database is compared with information obtained from the WV Parole Board's monthly report.

Automated Inmate Information System (1995-2002)

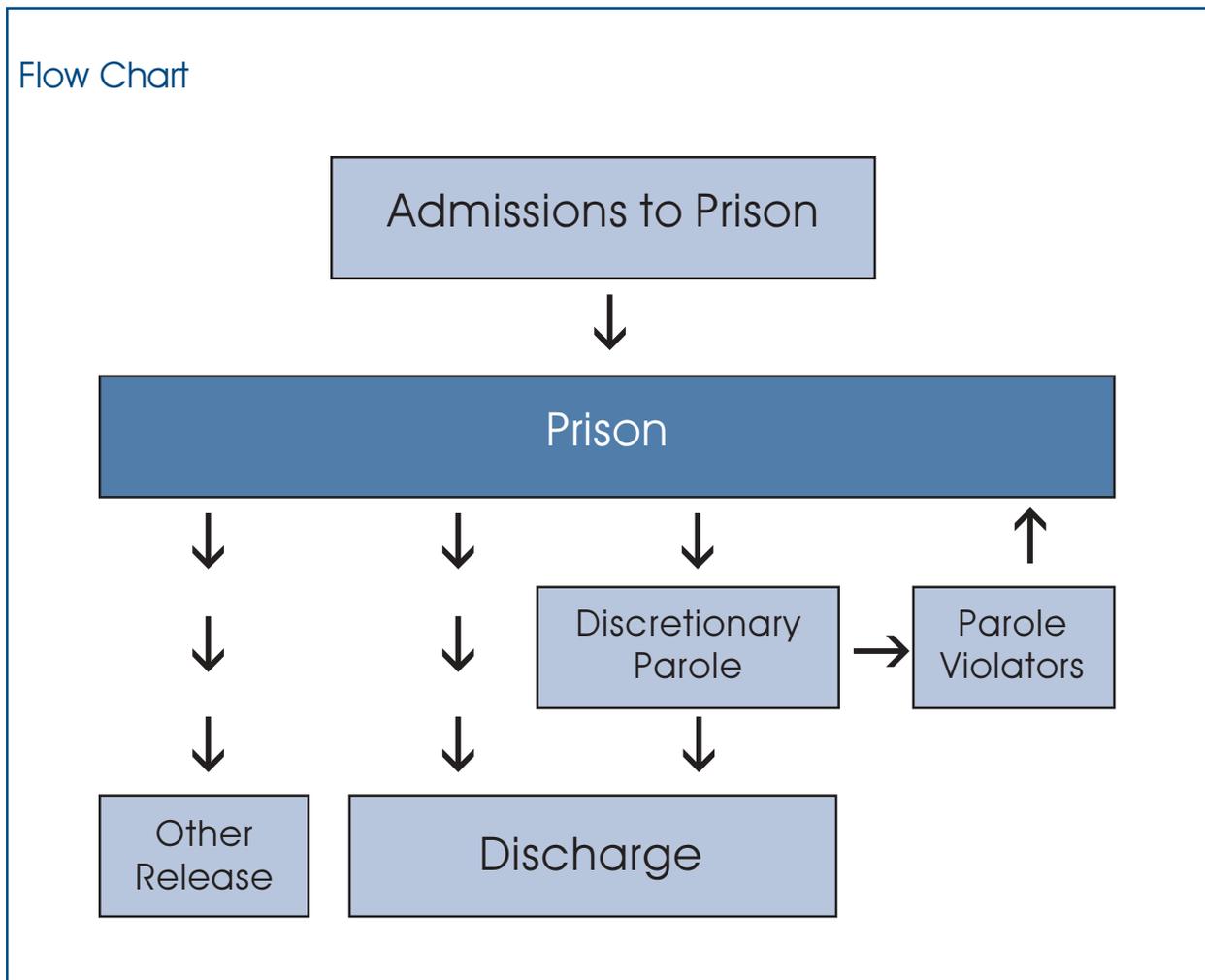
The DOC maintains an Automated Inmate Information System (AIIS) to record information about inmates in the physical custody of the DOC. Institutional staff members use this system to manage the prison population with such tasks as classification, movement, programming, sentencing, and date calculations. The name, DOC number, date of birth, sex, race, highest grade completed, GED earned, marital status, commitment type, crime, sentence, conviction county, minimum release date, maximum release date, first parole eligibility date, next parole eligibility date, order received date, effective sentence date, intake date and location are recorded in the database for each inmate.

parole at their first hearing have additional hearings after waiting an average of 12 months.

Offenders sentenced under the determinate sentencing structure are only given a maximum sentence and are required to serve one-fourth of that sentence before being eligible for parole. The parole release and rehearing process is the same for determinate sentenced offenders. Upon the granting of discretionary parole, determinate sentenced offenders are required to serve a period of parole supervision. If an offender, either determinate or

indeterminate, is not granted discretionary parole release, they are released at the termination of their sentence. Offenders who successfully discharge in this manner are not required to serve any period of community supervision.

The following diagram gives a visual description of the West Virginia prison simulation model.



Offender Groups

Offenders are categorized by their most serious offense into one of the groups below.

Murder

- 1st and 2nd Degree Murder
- Attempted Murder
- Voluntary Manslaughter
- Involuntary Manslaughter
- Vehicular Homicide/Manslaughter
- DUI with Death
- Child Neglect Resulting in Death
- Habitual Offender

Sex Crimes

- 1st – 3rd Degree Sexual Assault
- 1st – 3rd Degree Sexual Abuse
- Sexual Abuse by Parent/Guardian
- Sexual Abuse, Aiding & Abetting
- Incest
- Exhibiting/Possessing Mat'ls Minors in Sexual Act

Robbery

- Robbery
- Attempted Robbery
- Aggravated and Unaggravated Robbery
- Armed and Unarmed Robbery
- Robbery, Aiding & Abetting

Assault

- Assault/Battery
- Malicious Wounding
- Unlawful Wounding
- Malicious Assault
- Abuse of Incapacitated Adult
- Assault/Battery of Public Officer
- Extortion
- Kidnapping/Abduction
- Attempted Kidnapping
- Child Abuse/Neglect with Injury

Burglary

- Burglary
- Breaking & Entering
- Entering without Breaking

Property

- 1st – 3rd Degree Arson
- Fraud (Credit Card, Welfare, Computer)
- False Pretenses
- Grand Larceny
- Petit Larceny
- 3rd Offense Shoplifting
- Possessing/Receiving/Transferring Stolen Property
- Forgery/Uttering
- Counterfeiting
- Embezzlement

Drug

- Manufacturing/Delivering/Selling/Possessing Drugs
- Obtaining Drugs by False Pretenses

Other

- Attempt/Conspiracy to Commit Felony
- Aiding & Abetting Felony
- Accessory Before the Fact
- Wanton Endangerment
- Weapons Offenses
- Escape
- Obstruction
- Failure to Appear
- Failure to Pay Child Support
- Pimping/Prostitution
- Identity Theft
- Intimidation of Judicial Officer/Witness
- Violation of Civil Rights

DUI

- 3rd Offense DUI
- Fleeing Vehicle while DUI
- Driving on Suspended/Revoked License

Anthony Center

Young offenders can be sentenced for 6 months to 2 years to the Anthony Center.

Diagnostic

Offenders can be sentenced for 60 days for diagnostic evaluation.

Results

Admissions to Prison

Significant Finding: From 1994 through 2001, the total number of commitments to DOC increased by an average of 153 per year.

Significant Finding: Since the mid-1990's, the rate of increase in the number of commitment orders has declined. Even with this decrease, there is still an upward trend in the number of new commitments brought to DOC each year.

Significant Finding: Over half of the commitments to DOC are new felons sentenced by the courts. Offenders are also committed directly to Anthony Center, for Diagnostic assessment, and for parole violations.

In the mid-1990's, the total number of commitment orders to DOC increased at a rapid rate. The rate of growth peaked in 1997 when there were 305 more commitment orders than in 1996.

A smaller rate of increase was observed in the latter part of the decade. The rate of growth dipped in 2001 when there were only 30 more commitment orders than in 2000.

Over the past eight years, there has not been a decrease in the number of new commitment orders brought to DOC. The upward trend continued even though West Virginia's overall population remained relatively stable during this same period.

Each year, a percent of parolees are returned to DOC as a result of either a new offense or a parole violation. These offenders continue to represent a small percent of the commitments to DOC each year. The majority of commitments are new felons sentenced by the courts.

Table 3
Offenders Committed to the Division of Corrections
1994 - 2002

Year	New Felons	Anthony Center	Diagnostic	Parole Violators	Total	Annual Change	
						#	%
1994	864	31	43	NA	938		
1995	814	55	58	178	1,105	+167	17.8%
1996	920	82	47	188	1,237	+132	11.9%
1997	1,166	194	21	161	1,542	+305	24.7%
1998	1,185	205	143	214	1,747	+205	13.3%
1999	1,381	194	106	197	1,878	+131	7.5%
2000	1,436	199	110	214	1,959	+81	4.3%
2001	1,363	240	158	228	1,989	+30	1.5%
2002	1,508	267	179	207	2,161	+172	8.6%
Average						+153	11.2%

Source: DOC - Commitments and Release Log

Notes: New Felons are offenders committed to DOC by the courts for a new felony charge. Parole Violators include offenders who violated the conditions of parole (technical violators) and offenders charged with new offenses. The number of parole violators returned to DOC in 1994 was not available separate from new felons.

Characteristics of Inmates Admitted

Significant Finding: The percent of female inmates admitted to DOC in 2001 was twice the average from 1995 to 1999.

Almost all (85.6%) of the inmates admitted from in 2001 were males. Most (87.0%) of the inmates admitted in 2001 were white. A substantial percent of the inmates admitted have less than a high school degree. In 2001, 10.7% had completed no more than

the 8th grade. 28.2% had completed no more than the 11th grade.

Twenty to twenty-four year olds comprised the largest age group of admissions (21.8% in 95-99 and 28.8% in 2001). Only 19.7% of those admitted in the four violent offender groups were 24 or younger at the time of admission. 10.0% of the admitted sex offenders were 24 years or younger and 43.3% of the admitted robbery offenders were 24 years or younger.

Table 4
Demographic Characteristics of Inmates Admitted by Year
1995 - 2001

Gender	1995-1999	2001	Race	1995-1999	2001
Male	92.4%	85.6%	White	83.2%	87.0%
Female	7.4%	14.4%	Black	16.3%	12.3%
Missing	0.1%	0.0%	Missing	0.5%	0.7%
Education	1995-1999	2001	Age	1995-1999	2001
8th grade or lower	13.1%	10.7%	19 & under	4.2%	7.8%
9th to 11th grade	28.8%	28.2%	20-24	21.8%	28.8%
12th grade or GED	49.1%	54.3%	25-29	18.2%	15.6%
Some college	6.3%	5.4%	30-34	17.2%	13.2%
College degree	1.8%	1.2%	35-39	15.2%	14.5%
Missing	0.8%	0.1%	40-49	17.1%	15.4%
			50-59	4.5%	3.8%
			60 & over	1.4%	1.7%
			Missing	0.5%	0.0%

Source: DOC - NCRP Prisoner Admission Reports

Table 5
Age of Inmates Admitted by Violent Offender Groups
2001

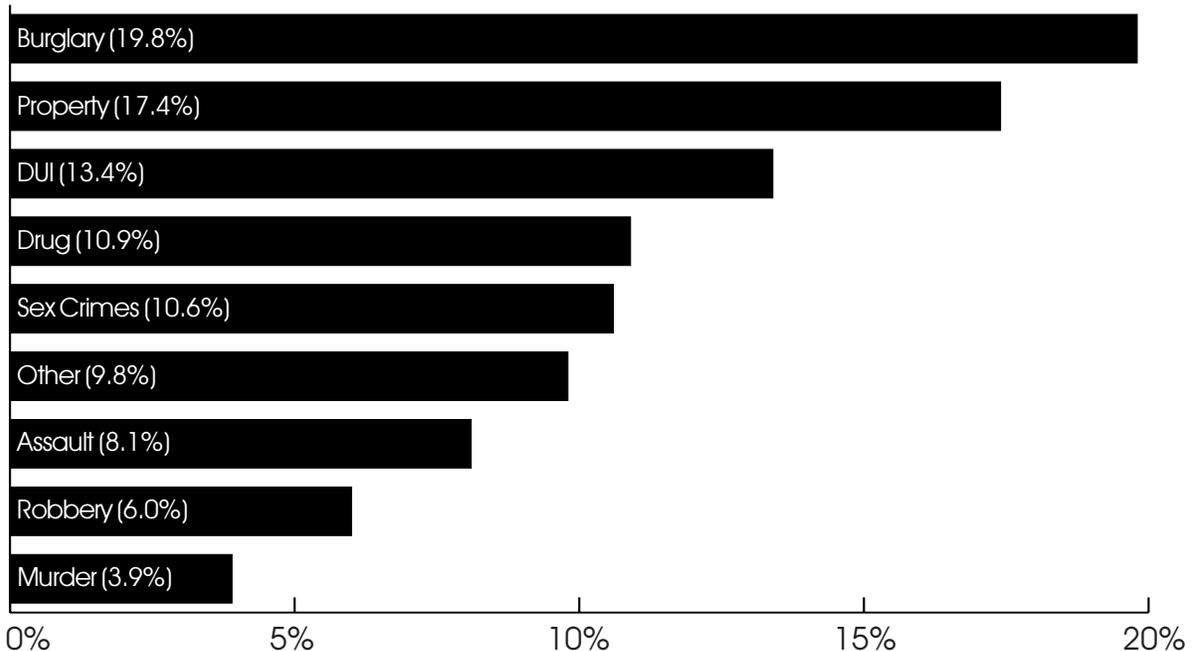
	24 & Younger	25-34	35-44	45-54	55+
Murder	20.4%	18.4%	34.7%	14.3%	6.1%
Sex Crimes	10.0%	26.9%	29.3%	19.2%	14.6%
Robbery	43.3%	36.7%	13.3%	6.7%	0.0%
Assault	15.1%	34.9%	35.8%	8.5%	5.7%
Total	19.7%	29.9%	29.3%	13.0%	8.1%

Source: DOC - NCRP Prisoner Admission Reports

Table 6
Inmates Admitted by Offender Group and Year
1995 - 2001

Offender Group	1995	1996	1997	1998	1999	2000	2001
Murder	10.3%	6.5%	6.5%	7.2%	3.9%	5.1%	3.9%
Sex Crimes	15.8%	12.1%	9.8%	12.7%	11.5%	11.3%	10.6%
Robbery	6.3%	5.7%	4.4%	6.8%	5.0%	4.0%	6.0%
Assault	10.2%	7.1%	7.6%	10.0%	10.2%	9.4%	8.1%
Burglary	16.2%	18.5%	11.0%	13.6%	15.3%	15.1%	19.8%
Property	16.0%	20.1%	18.3%	15.4%	16.8%	16.1%	17.4%
Drug	12.1%	13.8%	15.8%	15.2%	14.8%	13.9%	10.9%
Other	3.0%	5.1%	3.7%	4.0%	4.7%	6.5%	9.8%
DUI	10.3%	11.1%	22.8%	15.2%	17.7%	18.6%	13.4%

Graph 2
Inmates Admitted by Offender Group
2001



Source: NCRP Prisoner Admission Reports

Note: Percents may not total to 100.0% due to rounding.

Significant Finding: Inmates admitted to DOC continue to be a blend of offender types.

In 2001, 47.0% of the offenders were admitted for burglary, property, and other offenses. Burglary offenders comprised the largest group of offenders admitted (19.8%). Property offenders comprised the second largest group of offenders (17.4%).

28.6% were admitted for murder, sex crimes, robbery, and assault. Those from the murder offender group comprised the smallest group of admissions in 2001 (3.9%).

The most serious offense of 10.9% of those admitted was a drug offense. The most serious offense of 13.4% of those admitted was a DUI.

Sentences at Admission

Significant Finding: Between 1999 and 2001 sentences lengthened for most offender groups.

Sentences for burglary offenders, in particular, grew each year.

Significant Finding: Sentences for the robbery offender group fluctuated dramatically between 1999 and 2001.

In 2001, 79.4% of inmates were admitted with 1 sentence. Only 5.1% were admitted with 3 or more sentences.

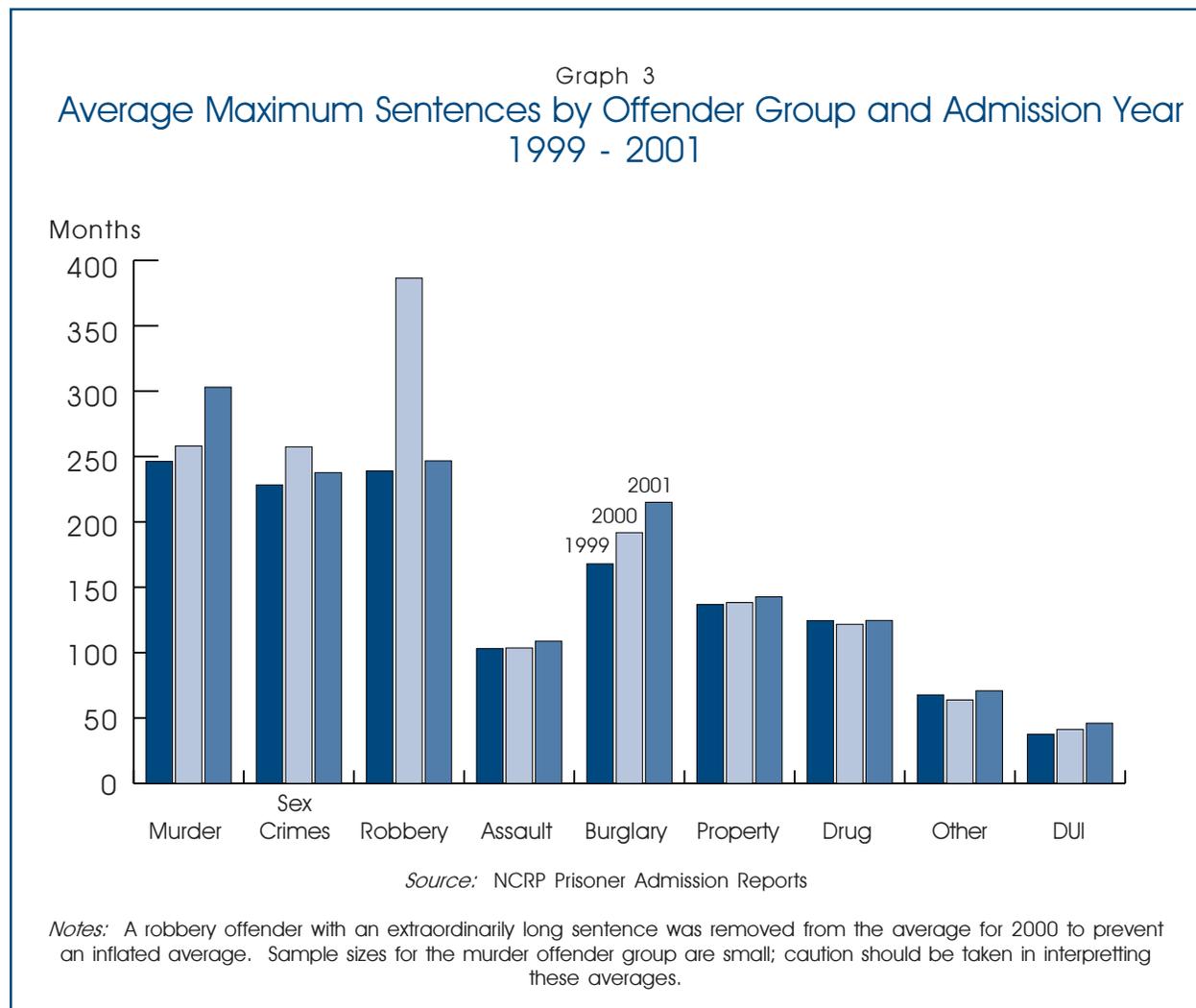


Table 7
Inmates Admitted by Number of Sentences and Year
1995 - 2001

Number of Sentences	1995	1996	1997	1998	1999	2000	2001
One	872	827	549	989	859	909	1,144
Two	195	161	78	217	147	165	222
Three or more	44	35	19	52	46	41	74
Total	1,111	1,023	646	1,258	1,052	1,115	1,440

Source: NCRP Prisoner Admission Reports

Releases From Prison

Significant Finding: The majority of offenders released from prison were paroled - 41.8% in 2001.

Significant Finding: The majority of sex offenders released from prison, however, were discharged - 68.5% in 2001. Although the authors expected this percent to decrease due to changes in the

minimum and maximum sentences for certain sex crimes, the percent increased from 54.8% in 1999. **The continued release of sex offenders without supervision should be a serious public safety concern for the State.**

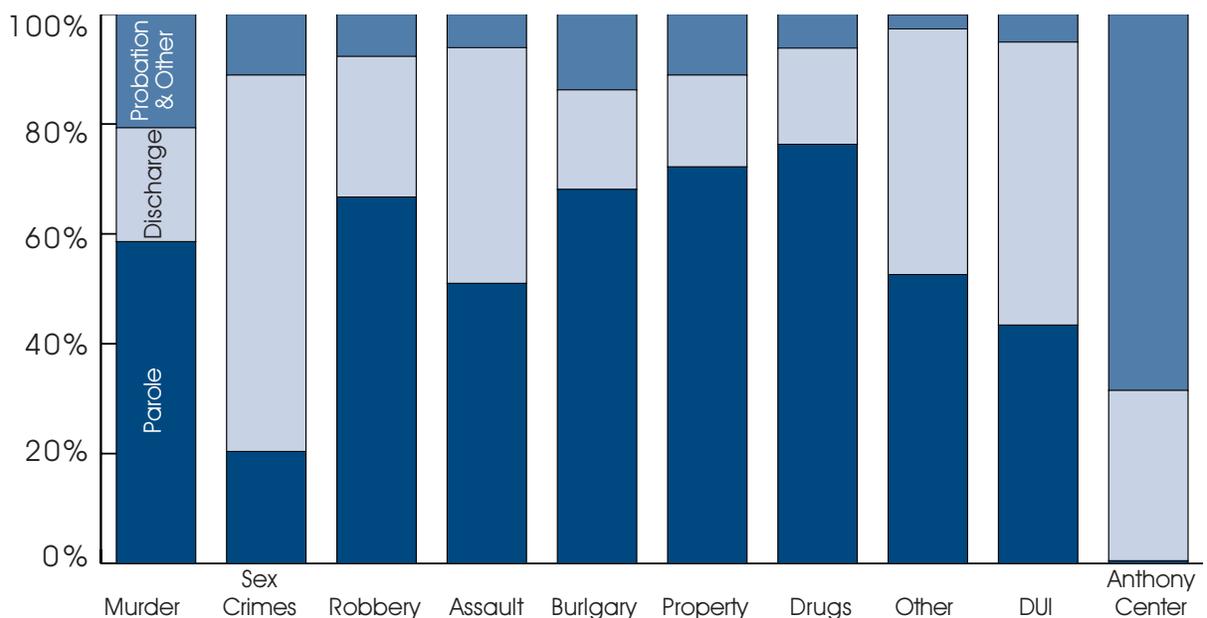
Between 1995 and 2001, most (69.8%) of all offenders released were released to parole. A much smaller percent (22.7%) were discharged. Few (6.1%) were released to probation.

Table 10
Releases by Type and Year

Release Type	1995	1996	1997	1998	1999	2000	2001	Average
Parole	426	462	496	575	762	605	318	69.8%
Probation	29	25	14	16	32	21	179	6.1%
Discharge	95	149	158	181	189	161	249	22.7%
Death/Other	3	9	11	5	8	26	14	1.5%
Total	553	645	679	777	991	813	760	100.0%

Source: NCRP

Graph 4
Releases by Type and Offender Group in 2001



Source: NCRP

Parole Grant Rates

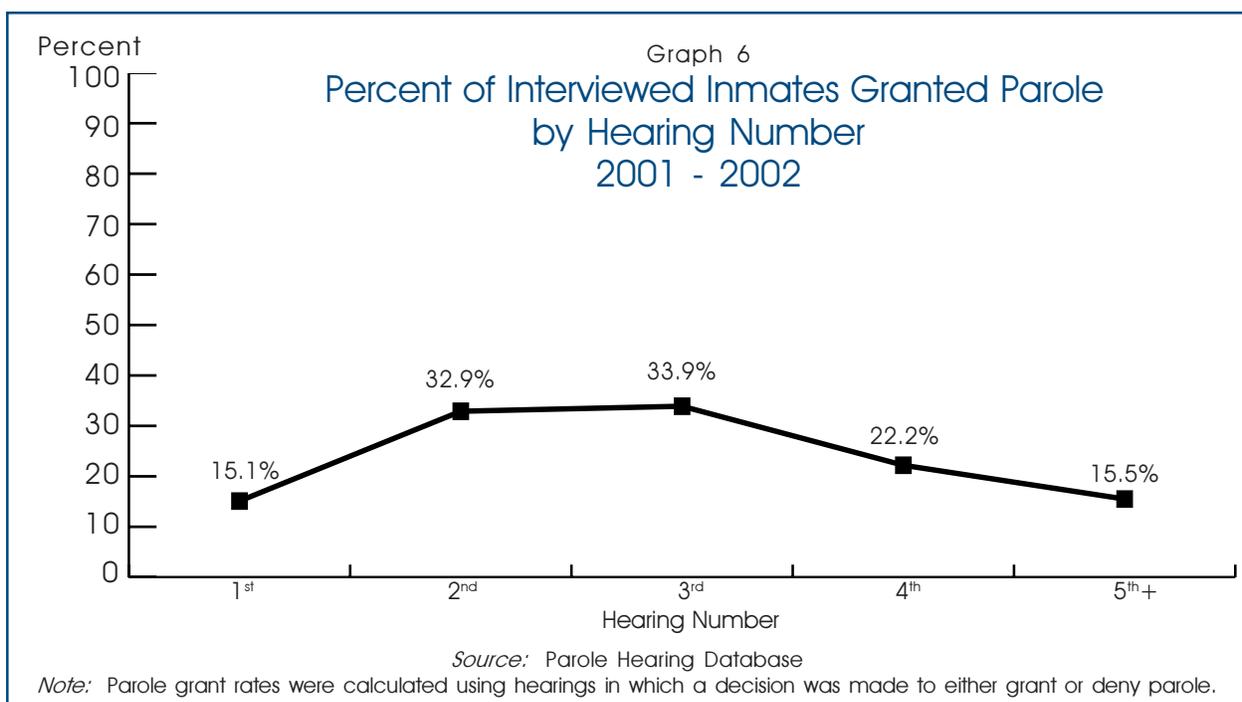
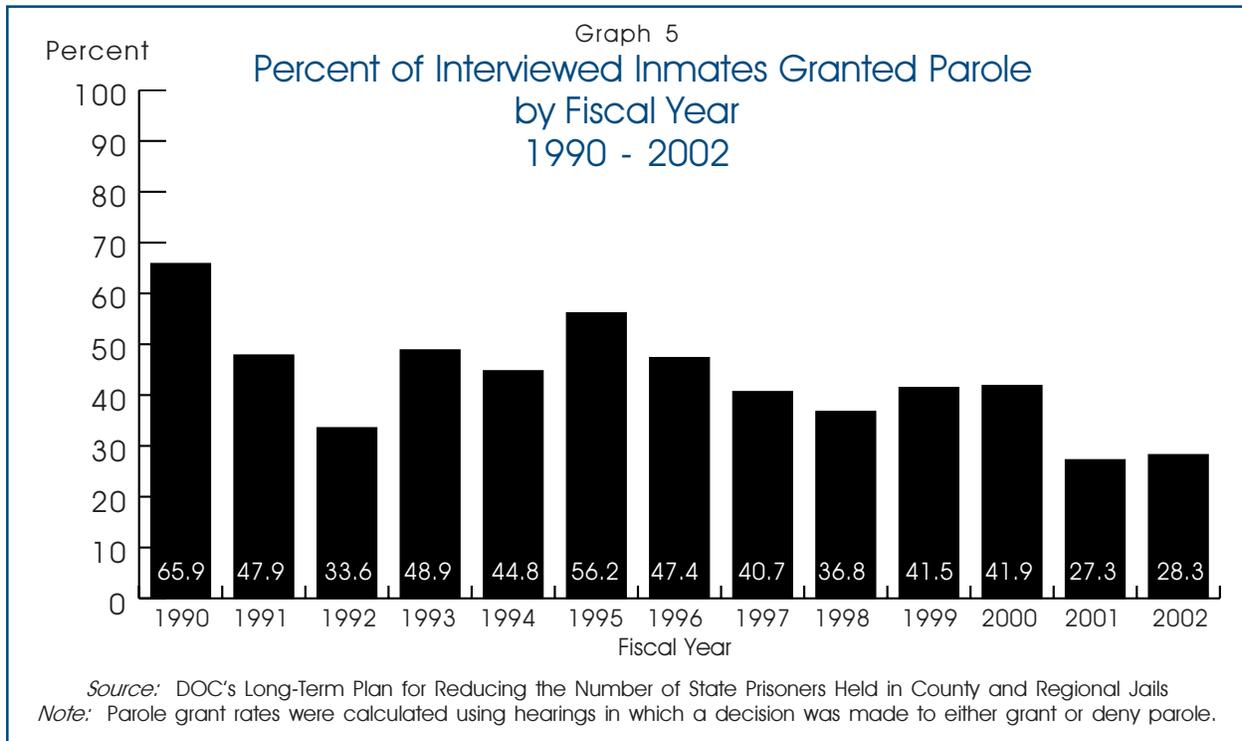
Significant Finding: Parole grant rates between fiscal years 2000 and 2002 averaged 32.5%. Between fiscal years 1990 and 1999 the average grant rate was 46.4%.

Significant Finding: The percent of inmates granted parole at their 1st hearing was 15.1%; this increased to 32.9% of inmates at their 2nd hearing.

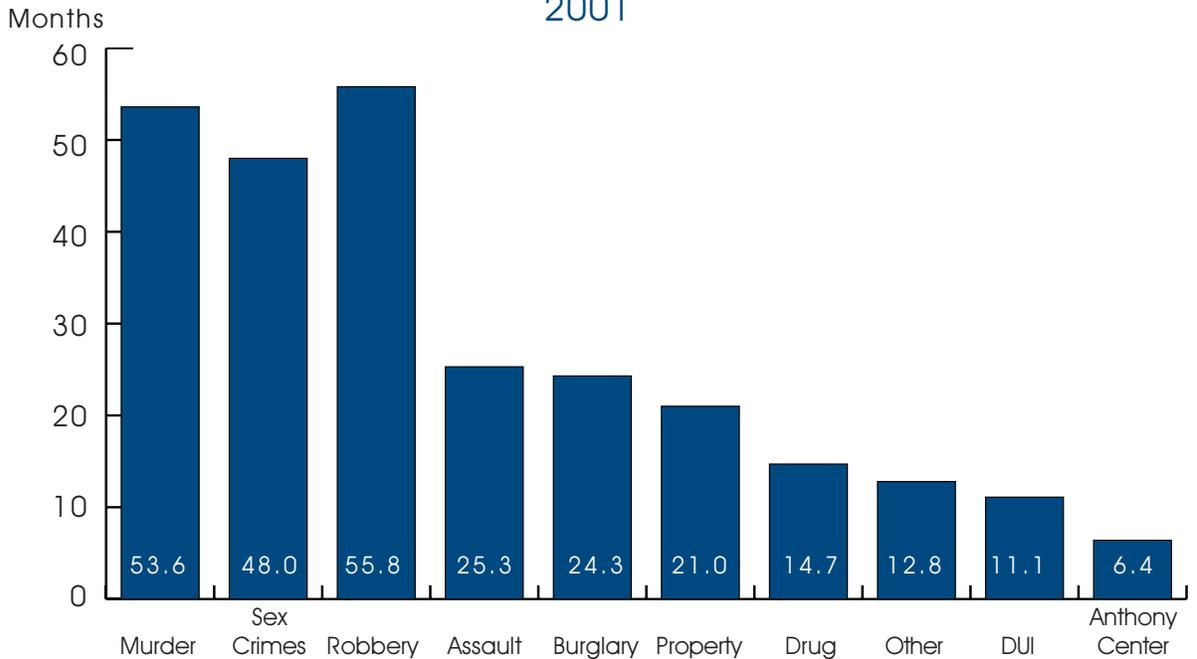
Time Served

Significant Finding: Offenders in the murder, sex crimes, and robbery offender groups spend a greater amount of time in DOC facilities than all other offender groups.

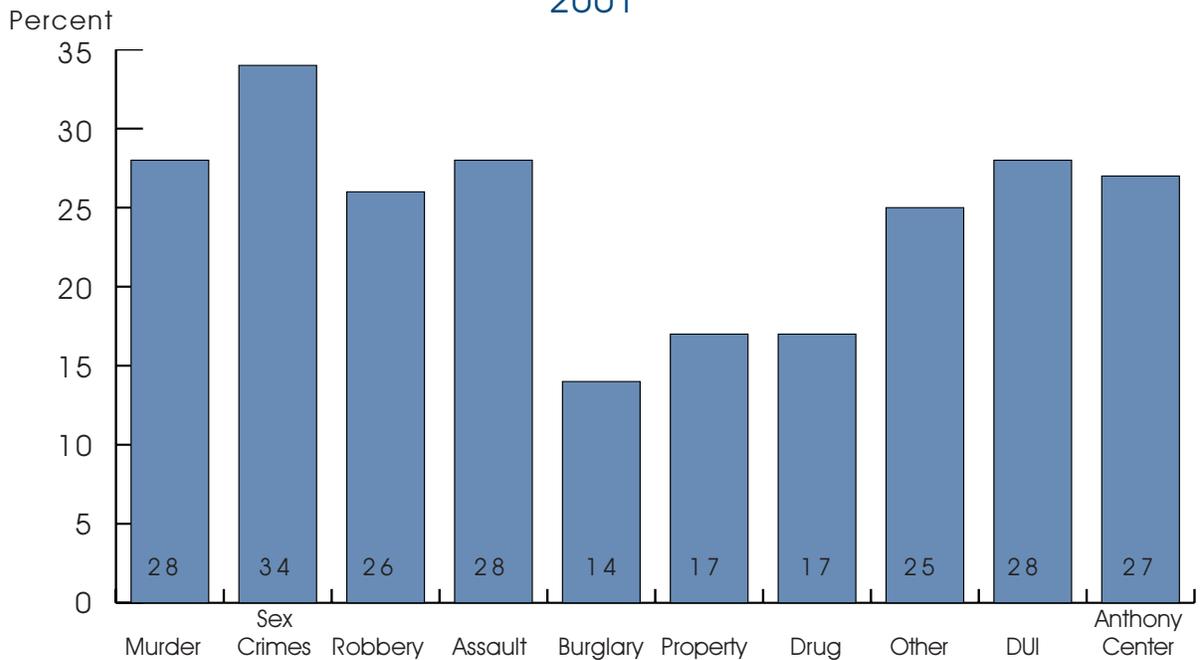
Significant Finding: Sex offenders spent the greatest percent of their maximum sentence in DOC facilities. These averages are a reflection of the maximum sentences and the parole grant rates.



Graph 7
Average Time Served in DOC Facilities by Offender Group
2001



Graph 8
Average Percent of Maximum Sentence
Served in DOC Facilities by Offender Group
2001



Source: NCRP Prisoner Release Reports

Notes: Sample sizes for the murder offender group are small; caution should be taken in interpreting these averages. Averages on this page were calculated using a release cohort, therefore they are relatively low. Inmates released in 2001 are more likely to have shorter sentences than those still confined by the end of 2001.

Confined Prison Population

Significant Finding: Between 1993 and 2002 West Virginia's prison population more than doubled. It increased by an average of 270 inmates per year.

From 1993 to 1998, the inmate population grew by one of the largest rates in the country – an average of just over 11% per year.

Since 1998, however, the inmate population has grown by a more reasonable rate - an average of 6.5% per year. The rate observed during this time period is only slightly higher than the national average.

It is important to note that the West Virginia prison population has continued to increase at the same time that the total population of the state has remained relatively stable.

Significant Finding: The percent of inmates held in medium custody decreased by 4% between 1999 and 2002.

Sex offenders make up the largest percentage of the confined population (20%) followed by murder (19%) and burglary (13%).

Violent offenders comprise the highest percentage of the confined prison population (56%), but only 29% of the admissions.

The confined prison population in West Virginia contains a greater percent of violent offenders (56%) than the average U.S. population (49%).

In mid-2002, offenders in medium custody made up the largest portion of the confined population at 30%, close custody was second at 27% and minimum/community was third at 23%. Maximum custody made up 10% of the population.

Table 11
End-of-Year Prison Population
1993-2002

Year	Population	Annual Change	
		#	%
1993	2,110		
1994	2,325	215	10.2%
1995	2,517	192	8.3%
1996	2,832	315	12.5%
1997	3,198	366	12.9%
1998	3,535	337	10.5%
1999	3,543	8	0.2%
2000	3,870	327	9.2%
2001	4,215	345	8.9%
2002	4,544	329	7.8%
Average		270	9.0%

Source: DOC - End-of-Year Tallies (Tracking)

Table 12
State Prison Population
by Security Level and Year

	1999	2002
Maximum	10%	10%
Close	25%	27%
Medium	34%	30%
Minimum/Community	23%	23%
Intake/Other	8%	10%
Total	100%	100%

Source: Tracking

Note: Does not include DOC inmates in jail.

Security Level Descriptions

Maximum: Most severe and restrictive custody relating to housing and movement; Includes segregation, administrative segregation and detention units and inmates ineligible for parole or discharge.

Close: Next to most severe and restrictive custody; Including special management status and behavior improvement units.

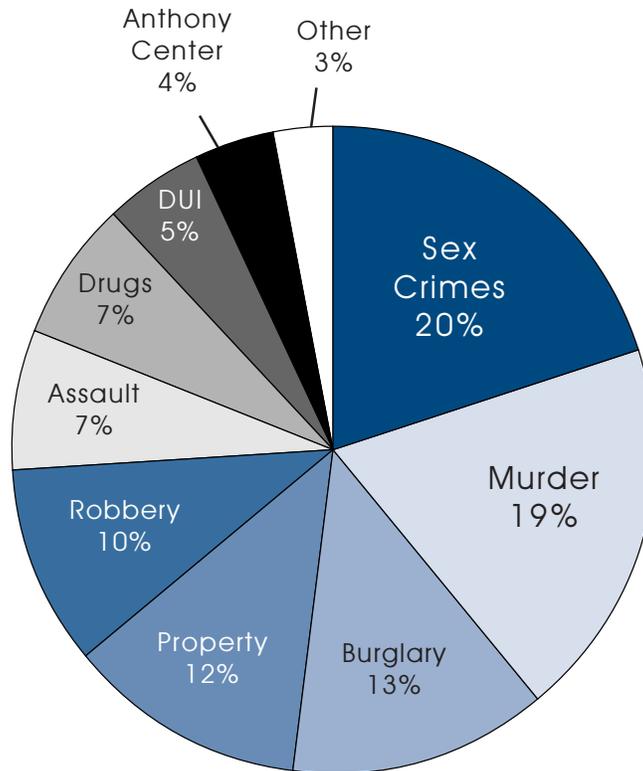
Medium: Permits inmates to function somewhat freely within the confines of the institution/facility/center.

Minimum: Includes inmates eligible for work crew or job assignment outside the confines of the institution/facility/center and possibly work release.

Community: Least restrictive; Includes inmates eligible for community program or work release placement.

Source: DOC Annual Report

Graph 9
State Prison Population in 2002



Source: Automated Inmate Information System

Notes: Includes DOC inmates held in jail, Anthony Center, and Diagnostic.

Table 13
Percent of Sentenced Inmates by Offender Group
United States and West Virginia

	US	WV
Violent	49%	56%
Property	20%	25%
Drug	21%	7%
Public Order	10%	8%
Anthony Center	NA	4%
Total	100%	100%

Sources:

US Data: Key Facts at a Glance, Bureau of Justice Statistics, U.S. Department of Justice. www.ojp.usdoj.gov/bjs.

WV Data: Automated Inmate Information System.

Notes:

Violent: Murder, Manslaughter, Rape, Sexual Assault, Robbery, Assault, Extortion, Intimidation, Criminal Endangerment.

Property: Burglary, Larceny, Motor Vehicle Theft, Fraud, Possessing and Selling Stolen Property, Destruction of Property, Trespassing, Vandalism, Tampering.

Public Order: Weapons, DUI, Escape, Obstruction, Vice, Moral/Decency, Liquor Laws.

Forecast Results

Key Assumptions

The inmate population projections contained in this report were completed using the Wizard 2000 simulation and projection model. This model simulates the movements of inmates through the prison system based on known and assumed factors affecting both the volume of admissions into the system and the lengths of stay for inmates who are housed in prison. It simulates the movements of individual cases, by offense category, and projects each separately.

The following key assumptions were used and have a significant impact on the projection results.

A. The sentence group composition of future annual new court commitments is assumed to be the same as the composition of admissions between January 1, 2001 and December 31, 2001.

Projections in this report are based on admission and release data provided to ICJC by West Virginia for the time period January 1, 2001 to December 31, 2001. Future admissions are assumed to “look like” these admissions in terms of the proportion of admitting charges, sentences received, jail credit days earned, good time credit awards, likelihood or parole release rates, and serving times to parole eligibility.

B. Parole grant rates will remain consistent with hearings held between July 1, 2001 and June 30, 2002.

For the first time, actual individual parole hearing information was compiled from the Institutional Parole Officers by the DOC Office of Research and analyzed for this simulation model. Between July 2001 and June 2002, 33% of the parole hearings in which a decision was made resulted in a release from prison. This overall grant rate was built into the model and is assumed to remain relatively stable.

Grant rates vary by offender group and by hearing number. This variance was built into the model and will increase the accuracy of the resulting forecast.

C. Parole revocation rates will remain at the levels reported between January 1, 2001 and December 31, 2001.

In 2001, a total of 228 offenders were returned to prison for violations of parole conditions. It is assumed that the revocation rates associated with the returns between January 1, 2001 and December 31, 2001 will remain unchanged throughout the forecast horizon. Since violators are returned to prison within the simulation model based on existing rates, more offenders will be “naturally” returned as the number of releases from prison increases.

D. Over the forecast period, new court commitments are projected to increase by an overall average of 1.8% each year through the year 2012.

The average increase is assumed to continue over the forecast horizon.

Forecast

This section contains the inmate population projections. Projections are presented for all state prison offenders, including Anthony Center inmates, diagnostic inmates, and inmates housed in local and regional jails.

Table 14 displays a summary of the historical and projected inmate population from 1993 to 2012.

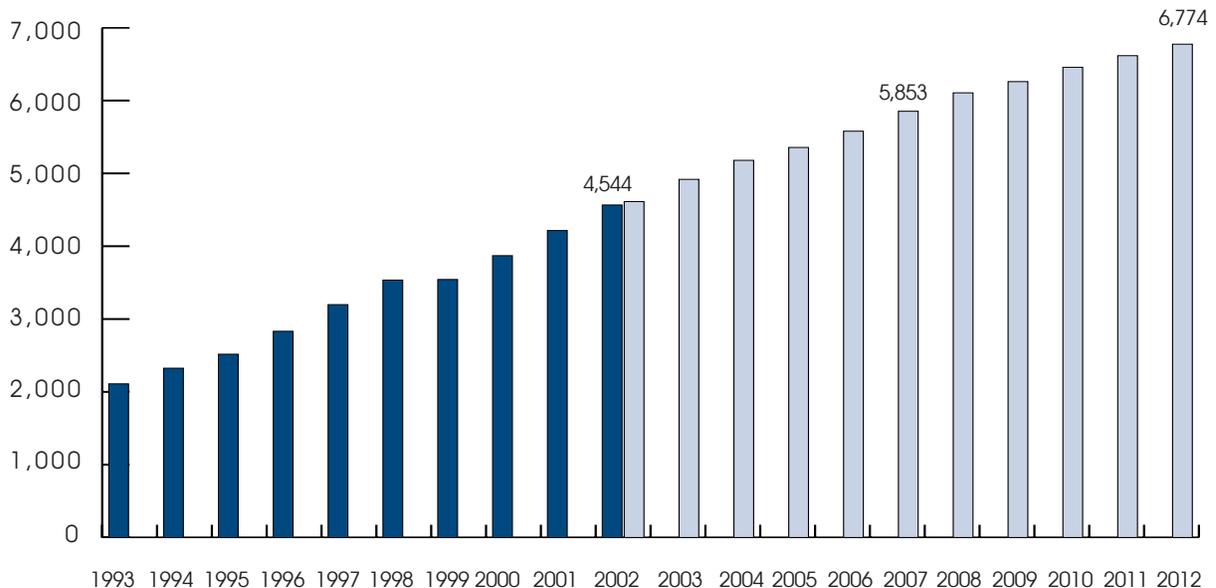
Significant Finding: *If current trends continue unchanged, the inmate population will grow to 5,853 by the end of 2007 and to 6,774 by the end of 2012.*

Table 14
Actual and Projected
Inmate Population: 1993-2012

Year	Population		Annual Change	
	Historical	Projected	#	%
1993	2,110			
1994	2,325		215	10.2%
1995	2,517		192	8.3%
1996	2,832		315	12.5%
1997	3,198		366	12.9%
1998	3,535		337	10.5%
1999	3,543		8	0.2%
2000	3,870		327	9.2%
2001	4,215		345	8.9%
2002	4,544	4,613	329	7.8%
2003		4,918	305	6.6%
2004		5,179	261	5.3%
2005		5,356	177	3.4%
2006		5,579	223	4.2%
2007		5,853	274	4.9%
2008		6,106	253	4.3%
2009		6,260	154	2.5%
2010		6,457	197	3.1%
2011		6,616	159	2.5%
2012		6,774	158	2.4%

Source: Historical Data - End-of-Year Tallies (Tracking)

Graph 10
State Prison Population Forecast



Recommendations

West Virginia continues to experience increases in the number of offenders committed to, confined in, and released from state prison. It is crucial that state leaders understand the continued growth in the flow of inmates through corrections, are able to explain this flow to their constituency, and respond in ways that ensure continued public safety. Although the prison population in West Virginia is relatively small when compared to other states, West Virginia is one of the few remaining states that has continued dramatic prison population growth and has done nothing to help curb this growth.

For the past three years, similar statistical methods that have been used around the country have also been used in West Virginia. This increased knowledge has helped replace anecdotal understanding with comprehensive studies.

In January 2001, the Statistical Analysis Center released the first forecast based upon a simulation. Since that time, the forecast has been updated and reviewed two times. Although the forecast has performed exceedingly well, the process of issuing prison statistics and producing a simulation model can be improved upon. Of the recommendations made in January 2001, the state has only responded to a few. The state must strive to respond to these recommendations to improve the quality of the forecast, our understanding of the prison population, and ultimately ensure public safety.

#1: Continue to Explore & Develop New Sources of Data

Simulating the flow of inmates through the prison system requires extensive knowledge, obtained through quantitative data, of the prison population. Currently, the method of obtaining this quantitative knowledge requires various data sources and a substantial amount of specialized and unorthodox programming. The programming was not error-free; many offenders could not be included and much information was lacking. Furthermore, information regarding probation and parole revocations are nonexistent. Due to these limitations, each forecast requires a great deal of investment and some additional assumptions regarding the prison population.

The Division of Corrections is in the process of developing a new automated tracking system. The current system of obtaining data through NCRP forms leaves gaping holes in our information about DOC inmates housed in local and regional jails. These forms are only completed on inmates who are physically admitted to a DOC facility. The State should continue to prioritize an automated system and ensure that the system contains the data elements necessary for the forecast process, including admission and release information on inmates housed in jails.

The Supreme Court Administrative Office is just beginning to explore a new automated tracking system for adult probationers. This system could provide valuable information about probation revocations. The State should invest in this system and ensure that it contains the data elements necessary for the forecast process.

The Parole Hearing Database, developed by the Division of Corrections and the Statistical Analysis Center, should continue to be maintained by DOC. It provides valuable information about parole hearings, including the grant rates by offender group and hearing number. It does not, however, include information about parole revocations. The State should explore methods of obtaining this information.

#2: Ensure Data Validity

Unfortunately, a data system and the reports produced are only as good as the information entered into the system. For these reasons, it is important for the State to develop data verification procedures and evaluate them on an annual basis. The State recently implemented a few procedures to increase data quality. The State could implement additional procedures, thereby ensuring quality data, quality reports, and quality decision-making. Even the best data systems maintained by highly skilled staff need to be reviewed and tested for sufficient levels of data validity.

#3: Continue to Involve the Consensus Group in Reviewing and Approving the Forecast

After the January 2001 report was issued, a comprehensive consensus group was formed to review and approve the simulation models, assumptions, and the ramifications of results. As a result, West Virginia has produced an official state forecast that all state leaders can trust represents the best forecast available. West Virginia should be proud that such a difficult and political task can be completed with such diverse input and consensus.

For this group to continue evolving, it should explore some of the unanswered questions regarding West Virginia's criminal justice system that have a great influence over the prison population. Additionally, the group should begin to address the ramifications of the forecast by identifying areas for potential prison bed savings and efficiencies. This group will be challenged in the future to spearhead these efforts and utilize the research capabilities at DCJS to inform these efforts.

#4: Continue Producing an Annual Corrections Statistics Report for State Leaders

This is the third annual statistical report concerning the prison population released by the Criminal Justice Statistical Analysis Center. These reports provide state leaders with the information necessary to understand and address the prison population growth. They have accurately predicted growth in the past and continue to predict growth in the future.

The Statistical Analysis Center has also provided numerous statements for the Legislature to assess the impact of proposed legislation on the prison population. This service continues to be available to key leaders in the state.