



Managing Broward County's Jail Populations

Broward County

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I. Introduction: Project Description

In 2009, the Broward Sheriff's Office (BSO) contracted with Florida State University's Center for Criminology and Public Policy Research to complete the following tasks:

1. Develop a ten-year population forecast for BSO's jail population.
2. Validate the COMPAS Risk Assessment instrument utilized to inform pretrial release decisions.
3. Conduct a cost-benefit analysis of the use of jail alternatives versus jail.

II. Incarceration Challenges

Role of Research

Why was this project an important step for BSO?

Timely and responsible criminal justice and corrections research is an important tool for administrators because it informs the planning and development processes for correctional policies and practices.

Informed correctional planning is clearly important now – when we are in a period of history where the country and the state are experiencing dire economic constraints, increasing correctional costs, and demands to maintain public safety in a fiscally responsible way. This is the challenge—how to ensure public safety and cost effectiveness.

With jail populations increasing at higher rates than prison populations (at the national level), planning for future capital outlay and operational expenditures is crucial and this is precisely what Broward County is seeking with this project. Namely, how to ensure its residents with maximum public safety that is cost efficient.

II. Incarceration Challenges U.S. and Florida Perspectives

- For decades, the dialogue addressing the dramatic growth in incarceration rates in the United States has focused on prison populations.
- The contribution made by expanding jail populations and jail overcrowding has been largely omitted from the national dialogue as well as at the state level despite their interrelationship, namely the more use of prisons the more inmates entering jails awaiting prison intake.
- The sentencing and release laws that were enacted in this country throughout the 1980s and 1990s sent 2.3 million people to prisons and jails by 2008.
- As the PEW Center on the States reports, more than 1 in a every 100 adults was confined in an American jail or prison in 2008.
- Moreover, in Florida, 1 in 31 adults was under correctional control. In 1982, this number was 1 in 74 adults.

II. Incarceration Challenges U.S. and Florida Perspectives

- In 2000, the national jail population was 621,149 and, by 2008, it had increased to 785,556 (26%)¹.
- Very importantly, during that same decade, jails were, on average, operating above 90% capacity¹.
- While Florida drastically increased the number of adults under correctional control between 1982 and 2007, the state slightly decreased the percent of the correctional population that was in jails or prisons¹.
- This decreasing trend which reflects increased reliance on alternatives to incarceration such as probation and other pretrial programs is a positive sign and one that should continue given the ongoing fiscal crisis and the documented effectiveness of many of these alternatives to incarceration.

1. Source: PEW Center on the States (2009) and/or Justice Policy Institute (April 2008))

II. Incarceration Challenges U.S. and Florida Perspectives

- At the close of 2007, 38% of Florida's correctional population was in prison or jail which ranked the state 20th in the country.¹
- This was a slight improvement from 1982, when 40% of the state's correctional population was in prison or jail (national ranking of 8th).¹
- Between 2000 and 2009, Florida's jail populations increased from 48,591 to 57,768 (19%); however, the jail population peaked in 2007 at 63,424 and then declined in 2008 and 2009. This two consecutive year decline is the first such decline since 1986 and the 6.1% decrease between 2008 and 2009 is the largest annual decline since 1986.²
- In 2009, on average, 60.3% of offenders in Florida's county jails were awaiting trial. ²
- In 2008, Florida expended 10% of general revenue on corrections—amounting to \$2.82 billion (increased from \$502 million in 1988).¹

1. Source: PEW Center on the States (2009) and/or Justice Policy Institute (April 2008)

2. Source: Florida Department of Corrections

III. Jail Population Forecasts

Broward's Resident and Jail Populations

- To plan for fluctuations in the jail population, BSO administrators need to examine trends in the county's resident population as well as trends in the jail population.
- Broward's resident population increased 7.8% between 2000 and 2009; projections estimate that the rate of growth will slow between 2010 and 2020 (expected to increase by 4.9%).
- Broward's jail population increased by 24% between 2002 and 2006; however, since 2006, the jail population has experienced a decrease (from 5,661 in 2006 to 4,888 in 2009) with a noticeable decline between 2008 and 2009 (5,364 to 4,888).

III. Jail Population Forecasts

Broward's Historical Jail Population Compared with Florida's Other Large Counties

- When focusing on the two-year period between 2006 and 2008, Broward County's jails' average daily population (ADP) declined significantly – while Dade, Palm Beach, Duval, and Orange counties experienced increases in their ADPs.
- Broward's ADP decreased from 5,661 to 5,364
- Of Florida's largest counties, only Hillsborough's jails' ADP decreased in a similar manner as Broward's (3,864 to 3,735).
- Broward continued to initiate proactive practices with regard to alternatives to jail and, in 2009, Broward's ADP was 4,888 – yet another year of decreasing jail populations (an 8.9% decrease between 2008 and 2009).

III. Jail Population Forecast

Broward's Historical Jail Population - Average Length of Stay

- Another example of the BSO's proactive stance toward managing jail populations is demonstrated in the trend with the average length of stay in jail.
- From 2003 to 2006, there was a steady increase in the average number of days spent in jail for all inmates—from 27.4 days to 32.4 days.
- Since 2006, the average length of stay for all inmates has declined (from 32.4 days to 29.2 days), although there was a slight increase between 2008 and 2009.
- From 2002 through 2009, greater than 50% of jail releases spent two days or less in jail.
- Although there have been fluctuations from year to year, the percent of individuals spending various lengths of time in jail has remained relatively constant.

III. Jail Population Forecast

Broward's Historic Jail Population - Pretrial and Sentenced Populations

- Examining Broward's pretrial population further illustrates the fact that the BSO has been proactive and responsible in managing their offender population while protecting the public from violent offenders in a cost efficient manner.
- Between 2005 and 2009, Broward increased the use of pretrial alternatives and alternatives to jail for sentenced offenders; the ADP for these programs experienced annual increases, with the exception of drug court from 2007 to 2008.
- Between 2005 and 2009:
 - Pretrial's ADP increased 159%
 - Probation's ADP increased 46%
 - Day reporting/reentry's ADP increased 419%
 - Drug court's ADP decreased 10.5%
- Overall, there has been a modest increase in the percent of jail releases that had a pretrial status: 57.3% of releases had a pretrial status in 2002 and 61.0% of releases had a pretrial status in 2009.
- Data from the most recent years—2007, 2008, and 2009—further demonstrates this trend; the percentage of inmates who were released through pretrial mechanisms increased annually: from 57.9% to 59.1% to 61.0% respectively.

III. Jail Population Forecast

What to Expect?

- A long-term jail population forecast is essential in order to plan for future needs with regard to jail capacity, personnel, and operational costs.

- Three methodologies were utilized to develop Broward's jail population forecast:
 - Demographic Based Model: a model that utilizes projected trends in demographic resident population data to project future jail populations
 - Autoregressive Integrated Moving Average (ARIMA) Model: a time-series analysis that uses historical trend data for jails to predict future jail populations and is influenced more by recent past data than distant past data
 - An average of the projections from those two models

III. Jail Population Forecast

Projections from the Demographic Based Model & the ARIMA Model

Demographic Model:

- No significant increase in the jail population is expected over the next ten years.
- The total annual ADP for Broward County in 2009 was 4,888.
- The total annual ADP is projected to continue to decline in 2010 reaching 4,620.
- The total annual ADP is projected to be 4,774 in 2020.

ARIMA Model:

- A decline in the total ADP is projected from 2009 to 2010, followed by a gradual increase from 2011 to 2020.
- The total ADP for 2020 (4,716) is not projected to be any higher than the ADP for 2009.

III. Jail Population Forecast

Jail Forecast Compared to Actual Population

There were minimal differences between the projections generated from the Demographic Based Model and the ARIMA Model which increases the confidence in the projections' accuracy.

By 2020, the difference between the two methodologies for total jail population is 58.

A preliminary examination of actual ADP data from the BSO for 2010 indicates that the ARIMA forecast results are extremely close to the actual numbers.

The ARIMA model projected the ADP to be 4,460 for the months January through August 2010 and the actual ADP (as calculated and provided by the BSO) is 4,489—a difference of 29 inmates or less than 1 percent.

IV. COMPAS Risk Assessment Validation

- Risk assessments have a long history in corrections that has moved from individual correctional personnel who differentiated their caseloads to quantitative systems like COMPAS.
- COMPAS was implemented in late 2008, in part, to provide the First Appearance Judge with additional information to inform the pretrial release decision-making process.
- FSU conducted a validation of the predictive ability of the COMPAS instrument only; the validation did not include the administration of the instrument or the selection of offenders screened by COMPAS.
- The COMPAS instrument assesses three categories of risk: recidivism (commission of any future crime post release), violence (commission of future violent crime post release), and failure to appear at a court hearing (FTA) post release.
- Risk Scores range from 1 (lowest) to 10 (highest)
- Recommendations assess offenders as Low Risk (1-4); Medium Risk (5-7); or High Risk (8-10).

IV. COMPAS Risk Assessment Validation

Predictive Accuracy

- Predicted measures for recidivism, violence, and FTA were compared with actual occurrences of those three indices over six follow-up periods (1 mo., 2 mos., 3 mos., 3 mos., 6 mos., 9 mos., and 12 mos.).
- Overall, regardless of the length of the follow-up period post release, the data consistently demonstrate that offenders assessed by COMPAS as having a higher risk of recidivism were, in fact, more likely to recidivate.
- 27.2% of the high risk offenders were re-arrested within three months compared to 6.5% of offenders assessed as low risk and 61.0% of offenders assessed as high risk were re-arrested within twelve months compared to 18.1% of the low risk offenders.

IV. COMPAS Risk Assessment Validation Predictive Accuracy

- COMPAS was highly predictive for each of the three risk measures (recidivism, violence, and FTA) across the follow-up periods of varying lengths.
- COMPAS was most accurate in predicting overall recidivism.
- Across the varying follow-up periods, the three levels of risk (low, medium, and high) that COMPAS utilizes for recommendations were meaningful and appropriate.
 - Low risk was distinguished from medium risk, and medium risk was clearly distinguished from high risk.
- The thresholds that distinguish the three risk levels were found to be appropriate across the various follow-up periods.

V. Cost-Benefit Analysis (CBA)

Alternative Programs Compared to Jail Costs

- Given the trends of decreasing jail populations and increasing placements in programs, it is important to determine if there is a cost-benefit to an increased reliance on pretrial programs and programs that serve as alternatives to a jail sentence.
- Four programs were included in the CBA: drug court, probation, day reporting/reentry, and pretrial.
- Comparisons were made between one year in each of these programs compared to one year in jail.
- All 4 alternative programs demonstrated a cost savings when compared to housing offenders in jail.

V. Cost-Benefit Analysis (CBA)

Alternative Programs Compared to Jail Costs

- The cost savings were calculated using annual ADPs for each program between 2005 and 2010 and the per-day/per-client costs for each program. These costs were compared with calculations using the per-day/per inmate costs and ADP for jail.
- The numbers demonstrate that probation generates the largest cost savings; however, that level of cost savings is a function of the larger number of individuals placed on probation compared to the other programs. A larger ADP will generate greater cost savings.
- These numbers represent the amount of dollars that are saved by placing these individuals (the ADP) in a particular program rather than placing them in jail.
- The annual cost savings for these 4 programs over 6 years (between 2005 and 2010) are:
 - Drug court potentially saved between \$20m - \$30m
 - Probation potentially saved between \$150m - \$300m
 - Day reporting/reentry potentially saved between \$30m - \$40m
 - Pretrial saved approximately \$30m in the early years and reached more than \$100m in savings in 2009-10

VI. Summary and Conclusion

- This project provides the BSO with research that validates practices that have already been implemented and that will assist future planning to manage the jail population without jeopardizing the safety of BSO employees, county residents, or offenders and thereby resulting in a series of cost-benefits.
- BSO currently operates 4 jails, based on the projections from the jail population forecast, it does not appear that there is a need to expand jail capacity.
- BSO utilizes a risk assessment tool that is highly predictive and can inform pretrial release decisions.
- BSO has developed and utilizes various alternative programs for pretrial and sentenced offenders that generate significant cost savings for the county when compared to housing offenders in jail.

VI. Summary and Conclusion

- Recommendations include:
 - Continue to increase utilization of current alternatives to jail for appropriate offenders (pretrial and sentenced).
 - Identify the programs that are most effective in reducing recidivism and meeting program goals and objectives.
 - Very importantly, examine the feasibility of expanding programs to further reduce jail populations and to meet the diverse needs of offenders.
 - Assess/validate the administration of the COMPAS tool and the selection of offenders who receive the assessment.
 - Identify impediments that may hinder the use of COMPAS recommendations by the judiciary.

VI. Summary and Conclusion

- Conclusions include:

- Broward County is operating an effective series of jail alternatives that together have reduced reliance on jail for both pretrial and sentenced offenders.
- Should subsequent research document the feasibility of expanding pretrial and other jail alternatives, further reductions in Broward's jail population can be anticipated that would continue to reduce costs while maintaining public safety.
- The ultimate question facing Broward is to determine the limits of pretrial and other jail alternatives while maintaining public safety.