

## **FORECASTING: FICTION AND UTILITY IN JAIL CONSTRUCTION PLANNING**

by Allen R. Beck, Ph.D.

### **HOW ACCURATE IS FORECASTING?**

There are several things to remember about forecasting criminal justice events, regardless of whether the forecast is based on simple or complex mathematical models, uses a microcomputer or the most sophisticated main frame computer, or was developed by a high priced consultant. The first point to remember is that the future cannot be predicted with certainty. The rules of probability do not hold in the forecasting of social phenomena such as crime. The further out in time a projection is made, the greater the possibility that the future could vary. Quite simply, a forecast made for tomorrow, one day away, is more reliable than a forecast made for months or years into the future. If an "expert" claims to possess a forecasting model that has been proven to be accurate or that a forecast can be created with 90% probability of being correct, the person hearing this claim should warm up the tar, collect the feathers, get out the rail, and escort the charlatan out of town.

Forecasts are guesses about the future based on the past. Using the past to "see" the future is like driving a car by looking into the rear view mirror. As long as the road is straight or curving in wide arcs, the driver can stay on the road by looking backward. However, if a sharp turn occurs or a bridge is out, the driver will crash. So it is in criminal justice forecasting. For example, no one in the 1970's was able to foresee the rapid growth of drugs in the 1980's. In fact, in the late 1960's and up to mid 1970's there was a political move afloat by some "knowledgeable" experts to halt new prison construction across the country. Their prognostications were as shaky as are all long range visions.

### **FOUR CONSIDERATIONS OF A JAIL FORECAST**

When faced with jail or prison overcrowding a need arises to determine how much new capacity should be added. Knowing that the current jail or prison is too small is a different matter from deciding how much capacity should be built. The answer to this question involves examining alternatives rather than a single prediction of bed space requirements. Each alternative involves a cost. Building a new jail based on the recent inmate growth rate is but one of the options. And it just happens to be the most costly!

In order to provide a solid understanding of decision making options, the forecaster should address four considerations:

**Consideration One:** Have there been any criminal justice policy shifts that have contributed to the trend in inmate population growth? In some cases local decision makers may feel they know what is causing their population growth problem, but often they are surprised at what an analysis discovers. Seemingly minor changes in informal and formal policies can sometimes ignite major growth in jail population. Fortunately, not all policy shifts are unalterable. In explaining such shifts the forecaster should include an estimate of the magnitude of impact on the inmate population.

**Consideration Two:** What is happening to crime and arrests? These two events are not the same thing. It is not unusual to find that a crime, such as auto theft, is decreasing in its rate of occurrence but has an increasing arrest rate. Furthermore, what brings about an increase in crime does not necessarily bring about an immediate increase in arrests and vice versa. For this reason, a forecaster must examine not only policy shifts but changes in community demographics, changes in economic trends, and changes in the reporting and arrest trends for each type of crime. The findings should be communicated in the forecast document and in a manner that is easy to understand. Such information is helpful in two

ways. First, it can rule out erroneous perceptions about crime in the community. For example, in one community studied by the author the analysis deflated a notion held by several political activists that serious crime was soaring and that more jail space was an absolute necessity. Anyone not supporting their view of the need for a new jail ran the risk of being labeled as "soft" on crime. The second benefit of historical analysis is to provide insight into why arrests are changing. Sometimes such analysis points to choices among law enforcement options.

**Consideration Three:** How well is the criminal justice system functioning in moving defendants through the adjudicatory process? This is an extremely important question when considering construction of a new jail. Given that typically about 60 to 75% of the persons in jail are awaiting trial, the speed with which their cases are processed will affect the size of the jail population. Large reductions in jail populations have been obtained by improving case processing procedures. Those procedures span the entire criminal justice system from the time of arrest to the point of final disposition of the defendant's case. For this reason the forecaster should look for historical changes, i.e., those changes within the last ten years and specifically within the last three, that have slowed the adjudicatory process. In addition, an analysis should be performed to determine if the system is operating efficiently. Such study need not be all-consuming or prohibitively expensive. In most small and medium sized jurisdictions, three days of interviews and one day of making data requests is all of the information collection time that will be required of the forecaster. Of course, time will be required for agencies to turn around data requests. A protracted study is not usually needed since most major performance improvement needs can be identified through a general analysis.

**Consideration Four:** What alternatives to incarceration are being used? Experience suggests that in about two thirds of the communities experiencing jail crowding underutilize alternatives to incarceration. This is not to say that all incarcerated defendants should be let out. The use of effective options is not an all or nothing situation. If a defendant cannot make bail, he or she is not necessarily a poor candidate for supervised release. Conversely, a defendant who makes bail is not automatically a good risk for unsupervised community release. Not only is this an issue related to jail crowding, but one of practicality and fairness as well. What is being advocated is not a radical or "liberal" position but one that recognizes that locking up arrestees is not an appropriate "one size fits all" response to managing the unsentenced jail population. Usually the development of effective community supervision options for both unsentenced and sentenced persons provides a cost-effective way of reducing the number of new jail beds that will need to be constructed.

### **FORMAT OF A USEFUL FORECAST**

Keeping in mind that the future will be greatly affected by decisions, an administrator or governing body dealing with the issue of jail or prison overcrowding should expect to receive a forecast document that makes explicit the various offender population management options. This document should also depict the future in terms of alternative paths or projections. Typically, one path will portray what might happen in a "business as usual" scenario. Other paths should provide insight into what could occur given various likely mixtures of options. Of course such a forecast will require the analyst to provide more than one set of calculations on projected capacity requirements.

The forecast document should also present details on the four considerations described in the previous section. This will help decision makers become knowledgeable about the issues. If they are to make cost-effective decisions and justify their decisions to the public they must be well informed.

Decision makers must keep in mind that no one can tell exactly what will happen in the future. Forecasting the criminal justice future is not like forecasting rain, an undertaking in which scientists keep looking for more accurate methods. The future will be driven by a collection of forces, some of which can be affected, manipulated, and changed. A forecast should not be judged by the pinpoint accuracy of its predictions, as that is a matter of luck. Rather, a forecast document should be evaluated on its utility in making explicit decision making options which can be employed to control jail population growth. This view of the future respects decision making and program management--not mathematical equations and

computer programs, as determinants of the future. The forecaster plays a supportive role which provides information for decision making. Collectively, the forecaster and decision makers strive not to foretell the future but to enable it.

### **STRATEGIES FOR CAPACITY ADDITION**

There are several ways to approach addition of jail and prison capacity. One way of hedging against an unpredictable long range future is to plan facilities so that capacity can be added in intervals rather than all at once. From a cost perspective, it is wasteful to immediately "build out" the estimated capacity required to house inmates fifteen or twenty years into the future. Such a strategy could result in constructing beds that would go unfilled for many years.

In architectural terms, such planning calls for designing a larger "footprint" than is needed for the next five to ten years. A footprint involves the layout of space and utilities to accommodate all of the space within the facility at build-out. For example, the kitchen and laundry would be sized for future needs and utilities would be planned to accommodate additional living areas. By designing a larger footprint than is immediately needed construction can be geared to match the rate that the inmate population actually grows. If the rate slows, construction of additional inmate housing capacity can be delayed.

Other strategies to offset the costs of overbuilding capacity can be considered. For example, the housing of inmates from surrounding jurisdictions on a per diem cost basis is a relatively common way of filling unused jail capacity. Such strategies typically are examined as a separate issue apart from the forecast.

---

**ABOUT THE AUTHOR:** Dr. Allen Beck has been actively involved in studying and creating forecasts since 1976. In 1978 he completed his dissertation entitled: *The Art and Methods of Jail and Prison Population Forecasting*. He was also a Research Fellow sponsored by the U.S. Department of Justice, USDOJ, to study forecasting methods. From 1977 to 1981 he served as Consultant, Assistant Director, and Director of the Midwestern Criminal Justice Training Center established by the Law Enforcement Assistance Administration, LEAA, which was part of the USDOJ. While associated with the Training Center he taught forecasting to many of the country's criminal justice planners. Since 1981, he has created forecasts for the planning of jails and prisons in more than 35 criminal justice communities (counties and states). During the late 1980's he created a computer-based training program for a forecasting software program, IMPACT, which was developed by the Justice Research and Statistics Association under a USDOJ grant.

Dr. Beck is a principal in Justice Concepts Inc., JCI, which provides consulting services nationwide in the study of criminal justice systems and planning and financing of jails. He can be contacted at Justice Concepts Inc., 417 W. 87<sup>th</sup> Place, Kansas City, MO 64114, Phone: (816) 361-1711, Email: [abeck@justiceconcepts.com](mailto:abeck@justiceconcepts.com).

Copyright © 1996 by Allen R. Beck. This article also appeared in the August 1998 issue of *Correctional Building News*. For information about *Correctional Building News* please visit their website at [www.correctionalnews.com](http://www.correctionalnews.com)