Preventing Jail Crowding: A Practical Guide

Understanding the sources of jail crowding

Try to visualize a graph...one line sloping downwards, the other sloping upwards. The first line represents the decline in offenses reported to local law enforcement and the other represents the growing number of people in the county jail. The graph illustrates the divergence of two trends.



We all agree that the number of people in jail

is a consequence of the level of criminal activity taking place in the community. But that does not fully explain the situation in jurisdictions where measures of the level of crime have been declining, yet the jail population continues to increase.

In these jurisdictions, the increase in the number of people in jail is also a consequence of changes in the response of officials who operate the local justice system -- local law enforcement, prosecutors, probation and parole officers, judges.

These changes can be thought of as changes in justice policies and practices. They may be stated or unstated, obvious or subtle. Empirically, they show up as changes in decision making. These changes in decision making can be detected at key justice system decision points that mark the passage of an individual or a case through the justice system process; e.g., at the decision to arrest, the decision to place an arrestee in detention, case filing, sentencing, and so on.

Though they work independently, as these officials make decisions at these key justice system decision points, they collectively operate the levers and controls that regulate the size of the jail population. Note the changing policies and practices of these officials lie mostly outside jail operations. The Sheriff, or the jail administrator, has little control over who goes into jail, how long they stay there, or how they get out.

Understanding the dynamics that create changes in jail occupancy levels.

Preventing and/or managing crowding requires a basic understanding of the jail population dynamics that determine how many people are in a jail. This understanding comes from examination of a basic formula:

The jail population analysis formula:

The admission rate and inmate length of stay determines the number of people in jail. This can be expressed as (number of admissions x average length of stay = number of jail bed days required) divided by 365 days per year = average daily jail population.

Changes to either portion of this equation (number of admissions or length of stay) will change the number of people in jail on any given day. A jail crowding crisis can result if they both increase at the same time.

An example will help illustrate this important formula. Let's say that, on average, ten people are admitted to a hypothetical local jail each day, and the average length of inmate stay is 15.0 days. As we start this exercise, the midnight inmate count at the end of the day on January 10th confirms that there are 100 people in jail.

Consider the following scenarios:

Scenario 1 - Stable State: If ten people are admitted to jail on January 11th and exactly 10 people are released on January 11th, the midnight inmate count at the end of January 11th will remain the same as it was at the end of January 10th. This stable state will occur if the number of admissions exactly matches the number of releases. The jail occupancy level will remain unchanged as a result.

Scenario 2 - Admissions Increase: If 20 people are admitted to jail (10 more than normal) and only the usual 10 people are released, there will be 110 people in jail at the end of the day on January 11th. This is an increase of 10 inmates. It is easy to see how more admissions can increase the number of people in jail and eventually produce jail crowding.

Scenario 3 - Length of Stay Increase: If ten people are admitted to jail on January 11th and only one person is released that day, the total inmate count will swell to 109 inmates. The number of admissions did not change, but there were fewer releases than usual. Fewer releases *always* mean inmates are staying longer than before. This scenario shows how longer inmate stays will increase the number of people in jail. (Conversely, shorter stays will work to reduce the number of people in jail.)

The length of inmate stay is a very important but less understood determinant of the number of people in any jail. Many jail administrators can quickly produce detailed information about their number of admissions, often with additional detail about arresting agency, charges, and so forth. Yet, it is much harder to find jail administrators who can produce length of stay information for these same classes of prisoners.

Scenario 4 – Both Change: What happens when scenario 2 and scenario 3 combine; in other words, when there is an increase in admissions *and* an increase in the length of inmate stay? Using our example, we can see that the increase in admissions would produce ten additional inmates at the end of the day. Further, the increase in the inmate length of jail stay would produce nine additional inmates. As a result, the total inmate

count would swell from 100 to 119 inmates. (Ten from an increase in admissions and nine from an increase in the inmate length of stay.) Thus, the most difficult situation, from a jail population management standpoint, is when *both* the numbers of admissions and the inmate length of stay are increasing. This is when the jail population will increase most rapidly.

Explaining Swings in Jail Occupancy Levels

It is precisely in these times of crisis that the Sheriff and/or the jail administrator will be expected to answer some pretty basic questions: Who is in jail? Why has the jail population has been increasing? Why is the jail crowded? Typically, the people responsible for answering these questions do not do a very good job. This is because they simply do not have sufficient information to do so. Difficulty in answering even simple questions can undermine public confidence in the ability of the jail administrator and/or Sheriff to understand and manage the situation.

It isn't that they are not trying. The interaction of the admission and length of stay variables can be complicated. These are not easy interactions to understand. Many computerized jail information systems seem unable to create the kinds of reports that are needed. And, if done manually, it takes time to pull the booking jackets, collect the data by hand, analyze it, and prepare a report. Even then, the report may not contain information sufficient to answer some of the questions that will be asked. For example, it may not contain information that will confirm or discredit some of the hypotheses (guesses) others will set forth to explain changes in jail population levels. Thus, the analysts must return to the data, do additional analysis, and repeat the process.

By the time a written report can be presented, additional changes in admission and release rates may be taking place. The situation keeps changing. Analysts are always shooting at a moving target. It is difficult to create a clear picture of the situation. Rather, the process seems to go in circles. This can gradually erode confidence in the department's ability to analyze the situation. As a consequence, there is little enthusiasm for proposed courses of action because too many people are unsure that these are the appropriate remedies. The result is inaction.

Fortunately, there is an alternative...

A Jail Population Analysis System

It is possible for any jail to set up a data collection and analysis system that will describe these changes in admission and length of stay, show how they combine and explain why and how the jail population is rising and falling.

The data that could produce a very basic jail population analysis appears in table 1

Table 1: Jail Population Analysis System Data Elements

Essential Data Elements	Description			
Person identifier	Number unique to the person			
Booking event number	Number to identify the jail admission			
Sex	Identify gender			
Booking date	Date inmate was admitted to the jail			
Booking time	Military time inmate was admitted			
Release date	Date inmate was released from jail			
Release time	Military time inmate was released			
Release Type	Bail, ROR, acquittal, escape, etc.			
Examples of Optional Data Elements				
Arresting agency	Agency making arrest (not transport)			
Sentence status	Sentenced all charges; partial; none			
Offense level	Felony, Misdemeanor, Infraction, etc.			
Court jurisdiction	Court of jurisdiction			

These data should be collected on every person in the jail at a specific date and time; for example at a midnight inmate count. Thereafter, the same data should be collected for anyone who enters or leaves the jail. The data for each inmate would appear as a row on a spread sheet or in a data base. Conceptually, it is like creating a checkbook where the checkbook balance represents the daily population count, deposits represent admissions and checks written represent releases -- It's a crude equivalent of a "Quicken" for Corrections.

Every jail keeps some sort of record of jail admissions and releases. This means that every jail already has the basic data needed to begin to build a jail population analysis system. No additional data may need to be collected.

Data collection starts with the recording of the date, time and identifying information for every person who enters or leaves the jail. Normally, additional information will also be available from records kept at the jail or in the local information system. For example, admissions records may identify the arresting agency, the arresting agency charges, and so forth. And, in addition to release date and time, there may be some record of the type of release (bail bond, release on recognizance, dismissed or acquitted in court, etc.)

Using only the data elements labeled "essential" in table 1, a jail administrator could begin with the jail population on January 1, 1999 and show how changes in the number of admissions and/or length of stay added or subtracted to the population over the following months. This would permit the jail administrator to determine how much of the change was due to an increase in admissions, and how much was due to a change in the average length of inmate stay.

If additional detail is also in the data base (see example optional data in table 1), the administrator could "drill down" into the data base to analyze components of the jail

population. This will help determine if the change can be attributed to some subset of inmates. For example, is the change concentrated in male inmates or female inmates, inmates being arrested by a particular agency, or for a particular offense, or who are being processed in a particular court?

Table 2 displays an example of partial results of such an analysis for inmates in custody on a given day. Monthly reports of this type can be compared to show changes in jail composition. Similar tables can be created to depict changes in bookings and/or releases over various time periods. The report format will be essentially the same.

Table 2: Example Report of Jail Utilization and Occupancy

Sentence Status	Number of Inmates	Percent of Inmates	Hours in Custody	Percent of hours	Ave. Hours Stay
Felony Sentenced	156	26.5%	370,865	26.8%	2,377
Felony Unsentenced Misd. Unsentenced	184 119	31.2% 20.2%	847,229 248,419	53.0%	4,605 2,088
Misd. Sentenced Other Sentenced	125	21.2% 0.6%	111,898 15,985	7.0% 0.1%	895 3,996
Other Unsentenced	1	0.2%	4,150	0.3%	4,150
Totals	589	100.0%	1598546	100.0%	2,714
Offense Levels					
Felony	340	57.7%	1218094	76.2%	3,583
Misdemeanor Other	244 5	41.4% 0.8%	360,317 20,134	22.5% 1.2%	1,477 4,027
Totals	589	100.0%	1598546	100.0%	2,714

Some jails do not have an automated record keeping system. Fortunately, these tables can be constructed using the manually maintained booking and release logs as source information. The data must first be entered into a desktop computer. It can then be analyzed with commonly available, widely used spreadsheet programs.

Where this information is already in a computer, the task is to set up a daily down load of existing data. No new data collection should be necessary.

Modeling Jail Population Management Options

Once this basic jail population analysis capability is established, it can be used to begin modeling the results of hypothetical or actual changes in admissions or lengths of stay. Hypothetical changes may be labeled "defensive," as in the case of a crowded jail that seeks to find ways to reduce the size of the inmate population. Or, changes may be

labeled "proactive." For example, officials may seek to make more effective use of jail bed space by deliberately changing the composition of the jail population so as to keep some people longer and move lesser offenders to other corrections options.

We begin with an example to illustrate how a defensive type change would work:

Let's assume that our hypothetical jail has 100 inmates and that the jail is full at the start of our exercise. This would mean that the public protection resource available to the community is 100 beds x 365 days a year or 36,500 jail bed days. This 36,500 jail bed days represents the available public protection resource.

If the average length of inmate stay is 15.0 days, then 2,433 inmates can be housed during the year. (36,500 jail bed days divided by 15.0 average day stay = 2,433 inmates).The bed space requirement would change if either the number of admissions or the length of stay were reduced. For example, let's say the number of admissions and the length of stay could both be reduced by 10%.

How would a 10% reduction in both the numbers of admissions and the length of inmate stay effect the inmate count? The results of the exercise are as follows:

Reduction in number of admissions: (10% of 2,433 inmates housed during the year = 243 inmates) x 15.0 average days stay = 3,645 jail bed days. This translates into a bed saving of 10 beds (3,645 jail days divided by 365 days = 9.98 beds)

Reduction in inmate stays: (10% of 15.0 days = 1.5 days.) This reduces the average length of inmate stay from 15.0 to 13.5 days. This translates into a bed savings of 10 beds (1.5 days stay x 2,433 inmates = 3,650 fewer jail bed days). And 3,650 fewer jail bed days divided by 365 days per year = 10 beds.

The combined result can be estimated as follows:

- Previous number of inmates that could be housed 2,433 • 10% reduction in admissions -243
- New number of admissions (90% of previous) 2.190
- New length of stay =13.5 days

13.5 day inmate stay x 2,190 inmates = 29,565 jail bed days, divided by 365 days in the year = jail population of 81 inmates. This means the jail population would be reduced to 81 inmates versus 100 inmates before these reductions.

Reducing the inmate population in a crowded jail.

Our example also illustrates how officials might reduce the number of inmates in a crowded jail. Suppose a local jail has only 81 beds, but is crowded and has an average daily population of 100. The previous example shows how the inmate population can be reduced to 81 inmates through the achievement and continuous management of a 10% reduction in admissions and average length of stay.

Policy Choices

Any actual implementation of this idea would not use an arbitrary 10% reduction, either for admissions or length of inmate stay. Analysis of the type and source of admissions and types of jail releases should inform action. Each situation will be different. Some jurisdictions may find more possibilities to manage the admission rate but find fewer possibilities for managing the length of stay. Other jurisdictions may discover just the opposite.

Some jurisdictions might want to incapacitate fewer inmates but increase the length of stay of more serious cases. This would be an example of a "proactive" strategy. To do this they would reduce the number of admissions and increase length of stay. The total number of jail bed days might remain unchanged yet produce improved public protection.

There may be other jurisdictions that seek to achieve improved public protection by doing just the opposite; that is, by increasing the number of admissions but reducing the average length of jail stay. They may or may not wish to change the total number of jail bed days that are being provided.

These are but a few examples of how a jail population analysis capability might be put to work to first prevent, and then better manage jail population occupancy levels in a city or county jail. These are all examples of jail population *management*, a responsibility that springs from the belief that jail bed space needs to be managed in a way that maximizes community protection. In too many jails, the size or composition of the jail population is not determined by deliberate, well thought out, coordinated decision making. The jail population is left to seek its own level.

Conclusion

The key to preventing crowding, and to managing the jail population, is to continuously collect, monitor and analyze admission and length of stay information, then share the results with other justice officials and officials in leadership positions in general government. Their cooperation will be essential. They, collectively, control the policies and practices that determine jail admissions and length of stay. As noted earlier, these levers and mechanisms lie outside the control of the jail administrator and/or the Sheriff.

For this reason, the Sheriff and the jail administrator have a stake in forming a justice system wide Criminal Justice Coordination Council (CJCC), or in strengthening an existing CJCC that is not operating well. This is a forum where the Sheriff can demonstrate that potential or actual jail crowding is a justice system dysfunction. It is not simply "the Sheriff's problem." (For readers who seek additional information, developing a CJCC is the subject of a forthcoming NIC publication. See citation at the end of this article)

These officials have a big stake in making sure the jail bed resource is best used to maximize public protection. When they are presented with clear and convincing, empirical evidence, they will do what they can to modify their polices and practices. A jail administrator and/or Sheriff can exert a great deal of influence on the decision making of these other agencies. But they can only do so if they have the facts, if they can competently answer questions about how the jail population is changing, and if they can clearly demonstrate how changes in admission rates or lengths of stay can improve the administration of justice. (For more information, understanding the dynamics of jail population change is the subject of another forthcoming NIC publication, written by Mark Cunniff, of the National Association of Criminal Justice Planners. The Pretrial Services Resource Center has also prepared an excellent piece on jail crowding from a systems perspective. These publications are cited at the end of this article.)

This approach will also serve the community well when it comes time to build a new jail. Officials will be more informed and more supportive. They will be able to help the community understand that jail bed space is being used wisely. The public will not support efforts to expand jail bed space until they are convinced that all potential excess has been squeezed out of the existing operation.

Resources:

- "Guidelines for Developing a Criminal Justice Coordinating Committee," written by Robert C. Cushman, forthcoming from the National Institute of Corrections;
- "Jail Crowding: A Process for Discerning the Jail Dynamic," written by Mark Cunniff, Executive Director, National Association of Criminal Justice Planners, forthcoming from the National Institute of Corrections;
- "A Second Look at Alleviating Jail Crowding -- A Systems Perspective," prepared by the Pretrial Services Resource Center, Washington, D.C., published by the Bureau of Justice Assistance, U.S. Department of Justice.

Bob Cushman is former corrections practitioner and current member of the American Jail Association. He is an experienced justice system trainer, researcher, project director, writer and consultant. boborsandy@aol.com (650) 341-4309.