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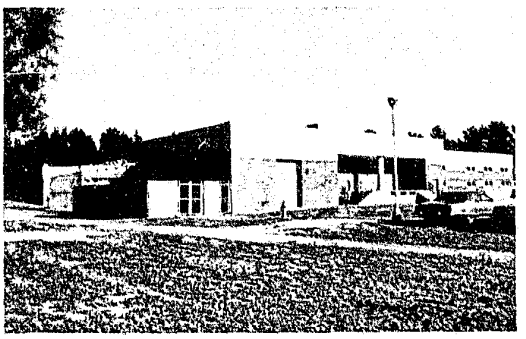
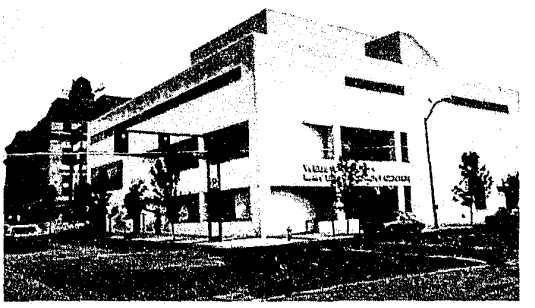
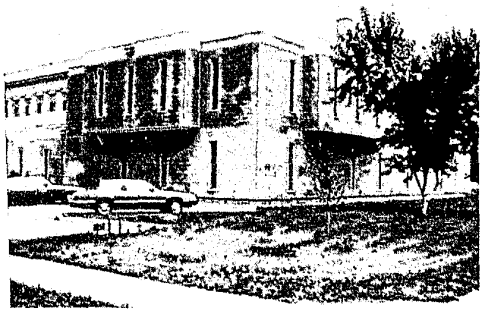
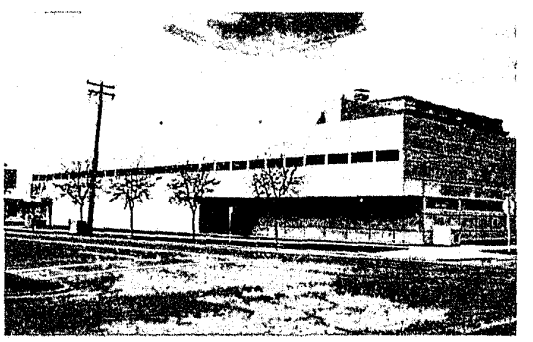




The Nature of New Small Jails: Report and Analysis





Cover photos, clockwise from top right: Webster County Jail, located within the Webster County Law Enforcement Center, Fort Dodge, Iowa; Walla Walla County Jail, Walla Walla, Washington; Beadle County Regional Correction Center, Huron, South Dakota; Lincoln Parish Detention Center, Ruston, Louisiana.

THE NATURE OF NEW SMALL JAILS:

Report and Analysis

by

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October 1985

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ABSTRACT

In 1985 KIMME Planning & Architecture surveyed 255 jails of 50 beds or less ("small jails") that had been opened since 1974, and conducted on-site evaluations of 32 of those facilities. The work, done under a grant from the National Institute of Corrections, was designed to discover the nature of the facilities that had been built and to determine what "worked" about them and what did not. This document is principally meant to communicate the results of the 255-jail survey; the on-site evaluations were made to add depth to the interpretation of the data.

The data revealed that many, but not all, of the new facilities experienced a variety of problems. These included overcrowding, space shortages, and law suits. However, problems occurred with much less frequency in jurisdictions that had adequate numbers of trained staff, had done pre-architectural planning, and had to meet state jail standards. The method of supervision utilized also affected the incidence of problems. Specific architectural features such as the materials used seemed to have a lesser effect on operational problems in the jails.

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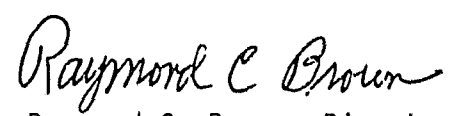
FOREWORD

New jail construction is a major capital undertaking. For smaller jurisdictions, it may represent the single largest project in which county officials are involved. Since 1970, as many as 1,000 small jails have been constructed in the United States at an estimated total cost of $670 million. While this major jail construction effort might have been expected to result in a vastly improved system of local jails, it apparently did not.

Instances of new jails that were facing lawsuits as soon as they opened, and others with operational, staffing, or physical plant problems so serious that they could not open, were fairly commonplace. Many localities reported experiencing most or all of the same problems that existed in their old jail--problems that the new facility was expected to reduce or eliminate. Simultaneously a body of case law was being developed around jail design, management, and operations. And, in response, professional associations and various state agencies were developing and implementing minimum standards for local jails.

To respond to local jurisdictions' need for direction and assistance in the area of jail facility planning and design, the National Institute of Corrections sponsored a two-year grant program to develop Model Architectural Plans For Small Jails. The first part of that effort identified and surveyed all of the new small jails opened during the 1974-1984 decade. The purpose of the survey was to determine which planning, design, and operation elements were successful, which were not, and why. This report documents the results of that survey.

The information presented here should be beneficial to all those involved in the construction of new small jails: county commissioners, sheriffs, jail administrators, criminal justice planners, architects, and interested lay persons. As the second part of the grant project proceeds, the study team will be producing a comprehensive design guide for small jails based on the collective experiences of the small jails surveyed.



Raymond C. Brown, Director
National Institute of Corrections

ACKNOWLEDGMENTS

Any effort as extensive and substantial as surveying 255 of the approximately 490 small jails built since 1974 and visiting 32 of them relies on the good will and assistance of a great many people. A basic debt of gratitude goes to NIC's Program Manager for this project, Michael A. O'Toole. Mike provided constant guidance, cooperation, and good advice in the execution of the work. The authors would also like to thank the many sheriffs and their staff who willingly took the time to complete one more survey, and a lengthy one at that. Special thanks go to those helpful jurisdictions that agreed to an on-site visit from a team of strangers in addition to completing lengthy surveys. We would also like to extend our appreciation to the many state jail inspectors, state sheriffs' association staff, and other state level officials who helped us verify the existence of some of the new jails surveyed and also helped select sites for the project team to visit. And finally, we would like to thank Nancy Sabanosh at NIC and Barbara Krauth for valuable editing assistance, and thank Marie Mactavish, Lynn Lund, Jill Goldhart, Allen Patrick, Bill Barham and William Delaney for taking the time to review and comment on draft materials.

I. INTRODUCTION

The construction of a new jail facility is a major event in the life of any community. Much of the jail's importance is drawn from the fact that it costs a great deal to build and tends to last a very long time. To illustrate, consider that the estimated average cost of a jail in 1985 was over $50,000 per bed and that the National Sheriffs' Association (NSA)* has found that 26% of the nation's jails are at least 50 years old. Clearly, on these grounds alone, the construction of a new jail is an event worthy of considerable thought and planning aimed toward the creation of facilities that best serve the long-term interests of the community.

Although cost and longevity issues generate ample concern in their own right, the significance of the jail construction event has become even greater in the 1980's. Indeed, one could fairly say that the demands on today's project are "light-years" ahead of the demands of even the recent past. This owes to the fact that the expectations for jails have been transformed virtually overnight by several factors drawing massive attention to the corrections field. These include rapidly increasing crime rates, major riots and disturbances, and, most significantly, law suits questioning the constitutionality of our prisons and jails. These factors have led to an awakening and a facelift of a field that had remained dormant for nearly a century, much in contrast to the constant and even rapid progress of other disciplines.

A primary result of this metamorphosis has been the development of dramatically increased standards at both the state and national levels. Many states formulated jail standards for the first time, filling a surprising gap in regulation when one considers that there are standards and relevant codes for virtually every other type of public facility. Today, only a handful of states do not have standards of some sort, and many who had them a decade ago have fully revised their requirements.

The "catching-up" process that has taken place in corrections has created changes that, if not taken into account, can make new buildings obsolete the day they open and can create costly liability problems for the building owners and operators.

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*The State of Our Nation's Jails by the National Sheriffs' Association under a grant from the National Institute of Corrections, 1982.

In brief, there are several important realities that communities must face in the new correctional climate to avoid these consequences.

A. Jail Management. Based upon the way our courts and standards-writing bodies have come to view things, a county is obligated to provide far more rights for inmates and assume far more obligations in providing for people over whom they have total control and assume full responsibility. This has translated into more services, greater access to outside resources, and extensive documentation of jail activities, among other things.

B. Staffing. As both an issue in its own right and a result of more elaborate and extensive jail operations, counties are required to provide more and better trained personnel in the jail. At a minimum, this includes full-time, around-the-clock staffing ample in number, training, and type to respond to the needs of a diverse inmate population (women, intoxicated, mentally ill, etc.).

C. Facility Design. Modern day standards, which are based in large part on extensive research and standards from other fields that accommodate similar activities, require both larger spaces and more types of spaces than found in the typical jail of the past. This means, in essence, far larger buildings for comparable facility capacities. Additionally, new standards have placed heavy emphasis on key items of health, safety, and welfare, specifically through standards on sanitation, fire safety, and environmental conditions (temperature, ventilation, light, etc.).

Against this backdrop of change and changing requirements many new jail facilities have been built. (By extrapolating NSA's count, for example, as many as 1,000 new county and major city jails, or 30% of the nation's total, may have been built since 1970.) And also against this backdrop one might logically expect that many more jails will be built in future years. Certainly the demand is there (an estimated 50,000 beds during the next four years) due either to changes in standards or to overcrowding.

The direction of those anticipated future efforts, however, is not as clear as it might be because little has been documented about the results of the last ten years of activity. And nowhere has this been more true than with the small jails of the nation, the jails of 50 beds or less.

Concern about the small jail and the lack of overall knowledge about it grew for three reasons.

1. Periodic contacts with some new small jails revealed very poorly designed and operated facilities.

2. The focus of past research efforts and resources seemed to be heavily tilted toward larger jurisdictions.

3. Small jails represent 63% of the nation's jails and 12% of the nation's jail inmates.

In response to this concern, the National Institute of Corrections decided to launch a research effort that would discover the results of the last ten years of small jail construction. From these results would come information on the nature of new small jails, what "works" in their design and operation, and what does not. This research would thus fill a major void and would provide those many jurisdictions likely to build in the next decade with valuable background to their own efforts. This background would help ensure greater levels of success and, at least, help counties avoid the creation of architectural disasters that could never be operated securely, legally, or efficiently.

This document is a report of KIMME Planning & Architecture's research findings on behalf of the National Institute of Corrections and is, in essence, a description of the state of the nation's new small jails.

II. SUMMARY AND CONCLUSIONS

A. Summary

A survey of the last decade's new small jails, conducted in 1985, has netted some very interesting and potentially useful results. This user-provided data on the 255 county jails of 50 beds or less responding to a lengthy mail survey not only identifies the nature and characteristics of the new facilities, but identifies those factors that seem to have had the most influence on their successes and failures. The following points summarize some of the more important findings of the survey.

1. The typical new small jail has 28 beds, books 878 people per year, has an average daily population of 16.5, and opened in mid-1978. The average cost of construction was about $49,000/bed in 1985 dollars.

2. Ninety-one percent of the jails share a building with a sheriff's law enforcement operation and also frequently share the building with other governmental functions.

3. Fifty-eight percent of the new small jails house juveniles.

4. A very high percentage of facilities report histories of operational problems including damage to jail property, suicides, untrained staff, contraband passage, and law suits.

5. The most significant operational-related problem cited by new facilities was staff shortages (60 percent); 34 percent called this a very serious or somewhat serious problem.

6. Twelve percent of the new facilities failed to provide any jail staff, relying instead on radio dispatchers, electronic surveillance or other unspecified means. Thirty-nine percent failed to provide female staff at all times while female inmates were in the jail.

7. Overcrowding was a problem for 44 percent of the new facilities, with 40 percent of them occasionally experiencing inmate counts greater than their capacities in 1984.

8. The most popular mode of surveillance, at 88 percent of all new facilities, was the traditional intermittent mode with which constant observation of inmates is not maintained.

9. Staff surveillance was supplemented by audio surveillance equipment in 75 percent of the new facilities and by closed circuit TV in 40 percent of the new facilities.

10. There was a noticeable increase in the number of inmate programs and services provided in comparison to older facilities, although 42 percent of the new facilities failed to provide indoor exercise, and 47 percent failed to provide outdoor exercise.

11. Although single occupancy cells are recommended by professional standards, they represent only 34 percent of the capacity of new small jails.

12. Only 35 percent of the new facilities surrounded their cellblocks by the once-common perimeter guard corridor.

13. The majority of facilities utilized concrete block cell walls instead of the traditional steel plate walls, while the majority retained the traditional steel bar or steel plate cell door.

14. Fifty percent of the new facilities cited space shortages, with 33 percent calling the shortages a very or somewhat serious problem. The sheriff's law enforcement component of the building had more severe space problems than the jail, which perhaps explains why 27 percent of the facilities converted jail space to law enforcement uses.

15. Maintenance was a major problem for small jails, as documented by frequently cited difficulties with equipment failures, obtaining replacement parts, and obtaining repair services.

16. Inability to adequately provide physical separation between different types of inmates remained a basic problem for small jails and was perhaps compounded by the fact that space for special inmates (mental, juvenile, female, etc.) was frequently inadequate.

17. Three-quarters of the new jails did some form of pre-architectural planning, although the planning frequently omitted key planning elements such as outlining the activities and services to be provided in the new facility.

18. Transition into the new facility was a significant problem for nearly half of all the new jails. Principal

difficulties were found in providing adequate staff and adequate operational funding at opening.

19. The most influential factor in reducing operational and facility problems was providing trained jail staff.

20. Providing an adequate number of staff was the second most effective way to reduce both operational and facility problems.

21. State jail standards have had a very positive effect on new small jails, particularly with respect to reducing facility problems like space shortages and the physical separation of inmates.

22. Problems in physically separating inmates clearly exacerbate other operational problems such as inmate-to-inmate assaults or attacks, contraband passage, and assaults or attacks on staff.

23. The availability of indoor exercise areas seemed to measurably reduce the incidence of operational problems.

24. Many facilities citing overcrowding problems routinely held inmates for other counties, states, and/or the federal government.

25. Single occupancy cells make a noticeably positive contribution to the reduction of operational problems, especially with respect to damage to jail property and contraband passage, and, most surprisingly, with respect to suicides or suicide attempts.

26. Planning prior to actual design results in a clearly greater likelihood that facility spaces will be adequate in size, that the jail will fit in well with the law enforcement area, and that the operators will be satisfied with their facility.

27. Having an architect with prior jail design experience tended to result in fewer facility problems and a significantly greater likelihood that space provisions would be adequate.

B. Conclusion

The small jail survey results describe a set of facilities that collectively mark an improvement over the past. However, these same facilities have not universally adopted many of the changes that grew out of the 1960's and 1970's. Partly as a

result of this missed opportunity, many of the new facilities have experienced a recurrence of the operational and facility problems so characteristic of an earlier generation's jails. While there are a few excellent examples among the new jails, there are many more new jails with substantial problems and a limited ability to change or expand.

Much of the problem seems to stem from a lack of awareness of the changes that had occurred and of the resources that could help. Many small communities have never been sued, have never used the resources of agencies like the National Institute of Corrections, and were not aware of such things as accreditation standards. In any event, the best way to characterize the state of new small jails is that, in general, they are markedly better than their predecessors but have only made it half of the way home.

C. Advice from Jail Operators

The best general advice on how the next decade's jail planners and designers can make it the rest of the way home may come from the operators of the new jails themselves. In the survey, they were asked to give the single most important piece of advice they could to their colleagues and peers who were about to initiate their own planning processes. The responses were many and varied, but clearly boiled down to the following four points arranged in order of greatest frequency.

#1. Visit other jails. The respondents' #1 recommendation was that local officials take the time to visit other new facilities and talk to their users in order to discover what is good and bad about their existing designs and operation, and what is appropriate for a new local design and operation.

#2. Consult the users of your own facility. A surprisingly high number of facilities were designed without the input of the very people who were to operate them, sometimes even including the sheriff. A frequent recommendation was for close involvement by the facility staff.

#3. Don't skimp on the building. A common recommendation was to build the new facility right the first time, not to skimp on space and materials in such a way that operating the jail is a constant headache. Respondents pointed out that such headaches are cheaper to avoid before the fact than they are to resolve after the fact.

#4. Plan for the future. Respondents strongly and repeatedly recommended that facilities be designed to accommodate future growth and future change. Many stated that this was not the case with their own facilities.

The preceding advice is good advice. It can be summed up in one word: planning. Pre-architectural planning of a comprehensive and participative sort is basically what new jail operators are advocating from their experiences. A good model of this sort of planning is provided by the National Institute of Corrections through its Planning of New Institutions (PONI) training and technical assistance program,* which is free to local officials. Many of the survey respondents advised that their colleagues participate in this program.

Both better planning and the use of the data within this document should result in future small jails that are more effective in meeting the needs of their local communities.

*For more information about the PONI Program, contact the National Institute of Corrections Jail Center, 1790 30th Street, Suite 440, Boulder, Colorado 80301; telephone 303-497-6700.

III. SURVEY METHODOLOGY

This report is based principally upon the data generated from a survey document drafted specifically for small jails by the KIMME Planning & Architecture (KPA) team during 1984 and the first month of 1985. The team drafting the survey consisted of a survey specialist, two jail operational specialists, and three licensed architects. All had previous jail evaluation experience.

The survey document went through several careful revisions after team members offered critiques. The survey was pre-tested at 32 sites across the United States before the final document was prepared for distribution. The pre-tests were done by mailing the survey to the respondents and then making telephone contact to obtain the answers and to discuss the survey. Pre-test sites were selected from a group of eligible small jails suggested by contacts from various states across the nation.

The final product was an 18-page document that had 67 separate questions, with many of the questions having multiple parts. The questions were grouped into identifiable clusters on such topics as background, law enforcement, staffing, operations, facilities, and planning/transition.

The final survey was mailed to all new small jails that could be identified as being opened in or after 1974. In other words, no sampling was done since the survey was targeted at all jails of 50 beds or less opened since 1974. This alone greatly enhances the reliability of the data received. Other qualifications were that the jail be a newly constructed facility, not an addition or renovation, and that the facility be a full-service county jail, not a short-term holding facility or a city lock-up.

The survey was fundamentally a user survey. It was mailed to the jails and was therefore completed by sheriffs, jail officers, dispatchers, or combinations thereof. No survey was completed by commissioners, judges, architects, or anyone outside of the jail or sheriff's department.

The initially identified survey sites for the first mailing totalled 490 facilities. Between the first mailing and a later follow-up mailing, KPA received 273 completed surveys, a return rate of 55.7 percent. Of the 273 returned forms, 18 facilities were excluded because they were too old, too large, or, in two cases, returned the survey too late. The quality of the final set of 255 surveys was very high and very little data was missing.

KPA designed a computer program that tabulated and cross-tabulated the data for analysis. The resulting print-out was

lengthy and rich, and resulted in the data reported in this document.

Finally, significant perspective on the meaning of the data was provided by a series of on-site visits to small jails. These visits were made in conjunction with this project and added greatly to the staff's prior experience and to their interpretation of the survey data. Indeed, the lessons gained from the visits inspired some of the more interesting cross-tabulations of the data.

IV. BASIC SURVEY FINDINGS AND ANALYSIS

A. Profile of the Average Small Jail

This section of the report will document the answers given to the 67 questions asked in the 18-page small jails survey and will provide background and analysis for most of the questions. An attempt to interrelate or cross-tabulate various answers will be made in Chapter V of this report.

A profile of the average small county jail can be developed from survey results. This profile is in part based on inmate data taken from the year 1984.

To begin with, the average small jail of the last decade opened its doors in mid-1978, making it seven years old at the time of this writing. The average jail operator books 878 people into the facility per year and supervises an average daily jail population of 16.5 inmates. These figures in turn translate into an average length-of-stay of only 6.9 days for each person booked into the jail, even though 98 percent of the jails surveyed can legally house people in their facility for up to one year.

The average small jail has a capacity of 28.2 beds to accommodate its 16.5 inmates, apparently leaving it with a comfortable surplus of bed space. However, the typical jail experienced a peak day of 28.3 inmates, 71 percent more people than it experienced on an average day and roughly equivalent to the average jail's actual capacity. Of greater significance, 40 percent of the jails experienced a high day that was greater than their capacity. This suggests periodic overcrowding pressures at many new facilities.

The jail often shares a building with other governmental functions, most notably the sheriff's law enforcement operation. A full 91 percent of the jails surveyed featured this form of facility sharing. Given the limited size of these law enforcement operations and given the past history of sheriffs running the jails, it may be more worthwhile to turn the numbers around and note that as many as 9 percent of the jails did not have the law enforcement function in the same facility.

Other functions sharing a building with the jail and the frequency with which they do so are listed in Table 1.

Table 1

OTHER FUNCTIONS HOUSED IN THE SAME BUILDING AS THE JAIL

Judicial Court	36%
Juvenile officer or services	34
City police department	31
Probation, parole, or other justice agencies	28
Prosecutor's office	26
Federal emergency operating center	26

As shown in Table 1, smaller communities rarely build new facilities to meet their jail needs alone. Indeed, an average of only 59 percent of the typical facility's floor area was devoted to jail activities.

B. Interrelationship of the Jail to Other Jurisdictions

The routine transfer of inmates to facilities in other jurisdictions seems to occur with certain offender types. For example, 43 percent of the facilities regularly transfer the mentally ill, the escape risks, the violent, or others that could be considered "special prisoners" to other facilities. Thirty-four percent transfer their juvenile detainees to other facilities. Female adults and sentenced misdemeanants are also transferred, but to a much lesser degree (19 percent and 8 percent, respectively).

The data on juveniles is particularly interesting in light of the efforts of the federal government, state governments, and corrections professionals to remove juveniles from facilities housing adults. On one hand, the data may be discouraging since 58 percent of the new small jails in the United States still hold juveniles in the jail. On the other hand, 42 percent do not. Given that holding juveniles in small county jails was traditionally a standard practice, these figures might be interpreted as a significant improvement. Additionally, the average length-of-stay for juveniles held in new small jails is only 2.6 days, with 77 percent of the facilities holding juveniles an average of one day or less.

Housing inmates from other jurisdictions under formal negotiated agreements also occurs quite readily at new small jails; 63 percent had agreements to hold the inmates of other counties in their facilities. Holding inmates for the federal government and for state government was done to lesser degrees, but it was nonetheless done in a substantial number of

jurisdictions. Thirty-three percent of the facilities surveyed had agreements to hold federal inmates, and 39 percent had agreements to hold state inmates.

C. Staffing and Staff Training at the New Small Jail

Staffing is obviously critical to any detention facility and is no less so for the new small jail. Therefore, a profile of the numbers and types of staff found in new small jails is of great interest.

The average small jail has historically not been well staffed. In many instances, the small jail was without any formal jail staff and was frequently run only by a law enforcement radio dispatcher or a live-in sheriff. Fortunately, it seems that many smaller jurisdictions improved their staffing while they were building new facilities. Nonetheless, problems still seem to exist.

The average new small jail provides five full-time jail officers and 1.6 part-time jail officers. This is enough to provide the equivalent of one officer per shift given a 7-day-a-week, 24-hour-per-day operation. Many of these facilities seem to augment this staffing with radio dispatchers, since 71 percent of the facilities also used them as jail staff. Fifteen percent also augmented their complement of jail staff with a live-in sheriff or jail administrator, a surprising number since this practice seemed to have lost favor with the modern day sheriff.

Somewhat disappointing is the fact that around-the-clock jail staff has not yet fully established itself with new small jails. Excluding the dispatcher, 24 percent of the jails responding did not provide 24-hour-a-day, 7-day-a-week officer coverage. The survey also revealed that 12 percent of the facilities failed to provide any jail staff at all. Presumably, they rely upon dispatchers, live-in staff, or other arrangements common to inadequately staffed jails of earlier decades.

Another problem that appears to continue to some degree is not providing female staff when female inmates are being housed in the jail. Providing proper staffing for females and other special groups such as juveniles has always been a problem for resource poor and understaffed small jails. With respect to new small jails, 39 percent fail to provide female staff at all times when a female inmate is present in the jail. It is presumed that the 61 percent who say that they do provide such staffing do so through the use of female radio dispatchers, since this has historically been the case. This practice would appear to be logical to most small jurisdictions since the average daily population of female

inmates is rarely more than 5 to 10 percent of an inmate population. For the small jails in the survey, this percentage would translate into an average daily population as low as about 0.25 and no higher than about 4.0.

Since the preparation and delivery of food, the gathering and washing of laundry, and the general care and maintenance of a facility require person-power beyond levels actually provided by counties, inmate workers have historically been utilized in jails. These workers, frequently called "trustees," continue to be used in new small jails. Specifically, 81 percent of all of the respondent jails utilized trustees to provide various services in the jail. This percentage may in fact be somewhat higher since follow-up work on the survey revealed that some jurisdictions utilized inmate workers, but either did not consider them "trustees" or did not relate to the term.

The training received by jail staff to do their jobs has been a major concern throughout the United States for many years. Small jails seem to have inadequate resources to pay for pre-employment training and in-service training. This is complicated by typically high turnover rates, which increase the need for constant training. Data from the survey of small jails, however, is encouraging regarding the issue of training. The survey found that 63 percent of the new facilities claimed that "all" of their staff received formal jail (not law enforcement) training in a classroom setting or through correspondence courses. Such training excluded on-the-job training. Thirty-one percent of the facilities had "some" of their staff receive formal training, leaving only 5 percent of the facilities with no staff formally prepared for their work.

D. Inmate Supervision and Management

Certain features of a jail operation tell a great deal about how it supervises the inmate population and how organized and sophisticated it is in dealing with inmates. These features include the basic methods and tools of supervision, the availability of written policies and procedures, and other similar indicators. Historically, old small jails have been behind the times on these counts, as have been most jails throughout the United States.

One of the key operational issues is the method of inmate supervision. Concepts of supervision have much to do with the way in which jail spaces are organized in a building and with the amount of time staff are in physical or visual contact with inmates.

There are at least four basic ways in which jail populations can be supervised or monitored by staff. One method that has recently become quite popular is the "direct supervision" method. In this method jail staff are constantly positioned within each cellblock in direct contact with inmates since no barriers separate staff from inmates.

A second method that has become increasingly popular in the last decade is known as "podular remote." With the podular remote method, a series of pod-like cellblocks ring a central control station constantly occupied by jail staff. The staff member is separated from the inmates by a glass wall, thus inspiring the term "remote." In this arrangement staff are always able to look directly into the cellblocks and assert a constant level of surveillance; however, the relationship between the inmates and the staff is not interactive.

The third method of surveillance, the "intermittent" method, has historically been used in all jails, including small jails. With this method, staff are actually positioned in a different area of the jail than the inmates and, therefore, have only intermittent or non-constant contact with the inmates. When staff are not patrolling the cellblock area, inmates are expected to control themselves or to be controlled by electronic surveillance.

The fourth method of surveillance, for which there is no common name, relies primarily on electronic surveillance. Consisting of closed circuit television (CCTV) or audio surveillance (listening devices) or both, it generally does not involve any frequent or routine staff presence in the cellblocks.

Survey findings show, perhaps disappointingly, that the overwhelming majority of new small jails have opted for continued reliance on the intermittent approach to the surveillance of inmates. Specifically, a full 88 percent of the new small jails have designed most or all of their facilities around the concept of intermittent surveillance. The average intermittent surveillance facility required staff to make cellblock security checks only once per hour.

Only 1 percent of the jails featured the direct supervision approach. This is perhaps understandable given the recency of the idea's acceptance and, more importantly, the high numbers of inmates required per cellblock to make the concept economical. Less understandable is the fact that only 5 percent employed the podular remote method to take advantage of the constancy of surveillance it provides. Six percent of the facilities relied on electronic surveillance for inmate control.

Although it is clear that only a small minority of facilities relied primarily on electronic equipment for inmate surveillance, the presence of such equipment was common in the new facilities. Audio surveillance equipment was the most popular in the inmate housing areas (cellblocks), being used in 75 percent of the new small jails. Closed circuit television (CCTV) units were used in the housing areas of 40 percent of the facilities. These percentages represent a fairly heavy emphasis on technology as a way to assist in the control of inmates. The big emphasis on audio surveillance is particularly of interest since CCTV seems to be used more in older existing jails. This may be explained by the difficulty of adding secured audio systems to existing buildings and by the greater privacy concerns raised by CCTV in recent years. The lesser privacy concerns generated by audio surveillance may explain why 30 percent of the new facilities had audio units in the cells.

New small jails seem to represent a higher order of operational sophistication, if such sophistication can be accurately inferred from the existence of written operating policies and procedures, written rules for inmate conduct, and established inmate disciplinary measures, all features missing from the traditional jail. Specifically, nearly all of the new facilities had written policies and procedures (96 percent), written rules of inmate conduct (90 percent), and inmate disciplinary measures (94 percent). This data would raise hopes that a major improvement in jail operations has taken place, although the survey was unable to ascertain the nature, extent, or quality of any of these items.

E. Jail Programs and Services for Inmates

Inmate programs and services consist of such basic required activities as visiting and exercise and such typically optional activities as substance abuse counseling and library services. With the exception of the very necessary activity of visiting, the typical jail of the past offered very little in the way of any inmate programs or services. Survey results appear to indicate a marked improvement in the availability of both.

Visiting programs have always been a necessary and common activity in jails. In new small jails, this activity seems to be somewhat more structured and more readily available. Nearly all (88 percent) of the new jails have established policies whereby an inmate is assured a specified minimum time to visit. This period averages 33 minutes in new jails. Historically, such policies were not in existence, and the length of a visit was totally at the discretion of staff. In terms of availability, the average small jail allows visits two days per week; 34 percent of the

jails allow visiting three or more days per week. This would seem to be an improvement over the typical historical situation.

Outdoor and indoor exercise outside of the cellblocks, activities considered essential to the health of the inmates and useful to the control of their behavior, have been included in a relatively high percentage of new facilities. Historically, either type of exercise activity was rarely available. Even so, the survey team was surprised that only 58 percent of the facilities claimed indoor exercise outside of the cellblock and only 53 percent claimed outdoor exercise. A requirement for such spaces seems to have been firmly established during the past ten years through caselaw or state jail standards.

A variety of other programs and services were available to varying degrees in new facilities. Their presence is documented in order of greatest frequency in Table 2.

Table 2

PROGRAM/SERVICE AVAILABILITY IN JAIL

Telephone Privileges	98%
Religious Services	90%
Commissary	84%
Library	78%
Work Release	73%
Substance Abuse Counseling	65%
Education	47%

F. Operational Problems

As one might imagine, new jails, like new cars, can be expected to have some of the same problems as the old models. One can only hope, though, that the problems are not of a significant magnitude, and that the new experience will be a significant improvement over the past. Overall, the record of new small jails appears to be mixed if not somewhat troublesome regarding operational problems.

This impression is derived from responses given to the question, "Has there been any problem in your jail?," asked with respect to 12 classic issues. The responses are listed in Table 3 in order of greatest frequency. They are quite important to study not only because of their basic value, but because much of the analysis later in this report is based on these problem scores.

Table 3

OPERATIONAL PROBLEM FREQUENCY
(% of respondents answering "yes")

1.	Damage to Jail Property	79%
2.	Suicides or Suicide Attempts	65%
3.	Contraband Passage	64%
4.	Staff Shortages	60%
5.	Inmate-Inmate Assaults/Attacks	46%
6.	Overcrowding	44%
7.	Law Suits	42%
8.	Escapes	41%
9.	Untrained Staff	32%
10.	Assaults/Attacks on Staff	32%
11.	Fires	25%
12.	Standards Compliance	24%
AVERAGE		**46%**

These responses tend to give the impression that new small jails are operational calamities. They at least point up the fact that new small jails have failed to solve many of the problems they might have been created to solve. That such an overwhelming number have suffered damage to jail property or experienced overcrowding, law suits, and even non-compliance with jail standards is quite disheartening.

The only factor that takes the edge off of the previous statistics is that of the severity of the problems. All respondents affirming the existence of a problem were asked to rate its severity. The rating scale consisted of problems that were "very serious," "somewhat serious," "not too serious," and "not at all serious." Adjusted to reflect the total number of survey respondents, the percentage of jails rating their problem as "very serious" or "somewhat serious" for the given 12 categories is listed in Table 4 in order of greatest frequency.

Table 4

CITATIONS OF VERY OR SOMEWHAT SERIOUS OPERATIONAL PROBLEMS

1.	Staff Shortages (4th in Table 3 problem scores)	34%
2.	Contraband Passage (3)	17%
3.	Overcrowding (6)	15%
4.	Untrained Staff (9)	14%
5.	Damage to Jail Property (1)	13%
6.	Suicides or Suicide Attempts (2)	12%
7.	Escapes (8)	11%
8.	Law Suits (7)	8%
9.	Assaults/Attacks on Staff (10)	7%
10.	Standards Compliance (12)	7%
11.	Fires (11)	5%
12.	Inmate-Inmate Assaults/Attacks (5)	4%
	AVERAGE	**12%**

Adjusting for the severity of the problem reduces the impression that operational problems may be rampant in new small jails. Nonetheless, the percentages of very serious or somewhat serious problems being claimed are significant.

Adjusting for the severity of problems also changes the order of problems. Damage to jail property goes from clearly being the most frequently occurring problem to only the fifth most frequent problem in terms of seriousness, since only 16 percent of those respondents citing a problem with damage to jail property rated the problem as very severe. Staff shortages, on the other hand, ranks first in terms of seriousness, and only fourth in terms of overall problem frequencies because more than half of the respondents who designated it a problem felt it was very or somewhat serious. One of the most critical problems of the small jail, staffing persists as the dominant problem in the new facilities.

G. Characteristics of the Jail Building

A point of obvious interest is whether the nature of small jail design has changed much with the new facilities. In making such an inquiry, the survey team was interested in key interior features, not in the exterior appearance of the jail. The features of most interest were in the housing areas, since this area is the most fundamental ingredient of any jail. The interest

was in materials, cell area, design, occupancy levels, and the use of furniture and equipment.*

The small jail of the past had several typical, almost standard, characteristics. To begin with, small jails were almost totally reliant on multiple occupancy cells, that is, cells that were intended to hold two or more inmates. Two and four bed cells were the most typical and provided anywhere from 35 to 60 square feet of total floor area, or about 15 to 17 square feet per inmate. Cells were generally furnished only with bunks, small shelves, a mirror, and a combination toilet and sink fixture. They were typically constructed of steel plate and steel bars, although concrete walls and ceilings were sometimes used. Cells were generally built in a row, back-to-back with another row of cells but separated by a narrow space where piping for plumbing fixtures and lights could be secured. The cells were faced by a prisoner corridor or "bullpen" approximately 5 to 7 feet wide. The bullpen included a bench-type table with bench seating and provided access to a shower. The cells and bullpen were separated from the outside wall of the building by a 3 to 4 foot wide "guard corridor" that actually surrounded the entire cellblock.

New small jails have changed in character although many traditional features remain. They rely heavily on multiple occupancy cells although single occupancy cells (one bed per cell) predominate in selected facilities. Overall, 66 percent of the 7,151 beds represented by the survey group were to be found in multiple occupancy settings. On average, 9.5 of the 28.1 beds found in the average small jail were in single occupancy rooms.

The most commonly utilized multiple occupancy cell was the two-bed cell found in 50 percent of the new facilities. However, some of these were likely created when some 22 percent of the respondent jurisdictions had to add beds to their existing cells, a common practice when faced with overcrowding problems (44 percent of the respondents). The design of multiple occupancy cells, of course, is contrary to the criteria established by the Commission on Accreditation for Corrections in its Manual of Standards for Adult Local Detention Facilities, 1981 Edition.

Cells or dormitories of 5 beds or more were also extremely prevalent, being used by 49 percent of the new small jails. Also heavily used were 4 bed cells, found in 45 percent of the

*The use of CCTV and electronic listening devices was examined earlier.

facilities. Three bed cells were used by only 15 percent of those surveyed.

Single occupancy cells, where used, seemed to be adequately sized. The average floor area for a single occupancy cell was 63.5 square feet. However, 49 percent of them fell below the 70 square foot requirement of the accreditation standards. Thirty percent failed to provide at least 60 square feet of floor area.

The typical cell in the surveyed jails was better furnished and equipped than its historical counterpart. Virtually every jail surveyed had a bed, a mattress, a toilet, and a sink in the typical cell. Beyond those basics, however, was an impressive array of other features. These are listed in Table 5 in their order of frequency.

Table 5

ITEMS IN A TYPICAL CELL

Bed	99.6%
Mattress	99.6%
Toilet	99%
Sink	99%
Light fixture	98%
Mirror	90%
Shelf	76%
Clothes hook	72%
Desk or writing surface	72%
Chair or stool	63%
Inmate activated intercom	30%
Electrical outlet	24%
Light switch	12%

The most common construction materials for cells were concrete block for the walls at 62 percent of all facilities, concrete for the ceilings at 61 percent, and steel bars for the cell doors at 49 percent. The use of concrete block walls and to a lesser degree concrete ceilings illustrates major shifts in material usage for jails. The traditional steel plate found in so many older facilities appears as the typical cell wall material in only 15 percent of the new facilities and appears as the typical ceiling material in just 22 percent of the new jails.

The continued use of steel bar cell doors seems to be the primary construction legacy in new jails. This legacy is also strengthened by the use of traditional style doors consisting of a

single sheet of steel. This form of door was typical in 19 percent of the new facilities. Twenty-nine percent, however, used the more recent approach of hollow-core metal doors.

One significant improvement recently made in jails has been installing cell doors that can be remotely unlocked. These doors add to the security and safety of staff and aid in the rapid egress of the inmàtes in a fire or other emergency. Sixty-nine percent of the new small jails employed this feature. Thirty-one percent, however, are faced with the security problem of manually releasing inmates from their cells each day and with the time problem of manually releasing inmates under the pressure of a fire emergency.

Dayrooms, the central activity areas that serve a group of inmates, are normally immediately adjacent to their cells. Dayrooms have become a key element of the modern housing unit, or cellblock, and are expected to be a normal part of its design. Seventy-six percent of the new jails apparently concurred with this outlook and provided each housing unit with its own dayroom.

The dayrooms in new small jails featured varying furniture and equipment. Ninety-five percent provided tables and seating, and 83 percent provided a shower in each dayroom. A toilet and sink serving the inmates from the dayroom (in addition to any that were available in their cells) were present in 57 percent of the facilities. Televisions for entertainment purposes were found in the typical dayroom of 57 percent of the new facilities. This number is significant since the use of television has only recently gained acceptance as something beneficial in controlling inmate behavior. Telephones to allow inmates ready contact with family, friends, and service professionals were available in the dayrooms of 20 percent of the new small jails.

The typical inmate housing unit in the new facility was not surrounded by the traditional guard corridor. Sixty-five percent of the new jails did not utilize this feature, apparently opting for the savings in space this implies (20-25 percent of the floor area of each cellblock) and for a different approach to inmate surveillance. Another rationale for this change in approach has been to allow the direct introduction of natural light into the cells through the placement of a window in the cell wall abutting the outdoors. Of those facilities eliminating guard corridors, 48 percent had windows to the outdoors in all of their cells, and 29 percent had windows in some of their cells. Only 23 percent of the facilities rejecting guard corridors also rejected the concept of windows in their cells.

H. Space Adequacy

One of the frequent complaints about older facilities is that they just do not provide enough space. This complaint does not just apply to adequate square footage but to the provision of enough of the right kind of space. A bottom-line goal of any project, including a non-jail project, is that enough space be provided. A related goal is the ability to expand a building so that future space shortages can be accommodated without the initiation of a totally new project. The findings reveal that new facilities have not always responded very well to these concerns. In brief, 50 percent of the respondents claim that they had problems with space shortages, and 21 percent of the new facilities cannot be expanded.

In trying to detail the specific degree of space shortages, the survey inquired about the adequacy of 21 different spaces or areas within the jail. The survey asked the respondent to indicate which of the following phrases best described the adequacy of each space or area:

- Too much
- About the right amount
- Too little
- Much too little
- Do not have, do not need
- Do not have, do need.

In response, the survey revealed that there was a significant amount of dissatisfaction with the amount of space provided in different areas. It is not surprising, however, that there was very little response to the category citing "too much" space for a given room or function. The entire listing of space adequacy scores for new small jail facilities appears in Table 6. The figures printed in bold type in this table and following tables is intended to highlight certain key results.

Table 6

JAIL SPACE ADEQUACY

Area Function	Too much	About the right amount	Too little	Much too little	Do not have/ Do not need	Do not have/ Do need
Booking	2%	64%	26%	7%	0%	1%
Control	1	69	22	6	1	2
Vehicle parking	0	54	29	16	0	1
Detoxification space	0	57	20	7	8	7
Mentally ill holding	1	31	13	12	16	**28**
Disciplinary detention	0	60	17	9	4	11
Typical cell	1	**83**	12	4	0	0
Dayrooms	0	**75**	13	3	2	7
Trustees	0	62	11	3	15	9
Work release	4	48	15	5	19	10
Indoor exercise	0	39	18	11	9	**22**
Outdoor exercise	0	42	10	5	15	**27**
Non-contact visiting	0	67	21	7	3	3
Contact visiting	3	37	9	6	**36**	10
Attorney visits	1	**73**	14	6	0	5
Food prep/storage	0	54	20	13	**10**	**4**
Laundering	0	66	18	8	**5**	**4**
Admin./Staff	0	49	29	18	1	3
Storage	1	32	**35**	**32**	0	1
Inmate programs	0	39	**28**	**11**	**11**	**12**
Counseling	0	52	25	9	5	9
AVERAGES	**1%**	**55%**	**19%**	**9%**	**8%**	**8%**

The two spaces that most frequently had "about the right amount" of space were the typical cells and the dayrooms. They scored 83 percent and 75 percent respectively in the "about right..." category. This high level of rated adequacy might be explained by the respondents' limited perception of the spatial needs of inmates or, more likely, by the fact that cell size and dayroom size are frequently mandated by state standards. In fact, they are typically the only jail spaces which have specific square footage requirements attached to them by standards.

After cells and dayrooms, the two spaces with the highest adequacy ratings were the attorney visiting areas at 73 percent "about right," and control at 69 percent "about right." At the other end of the range were holding rooms for the mentally ill with only 31 percent "about right," and storage with only 32 percent "about right." These low approval ratings suggest some real and consistent problems that future planners should be careful not to overlook. These problems are also consistent with problems from the past.

Historically, small jails have had problems with small or special sub-groups of the overall inmate population. The problems of dealing with the adult female and juvenile offender groups are two prime examples. The mentally ill, intoxicants, and discipline problems are three other special groups that have created a constant problem for small jurisdictions. This is particularly true for the vast majority of jurisdictions with facilities having inadequate or inappropriate, specially designed space for them. Because of the classic nature of this problem, it is particularly discouraging to find that the jail space with the lowest adequacy scores among new small jails is holding rooms for the mentally ill.

Even though most national and state policy makers and most professionals in the field advocate the removal of the mentally ill and intoxicants from jails, the small, rural jurisdiction finds that it must deal with these groups to some degree. At a minimum, the mentally ill and the intoxicant (frequently a DWI or drunk charged with additional offenses) are held until arrangements can be made for their transfer or release. Such arrangements include court certification of mental condition, finding someone other than the shift's lone deputy to transport the individual, and, sometimes, finding a place that will accept the individual. So the problem is real and will likely continue in the forseeable future, even if detention is for one day or less.

Even more disappointing than the figure on inadequate space for holding the mentally ill is the fact that 28 percent of the respondents said that they did not even have such spaces, but did

need them. Overall, nearly one-half of the new designs failed to provide space for the mentally ill.

Space for intoxicants was not as inadequate. Fifty-seven percent of the new facilities had about the right amount of space. Only 7 percent of the respondents said that they did not have the space but needed it, and only 7 percent said that they had "much too little" space. Disciplinary detention space, frequently absent in old facilities, was adequate in 60 percent of the new facilities. However, 11 percent did not have the space but needed it, and 9 percent said that they had much too little disciplinary detention space.

Storage space is probably the least glamorous and least noticeable of the spaces in any building, including a jail. Yet it is as vital as any other space. The presence of files, mattresses, and toilet paper rolls in corridors, fire exit stairs, interview rooms, and staff offices is testimony to this fact. Yet, this problem persists with new facilities. Storage space easily had the highest percentages recorded in the "too little" and "much too little" space categories. A full one-third of all new facilities (35 percent) had too little storage space, and another one-third (32 percent) had much too little storage space, representing a 67 percent total dissatisfaction level.

The absence of certain kinds of space or areas is interesting to note in the contexts of spaces missing but needed and of spaces missing but not needed. The biggest missing but needed problem areas are indoor and outdoor exercise spaces. In 22 percent of the new facilities, the operators said that they did not have indoor exercise space but needed it, and 27 percent said the same thing about outdoor exercise space. An additional 9 percent and 15 percent, respectively, reported that they did not have indoor or outdoor space, and they did not need it. Thus, even in the face of changed standards and changed professional attitudes about the benefits of exercise, one-third of the new facilities did not have indoor exercise space and nearly one-half did not have outdoor exercise space, significant omissions for a new jail.

Another noteworthy absence is contact visiting space. Thirty-six percent of all new small jails do not provide this space, and their operators maintain that they do not need it. Ten percent replied that they did not have it but felt that they did need it.

Food service and laundry service space is also worth examining since small jails are generally small enough to consider alternatives to having it. Their option, of course, is to have the services provided by outside private businesses, local hospitals, or the like. Fourteen percent of the new facilities

did not include food service space in their floor plan, although 4 percent of the facilities missed its presence. Nine percent of the new facilities did not provide laundry space, although 4 percent of the facilities would like to have such an area. It seems clear that utilizing outside food and laundry services does not appear to be a popular option in new small jails.

I. Facility Problems

As with operations, the survey team designed some questions that had to do with a number of classic facility related problems. All told, fifteen topic areas were covered, and respondents were asked first to indicate if they had had problems, and, if so, to indicate the severity of the problems. Again, the hope was that new facilities would be relatively free of problems. And again, the finding was quite the opposite; a relatively high number of problems were reported.

The incidence of facility problems was not as high as operational problems, however. The most frequently cited facility-related problem, for example, was named by 63 percent of the respondents as opposed to a high score of 79 percent for the top category of operational problems (Table 3). Generally speaking, facility problem scores follow this pattern and are equally lower across the board. Nonetheless, there is a fairly high frequency of problems as Table 7 documents.

Table 7

FACILITY PROBLEMS FREQUENCY
(% of respondents answering "yes")

1.	Equipment failures	63%
2.	Obtaining replacement parts for equipment	50%
3.	Overall amount of space	50%
4.	Physical separation of inmates	48%
5.	Obtaining proper repair services	47%
6.	Durability of building materials & hardware	45%
7.	Good view into cellblocks	40%
8.	Basic location of rooms	34%
9.	Sound levels	32%
10.	Cell window frames & glass	30%
11.	Quality of environment	23%
12.	Ease of movement through the facility	22%
13.	Communicating w/inmates through barriers	21%
14.	Public-inmate view conflicts*	18%
15.	Emergency evacuation	15%
AVERAGE		**36%**

The entire issue of building maintenance is raised to a prominent level by these findings since four of the top six problem categories relate to this issue. This grouping of problems starts with the issue of equipment failures as the most frequently cited problem overall at 63 percent. It continues through the problem of obtaining replacement parts at a cited frequency of 50 percent, obtaining proper repair services at 47 percent, and the durability of building materials and hardware at 45 percent. These problems are prominent because of the emphasis on technology in new jail facilities in terms of heating, ventilating and air conditioning (HVAC) systems, plumbing, lighting, and more complex security equipment and the lack of basic maintenance and the ability locally to repair or stock parts for the equipment used.

*This refers to inmates being able to look out of their cells or other areas of the jail at the public in an undesirable or unacceptable manner.

Another major problem according to the survey, and a more fundamental one to the jail, is that of obtaining proper physical separation between different inmate groups. Groups requiring separation include males and females, adults and juveniles, higher security risks and lower security risks, felons and misdemeanants, violent and non-violent, pretrial detainees and posttrial incarcerants, and so forth. The length of the listing alone begins to suggest the difficult nature of this problem for the small jail. After all, it is entirely possible that the small jail's capacity may be smaller than the number of different groups it must keep separate. The separation problem has been classic to small jails that frequently have had only two or three cellblocks to work with. Unfortunately, the problem of proper inmate separation persists in 48 percent of all new small jail facilities. Perhaps part of the reason so many cited this problem is the lack of the various special holding spaces cited earlier.

One other problem is that of cell window frames and glass. This issue's problem score of 30 percent may seem relatively insignificant until one remembers that not all small jails have cell windows. Removing the 50 percent of facilities without cell windows increases the problem level to a full 60 percent; that is, six out of every ten facilities with cell windows have had some level of problem with them. This figure raises cell windows to the position of second-most frequently reported facility problem.

Cell windows have been a controversial feature ever since their reintroduction into modern facilities about 15 years ago. The problem involves many obvious and subtle operational and architectural issues that can and have been addressed in recent years. Nonetheless, it merits close attention by architects and operators alike.

While the overall citation of facility problems is at a lower level than the citation of operational problems, the survey shows that the seriousness of facility problems is considered greater. For example, where the average frequency of operational problems cited as very or somewhat serious is 12 percent of the new jails (Table 4), the average frequency of facility problems is 21 percent. This higher degree of seriousness is shown in Table 8 where the percentage of all surveyed facilities claiming a very serious or somewhat serious problem is documented.

Table 8

CITATION OF VERY OR SOMEWHAT SERIOUS FACILITY PROBLEMS

1.	Overall amount of space (3rd in Table 7 prob. scores)	33%	
2.	Obtaining replacement parts (2)	33%	
3.	Equipment failure (1)	32%	
4.	Physical separation of inmates (4)	30%	
5.	Obtaining proper repair services (5)	29%	
6.	Good view into cell blocks (7)	26%	
7.	Durability of building hardware & materials (6)	26%	
8.	The basic location of rooms (8)	21%	
9.	Cell window frames & glass (10)	16%	(31%)
10.	Sound levels (9)	14%	
11.	Ease of movement through the facility (12)	13%	
12.	Communicating w/inmates through barriers (13)	10%	
13.	Public-inmate view conflicts (14)	9%	
14.	Emergency evacuation (15)	8%	
15.	Quality of the environment (11)	7%	
	AVERAGE	**20%**	

The seriousness of the basic problem of inadequate space is underscored by the data listed in Table 8. The overall amount of space is rated as the most serious facility problem for new small jails based on 9 percent of the respondents citing very serious problems and 24 percent citing somewhat serious problems, for a combined total of 33 percent. (The remaining space problem citations were under the categories of "not too serious," and "not at all serious.")

It is again important to note that the "cell window" problem would rate as a more serious problem if non cell-windowed facilities were eliminated from consideration. In this case, the cell window problem would be scored at 31 percent citing very or somewhat serious problems (as parenthetically noted in Table 8), raising it to fourth on the facility problem seriousness list shown above.

Inmate separation remains high on the list of facility problems as seriousness scores are factored in. The problem is the most severe, however, in the "very serious" category. Inmate separation is cited as a very serious problem in 15 percent of all new small jail facilities. The next most serious problem is

getting a good view into inmate cellblocks, with a "very serious" citation of 11 percent.

Getting a good view into the cellblocks from a remote position is an important issue and is obviously a concern if 11 percent of the facilities cite this as a very serious problem. Historically, view has been a problem because looking in from outside of the cellblocks generally gave the jail officer a view parallel to the face of the cells, thus precluding sight into them. An otherwise visibly open bar wall also looks like a solid wall from this angle. Problems now being cited may be based on a recurrence of the old designs or the occurrences of new problems affiliated with the more podular (L-shape or U-shape) cellblocks with the kind of solid-face cell fronts that have developed in recent years. Nonetheless, the extent to which this very fundamental problem was cited in new facilities is worrisome.

A problem that reflects poorly on architects or their programming efforts is that of room location. Twenty-one percent of all new facility respondents cite very serious or somewhat serious problems with the placement of rooms in their facility. Poor functional arrangement of spaces can inhibit the execution of daily activities and can even jeopardize security.

J. Facility Renovations

In that some problems with the new facilities were anticipated, the survey was designed to determine if renovations or additions had been made in response. What was discovered was that a fair amount of change had indeed been made.

The survey did not attempt to identify every sort of renovation or change made. It did, however, target six particular areas of facility change that had historically occurred in jail facilities. Besides having value in their own right, the answers to these questions also give insight into the degree of change that might have occurred. The results from the survey questions are in Table 9.

Table 9

FACILITY CHANGES MADE

1.	Add beds to the existing cells.....	23%	
2.	Replace large numbers of plumbing fixtures.....	23%	
3.	Make significant changes in the building to solve significant problems...	21%	
4.	Block-up or severely alter cell windows.....	13%	(26%)
5.	Build additional cells.....	7%	
6.	Replace large amounts of furniture.....	4%	

A couple of comments on the results are in order. First, the cell window question once again gains prominence as the most frequent change made if one discounts those facilities not having cell windows (note the 26% figure in parentheses). This should serve as additional warning to architects to be careful in their detailing and material selection, and for operators to observe frequently the condition of the windows as they make routine cell checks.

Second, dealing with capacity problems seems to be of a very high priority, much as it has been in the past. However, the clear preference of the respondents is to solve overcrowding by adding bunks to existing cells (23%) versus building additional cells (7%). This may occur partly because communities find it impossible to go back to the public for more jail construction money shortly after a new facility has been opened. It may also be due to the late 70's Bell v. Wolfish case regarding the new New York Metropolitan Correctional Center. There the U.S. Supreme Court allowed double-celling in those particular single occupancy cells, whereas previous courts had always ruled against double celling. Nonetheless, the citation of crowding problems and the frequency of capacity changes suggests extra care in the formulation of capacity needs during planning.

K. Planning and Transition

A major area of interest for the surveyors, besides the actual nature and function of the buildings, concerned the level of pre-architectural and transition planning which occurred relative to the surveyed jails' development. This basically involved two issues at the extreme ends of the facility development process. On the front-end was the question of whether or not there was planning in advance of design, and on the back-

end was the question of whether or not any effort was made to prepare for the transition into the new building. Both types of activities were routinely absent with the earlier generation of facilities, and both types of activities have been encouraged in the 1970's and 1980's.

In response to the question on planning, 74 percent of all respondents said that their new small jail was based on some sort of pre-design planning process. The specific nature or quality of pre-design work, which is also known by the terms "feasibility study," "needs assessment," or "master planning," could not be identified through the survey. However, the survey did attempt to identify the sorts of topics that might have been covered. Table 10 documents how many of the total percentage of facilities included the specific planning item identified into their pre-design process. Again, the listing is in order of frequency. A score of 74 percent, identical to the percentage of those who planned, would mean that all of those people who planned did the following as part of that planning.

Table 10

PRE-DESIGN PLANNING TOPICS COVERED

1.	Calculate future bed space needs.....	65%
2.	Implementation timetable and transition plan.....	56%
3.	Determine method of supervision.....	53%
4.	Calculate staff needs.....	53%
5.	Outline basic services and activities....	50%
6.	Identify offender characteristics.....	44%
7.	Determine future operating costs.....	40%
8.	Evaluate alternatives to incarceration...	33%

Many correctional facility planners consider each of the above tasks in Table 10 to be standard and necessary features of a good pre-design planning process. Yet it is clear from the numbers that those tasks are just as likely to be ignored as to be considered.

Given the problems of overcrowding that have been cited earlier, it is perhaps interesting to note that 35 percent of the new facilities did not calculate bed space needs prior to design and that 67 percent did not evaluate alternatives to incarceration. Given the problems of staff shortages that were cited earlier, it is interesting to note that 47 percent of the new facilities did not calculate their future staff needs. And given

the shortages of exercise and program space and the problems with room location, it is interesting to note that 50 percent of the new facilities did not outline the services and activities desired in the facility prior to design.

Potential participants in the pre-design planning process are many. The data on participant involvement is recorded in Table 11 by order of frequency.

Table 11

PARTICIPANTS IN PRE-DESIGN PLANNING

1.	County Commissioners	**95%**
2.	Sheriff or his/her staff	**83%**
3.	Judiciary	38%
4.	Public	27%
5.	Jail Officers	14%
6.	Prosecutors	13%

Survey respondents basically indicated that involvement focused on two groups, and that other parties were involved to a much lesser degree. As one might expect, these two groups were the commissioners, involved in 95 percent of the pre-design planning efforts, and the sheriffs or their staff, involved in 83 percent of the efforts. In that the commissioners have the responsibility to pay for the planning and its conclusions, and in that the sheriffs generally have responsibility to operate the jails, one might have expected a participation level of 100 percent.

One group that was consistently and surprisingly excluded from local planning was jail officers. Only 14 percent of the pre-design work was done with the input of jail officers. A possibly important mitigating factor, however, might be that some facilities did not have jail staff to involve at the time of planning, although dispatchers serving in the role of officers were almost certainly available.

Another essential project participant is the architect. Assuming that the architect's preparation for the task might be important, the survey asked respondents to identify whether or not their architect had prior experience with jail design. The finding was that two-thirds (67 percent) claimed prior experience and that one-third (33 percent) did not.

The transition into the new facility is thought by many to be critical to future facility success. The equivalent to "getting-off-on-the-right-foot," the idea of transition is basically to be prepared for the new facility's opening. It involves having the right number of staff available, having adequate operating funds committed, knowing how to operate the facility and its equipment, and ironing out the logistics of moving everybody and everything to the new facility. To see how the transition into new small jails went, the survey asked if the county had any problems with these four issues. As the data in Table 12 verifies, difficulties were considerable.

Table 12

TRANSITIONAL PROBLEMS

Transition Issue	Had Problems	Had Very or Somewhat Serious Problems
1. Adequate staff	**50%**	**34%**
2. Adequate operating funds	40%	26%
3. Understanding equipment	35%	12%
4. Logistics	18%	6%

It is clear from the data that the recurring problem of obtaining necessary staffing and funding was perceived as having a negative effect on the transition into a new facility.

L. Law Enforcement Operations and Facilities

As noted earlier, the jail rarely stands alone in a small county, almost always (91 percent of the time) sharing facilities with a county law enforcement operation. Consequently, when architects design a small county jail, they are frequently also called upon to design a law enforcement operation for the sheriff's department. Sheriff's departments are involved in radio dispatching, civil process work, investigations, lab work, patrol coordination, evidence processing, public relations, and sometimes emergency operations. Consequently, the adequacy of law enforcement area design is critical in its own right. More to the point of this study, however, is that the adequacy of law enforcement facilities can affect the jail.

Survey results show that for 17 percent of the new facilities, the law enforcement areas were thought to conform

either poorly or very poorly with those of the jail. They also showed significant dissatisfaction with the adequacy of the spaces allocated for law enforcement functions. Perhaps as a result of these two considerations, the survey found that deficiencies or shortages in law enforcement space caused 27 percent of all new facilities to re-assign jail spaces to law enforcement use.

This reassignment of space is obviously bad for the jail, particularly when survey evidence seems to already suggest space inadequacies for new jails that are only seven years old on average. It does tend to reveal two critical facts. First, sheriffs are primarily law enforcement people and are understandably likely to give a higher priority to that area. Second, the law enforcement area has more or less "been-along-for-the-ride" as a secondary design consideration due to the great emphasis put on jails through the last ten years of court orders and increased state jail standards.

The short shrift given to the law enforcement side of the small county operation is best revealed through an evaluation of space adequacy. The space adequacy rating figures for law enforcement appear in Table 13.

Table 13

LAW ENFORCEMENT SPACE ADEQUACY

Area Function	Too much	About the right amount	Too little	Much too little	Do not have/ Do not need	Do not have/ Do need
Sheriff	3%	**72%**	18%	6%	1%	1%
Records	0	30	**43**	**26**	0	1
Squad Briefing	2	50	22	15	7	4
Communication	2	56	**31**	11	0	0
Property Storage	1	37	**30**	**29**	1	2
Supplies/equipment	0	34	**34**	**30**	0	2
Staff locker/shower	1	38	17	10	16	19
Photo Lab	0	36	8	3	**30**	**23**
Conference	1	49	18	13	5	14
Interview/interrogation	0	44	25	21	1	9
Staff training	0	50	20	11	4	14
Physical conditioning	1	26	16	8	15	**34**
Evidence storage	1	38	**32**	**27**	0	3
Civil process	1	62	20	7	7	4
Detectives	1	44	19	11	16	9
AVERAGES	**1%**	**44%**	**24%**	**15%**	**7%**	**9%**

The most notable deficiencies in law enforcement space are in a variety of important storage areas. The most deficient of these is record storage for which 69 percent of the facilities cited too little or much too little space. Sixty-four percent of the facilities had too little or much too little space for the storage of supplies and equipment, and 59 percent were deficient in both property storage and evidence storage.

Notable for their absence were photo lab areas and physical conditioning space. Photo labs were absent in more than half of the new facilities (53 percent), although 30 percent of the new facilities indicated that they did not need a photo lab. Physical conditioning space was absent in nearly half (49 percent) of the new facilities, even though 34 percent reported that it was needed.

One other space worth noting was communications. This space is the heart of a law enforcement center and frequently the jail since the dispatcher and all key communication and security equipment are generally housed there. Thirty-one percent of all new facilities felt that their communication area had too little space for their needs, and 11 percent felt that there was much too little space. The communication area appears to be among the worst areas to cut when economizing on space.

M. Client Satisfaction

Survey respondents were generally satisfied with their new facilities even though many problems were experienced and overall allocations of space were inadequate. Indeed, 26 percent of the respondents were "very satisfied" with their facilities, and 44 percent were "satisfied." Twenty-two percent of the respondents were "unsatisfied" and 8 percent were "very unsatisfied."

The high levels of satisfaction in light of many difficulties might be in part explained by the attitude expressed by one sheriff who, in acknowledging his facility's problems, said that the facility was nonetheless "great compared to what the surrounding counties have."

V. COMPARATIVE ANALYSIS OF FACTORS AFFECTING SMALL JAIL OPERATIONS AND DESIGN

A straightforward reading of the answers to the questions asked in the survey is quite informative. However, it also leads to curiosity regarding the interrelationships of certain factors dealt with in different questions. For instance, while some jurisdictions planned prior to design and some did not, and while there were many operational problems in the new facilities, were these two factors interrelated? Does planning reduce operational problems? Does it contribute to them? Is there no effect at all?

A method for responding to this curiosity is to ask the computer to compare and sort out answers, that is, to "cross-tabulate" data. Such cross-tabulations are very useful in analyzing the impact of various factors like planning before design. In other words, they begin to indicate more fully what "works" and what does not in terms of developing a successful small jail facility. Consequently, the Kimme Planning & Architecture (KPA) team has cross-tabulated a variety of issues and will present and analyze selected findings in this section of the survey report.

A. Reading the Tables

In order to make the crosstab findings more usable and comparable, the authors have adopted a standard approach to the presentation of the majority of the crosstab tables. These standardized tables are possible because all of them compare the incidence of the operational or facility problems discussed earlier with another factor or issue. For example, in the next section of this chapter, Table 14 compares the incidence of operational problems in jurisdictions that did not plan before design against the incidence of the same problems in jurisdictions that did.

In making the comparisons, the authors are basically identifying the percentages of facilities having had a given type of problem (such as overcrowding) under two contrasting sets of circumstances (such as those that did not plan versus those that did). This same comparison is done for a selected set of the operational or facility problems so that the reader can perceive the overall effects of an issue and pick out isolated data of particular significance.

To help communicate the degree of influence an issue has on the incidence of problems, the tables cite the "difference" in the problem scores found between the issues being compared. Further,

the tables are organized in order of the problem showing the greatest difference down to the problem showing the least difference. A sample of a standard table follows.

Example Crosstab Table

OPERATIONAL PROBLEMS/PLANNING CROSSTAB

Yes, had problems with...	Planned	Did not Plan	Difference
Untrained staff	**28%**	44%	+16
Staff shortages	51	63	+12

The title of the table tells the reader what is being cross-tabulated, in this case a set of the operational problems and the issue of planning. The table headings show more precisely the comparison, in this case the percentage of jurisdictions that confirmed having had a certain operational problem and the issue of whether they had planned or did not plan. The table then states the difference between the two scores, using a plus (+) sign to indicate favor for the issue one would expect to do better, in this case planning over not planning. In some cases, certain numbers will be printed in bold type in order that they be highlighted.

Each percentage figure presented in the table stands alone and is not taken from the same set of data as is the percentage in the adjacent column to which it is being compared. That is, each percentage figure is drawn from its own set of data. Using the first line of the example table, the 28 percent figure under the "Planned" column is taken from one set of data, that of the total number of respondents who planned. The adjacent 44 percent comes from another data set, those that did not plan. Therefore, there is no reason to expect the numbers in one line to add up to 100 percent and no reason to wonder where any "missing" percentages might be.

Starting with the first line, a proper reading of the example table might be as such: "28 percent of all those jurisdictions that planned had problems with untrained staff." The 44 percent figure to the right under the "Did not plan" column would read: "44 percent of all those jurisdictions that did not plan had problems with untrained staff." Since the difference between the two scores is 16 percentage points (44 minus 28) and since those who planned fared better as had been expected, the figure under the "Difference" column is +16.

In addition to the standardized tables described above, the report will occasionally present other forms of data. The approach to reading these will be presented as the need arises.

Finally, the authors have been somewhat selective about the specific set of operational or facility problems cross-tabulated against the various issues. This is because the team had determined in advance that a valid relationship between a certain problem and an issue either does not exist or is too strained to make the results useful or credible. In some cases, this selectivity applies to an entire set of problems. For example, the team has not presented a cross-tabulation of facility problems by the availability of written rules of inmate conduct because the team saw no particular connection between written inmate rules and such problem categories as the basic location of rooms, the overall amount of space, and so forth. On a more detailed level, the survey team has cross-tabulated the existence of inmate rules by operational problems, but not by all of them. For example, since there is no apparent connection between written inmate rules and the operational problem of overcrowding, no crosstab data is presented.

B. Planning before Design

Many professional agencies in corrections and certainly most architects advocate planning in advance of design. However, many local officials have held planning in disdain based upon prior bad experiences and upon instinct. "What is so difficult about a jail?," they might ask. "Why can't we simply start to design?" In order to answer such questions and to see if there is any correlation between pre-design planning and the performance of the new small jail, the survey team compared those jurisdictions that planned with those that did not under a variety of categories. These categories included operational problems, facility problems, space adequacy, expansion capabilities, and renovations to the new facility.

In general, the findings clearly suggest that planning before design is of benefit to small jail facilities, although the results are not overwhelming. That is, while the results clearly favor planning, jurisdictions that planned before they designed were not exempted from problems. This may be due to the basically problematic nature of the jail and to the wide variations in the quality of planning. The operational problems/planning crosstab data appears in Table 14.

While virtually all of the data supported planning, a couple of interesting items went against it. The first contrary data came from the result of cross-tabulating planning with the problem

of overcrowding. It was found that 44 percent of the facilities that planned before design experienced overcrowding problems, whereas only 37 percent of those not planning experienced problems. Also, 40 percent of the jurisdictions that planned experienced problems with law suits, but only 37 percent of those jurisdictions that did not plan had legal problems. This data runs contrary to expectations and is difficult to explain.

Table 14

OPERATIONAL PROBLEMS/PLANNING CROSSTAB

Yes, had problems with...	Planned	Did not Plan	Difference
Untrained staff	28%	44%	+16
Staff shortages	51	63	+12
Damage to jail property	71	83	+12
Standards compliance	20	29	+ 9
Escapes	35	38	+ 3
Law suits	40	37	- 3
Overcrowding problems	44	37	- 7
AVERAGE	**41%**	**47%**	**+ 6**

The data suggesting that overcrowding problems occurred somewhat more where planning was done is reinforced by data dealing with renovations or changes after initial construction. This data shows that more jurisdictions that planned actually added beds to their cells or built more cells than did those that failed to plan. This finding reinforces the need for better capacity forecasting in the course of planning and, perhaps, better expansion capabilities built in to all facilities.

Other than these two issues, jurisdictions that did plan made fewer other changes in their facilities. Table 15 illustrates this point.

Table 15

PLANNING/BUILDING CHANGES CROSSTAB

Changes made after construction	Planned	Did not Plan	Difference
1. Significantly renovated building	16%	29%	+13
2. Replaced plumbing fixtures	15	28	+13
3. Altered cell windows	11	20	+ 9
4. Replaced furniture	2	4	+ 2
5. Added beds to cells	23	21	- 2
6. Built more cells	6	2	- 4

Another problem for the planned or unplanned facility may be in making future changes. Data on the expansion potential of new facilities presented in Table 16 shows that those jurisdictions that failed to plan tended not to provide an expansion capability quite as frequently as did those that planned, although the difference is not that great.

Table 16

PLANNING/BUILDING EXPANSION CROSSTAB

Of those who...	Planned	Did not Plan
Can expand	83%	78%
Cannot expand	17%	22%
	100%	100%

The process of planning before design receives significant reinforcement from an evaluation of facility problems and an evaluation of jail and law enforcement space adequacy. Table 17 presents the salient information regarding facility problems.

Table 17

FACILITY PROBLEMS/PLANNING CROSSTAB

Yes, had problems with...	Planned	Did not Plan	Difference
1. Moving through jail	15%	32%	+17
2. Basic location of rooms	27	44	+17
3. Physical separation of inmates	39	56	+17
4. Environmental quality	14	28	+14
5. Overall amount of space	41	55	+14
6. Durability of materials/ hardware	38	46	+ 8
7. Communicating through barriers	19	26	+ 7
8. Remote view into cellblocks	36	43	+ 7
9. Inmate-public view conflict	17	20	+ 3
10. Improper sound levels	33	34	+ 1
11. Equipment failures	60	61	+ 1
12. Cell window problems	30	26	- 4
13. Jail evacuation	16	11	- 5
AVERAGE	**30%**	**37%**	**+ 7**

With the exception of cell window and jail evacuation problems, the results in 11 of 13 of the facility problem categories favor those who planned before design. Most significant of these are the top five categories where the gap between the problems of those who planned and those who did not is quite wide in favor of planning. All five of the categories have to do with very important and fundamental design issues that are thought to be greatly affected by the general and specific products of a pre-design planning process.

Of particular note among the top five categories is the problem category entitled "physical separation of inmates." As was shown earlier, this classic jail problem has not been solved satisfactorily in the new facilities. However, the solution of this problem seems to be far more likely with pre-design planning than without it. The 17 percent difference in the inmate separation problem score between those who planned and those who did not is significant.

Comparing the adequacy of specific jail and law enforcement space provisions again argues in favor of planning before design. The law enforcement spaces and areas of the new

facilities seemed to benefit most from pre-design planning. Nonetheless, with the exception of several spaces, the advantages are clear to both the jail and its companion sheriff's department facility.

The space adequacy scores under the "about right" category in Table 18 illustrate the effects of planning on jail space. Not listed are the "too much," "too little," "much too little" and "do not have" categories. However, the "about right" category accurately reflects the findings even without the other categories being listed. Listing it alone makes a comparison of the data far easier.

Table 18

PLANNING/JAIL SPACE ADEQUACY CROSSTAB

About the right amount of...	Planned	Did not Plan	Difference
1. Laundry space	74%	47%	+27
2. Dayroom space	85	61	+24
3. Storage	41	21	+20
4. Disciplinary detention space	68	48	+20
5. Counseling space	62	43	+19
6. Cell space	89	72	+17
7. Program space	45	28	+17
8. Work release space	55	38	+17
9. Contact visiting space	43	27	+16
10. Trustee space	67	51	+16
11. Booking space	70	55	+15
12. Indoor exercise space	44	30	+14
13. Control space	75	65	+10
14. Detoxification space	60	50	+10
15. Administrative/staff space	57	47	+10
16. Attorney visiting space	79	70	+ 9
17. Outdoor exercise space	48	45	+ 3
18. Food preparation space	54	52	+ 2
19. Vehicle parking	55	53	+ 2
20. Non-contact visiting space	72	75	- 3
21. Mentally ill holding space	31	36	- 5
AVERAGE	**61%**	**48%**	**+13**

Pre-design planning did not seem to resolve the nagging problem of responding to the needs of the special mentally ill

population. Performance on this issue was generally poor for new small jails and was slightly worse for those who planned prior to design. Nonetheless, the clear overall advantage of planning is confirmed by a 10 percentage point advantage for another special holding need, detoxification, as well as by a 27 percentage point advantage with laundry space, a 20 percentage point advantage with the essential but often overlooked storage space, and a 15 percentage point advantage in the pivotal booking area, among other key advantages. Overall, there was a 13 percentage point advantage for planning for the 21 areas evaluated.

Planning also fared better with those spaces that often are omitted from the designs. Two prime examples of this are space for indoor exercise and, surprisingly, the mentally ill since when it was provided those who planned provided less as we saw above. In both cases planning did not totally solve the problem, but it seemed to result in the mistake of omission less frequently. Those who planned omitted mentally ill holding space in 24 percent of the cases although they needed it, while those who did not plan omitted it in 31 percent of the cases. Those who planned indoor exercise areas shared a 19 percent to 28 percent advantage in terms of omitting needed space.

Table 19 includes the law enforcement space adequacy scores with regards to the occurrence of planning.

Table 19

PLANNING/LAW ENFORCEMENT SPACE ADEQUACY CROSSTAB

About the right amount of...	Planned	Did not Plan	Difference
1. Staff training space	63%	36%	+27
2. Staff lockers & shower space	48	21	+27
3. Interrogation-interview space	54	31	+23
4. Detective areas	53	33	+20
5. Conference space	57	38	+19
6. Squad briefing space	61	43	+18
7. Photo lab space	43	25	+18
8. Civil process space	66	50	+16
9. Supplies/equipment storage	40	24	+16
10. Evidence storage	42	32	+10
11. Property storage	41	32	+ 9
12. Physical conditioning space	30	23	+ 7
13. Communications area	60	55	+ 5
14. Sheriff's office	75	73	+ 2
15. Records storage	33	36	- 3
AVERAGE	**51%**	**37%**	**+14**

The positive gaps between planning and not planning are slightly wider for law enforcement spaces than they are for jail spaces. This is especially encouraging in that earlier space inadequacy data showed a greater level of deficiencies for law enforcement. In any event, the space adequacy data for both law enforcement and jail facilities argues strongly for the benefit of pre-design planning.

In terms of the two areas complementing each other, as they must in a small jurisdiction, those who planned fared better than those who did not. This is evidenced by the data comparing the planning question to the question on the conformity of law enforcement spaces to jail spaces, or how the two fit together and complement each other. Table 20 shows that the planning group performed better in achieving a satisfactory interface between the two key elements.

Table 20

PLANNING/LAW ENFORCEMENT/JAIL SPACE CONFORMITY CROSSTAB

Conformity	Planned	Did not Plan
Very well	57%	33%
Well	32%	47%
Poorly	10%	13%
Very poorly	1%	7%
	100%	100%

Finally, on the critical question of whether or not shortages of law enforcement space caused the sheriff to convert jail space to law enforcement use, planning again seems to yield the better results (Table 21).

Table 21

PLANNING/LAW ENFORCEMENT USE OF JAIL SPACE CROSSTAB

In response to law enforcement space shortages..	Planned	Did not Plan
Used jail space	21%	38%
Did not use jail space	79%	62%

In summary, planning before design did not forestall problems for the new small jail and its related law enforcement operation, but it did yield significantly better results for the new facilities.

C. Architect Experience with Jail Architecture

One of the key actors in pre-design planning and, especially, in design is the architect. Since the boom in jail construction has occurred only in the last fifteen years or so, it is reasonable to expect that some architects would specialize in the field and others would be doing their first and perhaps only jail. Given all the problems that have arisen with small jails, the relationship of those problems to the issue of architect experience becomes of interest.

Survey data shows conclusively that an architect with prior jail design experience will improve the prospects that clients will get a facility with which they are satisfied. More precisely, 86 percent of the survey respondents using the services of an architect with jail experience were either "very satisfied" or "satisfied" with their facility. By comparison, in facilities where the architect was not experienced, the very satisfied/satisfied group totaled only 60 percent. The biggest difference was with the "very satisfied" group, where the ratio was 39 percent to only 16 percent in favor of the architect with prior jail design experience.

The facilities designed by architects with experience also fared better when evaluated by the occurrence of facility problems, as indicated in Table 22. Non-experienced architects, however, did have fewer problems with three of the fifteen issues: jail evacuation, obtaining replacement parts for equipment, and improper sound levels.

The area in which experience was the most telling was that of overall amount of space provided. In this key category, experienced architects rated 28 percentage points better than those without experience. Experience also paid off quite clearly in such fundamental design areas as ease of movement through the jail (23 point advantage), attaining proper physical separation between inmate groups (19 point advantage), and the basic location of rooms (19 point advantage). The remainder of the findings further reinforce the apparent advantage of architect experience.

Table 22

ARCHITECT JAIL EXPERIENCE/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	Jail Experience	No Jail Experience	Difference
1. Overall amount of space	36%	64%	+28
2. Moving through jail	11	34	+23
3. Basic location of rooms	23	42	+19
4. Physical separation of inmates	39	58	+19
5. Environmental quality	12	30	+18
6. Remote view into cellblocks	33	45	+12
7. Durability of materials/ hardware	36	46	+10
8. Communicating through barriers	18	24	+ 6
9. Equipment failures	61	66	+ 5
10. Inmate-public view conflict	17	20	+ 3
11. Cell window problems	25	26	+ 1
12. Obtaining repair services	47	48	+ 1
13. Jail evacuation	12	10	- 2
14. Obtaining replacement parts	49	46	- 3
15. Improper sound levels	36	32	- 4
AVERAGE	**30%**	**39%**	**+ 9**

Space adequacy data also reveals a measurable edge for the experienced architect (Tables 23 and 24). On average, the adequacy of jail and law enforcement space was 11 percentage points greater for the experienced architect (as defined by the "about right" space rating). Regarding jail space (Table 23), experienced architects scored better on 20 of 21 categories, performing significantly better with several space-types that are frequently inadequate. Most notable among these are food preparation space with a 31 percentage point advantage, the critical category of storage space with a 23 point advantage, and administrative and staff space with a 15 point advantage. The experienced architects did not do as well as might be hoped on the critical special holding spaces. Although they had an advantage over inexperienced architects, their advantage on detoxification space, mentally ill holding space, and disciplinary detention space was only 8, 6, and 6 points, respectively. Also, experienced architects did no better than inexperienced architects in solving the critical site problem of parking.

Table 23

ARCHITECT JAIL EXPERIENCE/JAIL SPACE ADEQUACY CROSSTAB

About the right amount of...	Jail Experience	No Jail Experience	Difference
1. Food preparation space	68%	37%	+31
2. Storage space	43	20	+23
3. Contact visiting space	46	23	+23
4. Dayroom space	87	71	+16
5. Attorney visiting space	77	61	+16
6. Administrative/staff space	59	44	+15
7. Laundry space	72	61	+11
8. Indoor exercise space	48	37	+11
9. Trustee space	63	53	+10
10. Booking space	63	54	+ 9
11. Non-contact visiting space	74	65	+ 9
12. Detoxification space	56	48	+ 8
13. Cell space	90	82	+ 8
14. Outdoor exercise space	49	42	+ 7
15. Mentally ill holding space	34	28	+ 6
16. Disciplinary detention space	64	58	+ 6
17. Counseling space	61	55	+ 6
18. Work release space	51	45	+ 2
19. Program space	47	45	+ 2
20. Vehicle parking	55	54	+ 1
21. Control space	72	76	- 4
AVERAGE	**61%**	**50%**	**+11**

Experienced jail architects also did well on law enforcement space (Table 24). Overall, they received better space adequacy scores in 12 out of 15 categories. Most impressive was their apparently greater awareness of needs for detective areas, squad briefing areas, and interview-interrogation space. Their performance is less impressive with regard to key storage needs that were generally quite inadequate in the new small facilities. Although there was a 19 point advantage with storage space for supplies and equipment, there was only a 10 point advantage with evidence storage and a 2 point advantage with found and confiscated property storage. Experienced architects were outperformed by inexperienced architects (by 2 points) on records storage space.

Table 24

ARCHITECT JAIL EXPERIENCE/LAW ENFORCEMENT SPACE ADEQUACY CROSSTAB

About the right amount of...	Jail Experience	No Jail Experience	Difference
1. Detective areas	61%	35%	+26
2. Squad briefing space	62	37	+25
3. Interrogation-interview space	54	30	+24
4. Conference space	63	40	+23
5. Supplies/equipment storage	44	25	+19
6. Physical conditioning space	34	19	+15
7. Civil process space	70	56	+14
8. Evidence storage space	46	36	+10
9. Sheriff's office	75	66	+ 9
10. Property storage space	43	41	+ 2
11. Communications	61	59	+ 2
12. Staff training space	58	56	+ 2
13. Photo lab	39	39	0
14. Records storage	32	34	- 2
15. Staff lockers & shower space	41	46	- 5
AVERAGE	**52%**	**41%**	**+11**

As perhaps suggested by the performance data cited in Tables 23 and 24, facilities designed by experienced jail architects required less renovation or change after construction in each of the categories of change presented in the survey. Crosstab data in Table 25 documents this effect.

Table 25

ARCHITECT JAIL EXPERIENCE/BUILDING CHANGES CROSSTAB

Changes made after construction..	Jail Experience	No Jail Experience	Difference
1. Significant renovation	11%	30%	+19
2. Replaced plumbing fixtures	16	25	+ 9
3. Added beds to cells	17	26	+ 9
4. Altered cell windows	8	16	+ 8
5. Replaced furniture	0	7	+ 7
6. Built more cells	6	11	+ 5

Data in Tables 22-25 indicates that facilities designed by architects with prior jail experience both performed better and better satisfied building users.

D. Jail Staffing

Adequate staffing of the jail by the right number of trained correctional staff is critical to the operation of the jail. Jail staff provide basic facility security and oversee daily facility operations. But does the number of staff provided or, more specifically, does the provision of an adequate number of staff for the facility have an impact on a facility's performance? This is a key question since generating the necessary revenue for a jail staff is a difficult and challenging issue for every county. And given the low daily population of the small jail, providing "adequate" staffing sometimes seems especially hard to justify.

In order to test this question, the KPA survey team evaluated the occurrence of operational and facility problems against the problem of perceived staff shortages. The resulting data clearly shows a strong correlation between staff shortages and operational and facility problems. In this evaluation of 25 operational and facility problem categories, there was not a single issue on which inadequate staffing fared better than adequate staffing, nor was there a single issue where the performance difference between adequate and inadequate staffing was less than 11 percentage points. Table 26 presents the operational problems data.

Table 26

STAFF SUFFICIENCY/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Staff Shortages	No Shortages	Difference
1. Untrained staff	47%	**9%**	**+38**
2. Fires	33	**10**	+23
3. Inmate-inmate assaults/attacks	52	31	+21
4. Contraband passage	69	49	+20
5. Standards compliance	31	**13**	+18
6. Law suits	46	32	+14
7. Suicides or suicide attempts	68	55	+13
8. Assaults/attacks on staff	35	22	+13
9. Damage to jail	81	70	+11
10. Escapes	43	32	+11
AVERAGE	**51%**	**32%**	**+19**

According to Table 26, staff shortages have the greatest impact on the problem of untrained staff. This is understandable since it is hard to train staff or send them off for training if

the agency is short on personnel in the first place. It is also understandable if shortages are caused by staff turnover. With the loss of a staff member, an agency also loses a trained staff member who in turn must be replaced by untrained staff.

The findings in Table 26 are logical. One could logically expect problems to accompany insufficient staffing since it is the staff who must be available to prevent fires, the staff who must control the flow of contraband, and the staff who must classify suicide risks and supervise their behavior. The findings on staffing only verify what common sense has dictated for a long time. The consistency and strength of the finding is nevertheless striking and continues with the review of facility problems in Table 27.

Table 27

STAFF SUFFICIENCY/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	Staff Shortages	No Staff Shortages	Difference
1. Amount of space	62%	37%	+25
2. Obtaining repair services	57	33	+24
3. Durability of materials/hardware	55	32	+23
4. Equipment failure	72	50	+22
5. Physical separation of inmates	57	36	+21
6. Basic location of rooms	43	22	+21
7. Obtaining replacement parts	57	37	+20
8. Remote view into cellblocks	49	30	+19
9. Moving through jail	30	12	+18
10. Environmental quality	30	12	+18
11. Improper sound levels	39	24	+15
12. Communicating through barriers	28	13	+15
13. Cell window problems	36	22	+14
14. Jail evacuation	21	7	+14
15. Inmate-public view conflict	23	12	+11
AVERAGE	**44%**	**25%**	**+19**

At first reading, one might wonder how some of the facility problems listed in Table 27 relate to staff shortages. They relate statistically because there is a consistency of answer and a consistency in the gap between the shortage/no shortage categories. Beyond that, though, one must remember that the surveyors are dealing with perceptions, the perceptions of the very staff who are under pressure because of shortages in their ranks. Consequently, while the basic location of rooms seems

solely a design issue, it might be more of an issue to an overworked jail officer who must cover more responsibilities and areas than was originally intended. Locating and obtaining replacement parts for failed equipment might be more of a problem if the officer has no time to make the necessary contacts and calls. And the sound generated within a jail may increase with diminished supervision and/or seem more problematic to a jail officer under increased stress due to staff shortages.

In whichever way one relates the problem factors to staffing, it is clear that shortages of staff correlate directly with a greater frequency of operational and facility problems.

E. Staff Training

The adverse impact of staff shortages on staff training brings staff training to the forefront as an issue to examine in its own right. To many professionals, properly training jail staff in the performance of their duties is as essential as just having them in the jail in the first place. Obtaining adequate detention training, however, has been a long-standing problem for small counties due to a lack of training academies for them to utilize and due to their inability to create an in-house training capability like that in many larger jurisdictions.

In order to assess the impact of training on new small jails, the survey team again cross-tabulated the findings regarding operational and facility problems with data on training. The data available to do this was especially rich because there were two training related questions available for cross-tabulation. Consequently, there was a greater opportunity to develop meaningful results.

The two training questions came from different parts of the survey document and were presented in different contexts. One question asked if there had ever been any problems in the jail with regard to "untrained staff." The other question sought to identify whether all, some, or none of the staff had received formal jail, not law enforcement, training. This question had to be clear on the nature of the training since many jail officers historically have been new deputies awaiting road assignment. Consequently, the training they received was actually law enforcement oriented and had little or nothing to do with jail operations.

In summary, the cross-tabulations clearly show a strong and consistent relationship between a lack of training for jail staff and operational problems in the facility. In fact, the data shows that the impact of the training issue is greater than that of

staff sufficiency. The data from the question regarding problems with untrained staff shows the strongest correlation, as documented in Table 28.

Table 28

PROBLEMS WITH UNTRAINED STAFF/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Problems w/ Untrained Staff	No Problems	Difference
1. Staff shortages	88%	46%	+42
2. Inmate-inmate assaults/attacks	62	35	+27
3. Assaults/attacks on staff	48	21	+27
4. Contraband passage	78	52	+26
5. Standards compliance	41	15	+26
6. Law suits	57	32	+25
7. Escapes	55	31	+24
8. Fires	35	18	+17
9. Suicides or suicide attempts	73	57	+16
10. Damage to jail property	86	71	+15
AVERAGE	**62%**	**38%**	**+24**

The data from the cross-tabulation comparing operational problems to the number of staff having received formal training verifies the impact of training (Table 29). The only discord comes from the category of "some" jail staff having received training. In all but three categories, the data on "some" fits neatly in the middle of the data regarding the categories of "all" staff receiving formal training and "none" receiving formal training. The discordant categories are staff assaults where the frequency of problems is highest for the "some" group, and standards compliance and fires where the frequency of problems is lowest for the "some" group. Aside from these inconsistencies, the data on formal training validates and supports previous findings in favor of training, particularly in reference to the data regarding the "all" and the "none" categories.

Table 29

FORMAL STAFF TRAINING/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	All Trained	Some Trained	None Trained	All/none Difference
1. Escapes	31%	50%	67%	+36
2. Fires	26	12	58	+32
3. Law suits	38	40	67	+29
4. Staff shortages	57	59	85	+28
5. Standards compliance	23	20	50	+27
6. Contraband passage	59	61	83	+24
7. Damage to jail property	74	79	92	+18
8. Suicides/suicide attempts	60	66	75	+15
9. Inmate-inmate assaults	42	44	55	+13
10. Assaults/attacks on staff	26	56	36	+10
AVERAGE	**44%**	**49%**	**67%**	**+23**

The problem frequencies in Table 29 between the "all" category and the "some" category are often very close. Indeed, the overall average difference is only 5 percentage points. If the three categories having the most significant all/some spread (escapes, fires, and staff assaults) are eliminated, the remaining seven categories have an average difference of only 2 percentage points. When compared to the average difference of 23 percentage points between the "all" and the "none" categories of formal training, the data tends to suggest two conclusions. First, having some of the staff receive formal training is nearly as effective as having all receive training. Second, some trained staff is far better than none. The message for the resource-poor small county, then, might be to train at least some of their staff even if they do not believe they can afford to train all of them. Training some seems to be a far better response than training none as a consequence of adopting an "all or nothing" attitude towards the economies of training.

The findings of the two cross-tabulations generally support the value of training but reveal variations in the ordering of the effects of training on various problem categories. For example, the problems-of-untrained-staff affects inmate-inmate assaults/attack problems to the point of placing it second on that list (Table 28), but the level-of-formal-training affects it only to the point of placing it ninth on that crosstab list (Table 29). While that category and three others show significant variation in placement and scores, the general point is nonetheless the same.

Staff training clearly has a significant impact on all of the operational problem issues.

The cross-tabulations regarding facility related problems and staff training are not as conclusive as the data regarding operational problems. On one hand, the data comparing facility problems with jails that have had "problems-with-untrained-staff" strongly and consistently comes out in favor of trained staff. However, the correlations between facility problems and the numbers of staff receiving formal training are mixed; that is, the data seems to both support and refute the value of staff training in relation to facility problems. This correlation may be mixed partly because some of the problems, such as obtaining repair services, are only marginally related to the issue of staff training.

The data on facility problems cross-tabulated with data from jurisdictions that had problems with untrained staff and those that did not is presented in Table 30.

Table 30

PROBLEMS WITH UNTRAINED STAFF/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	Problems w/ Untrained Staff	No Problems	Difference
1. Remote view into cellblocks	60%	31%	+29
2. Ease of movement thru jail	41	13	+28
3. Durability of materials/hardware	63	37	+26
4. Equipment failures	80	55	+25
5. Physical separation of inmates	65	40	+25
6. Basic location of rooms	51	26	+25
7. Obtaining proper repair services	63	40	+23
8. Overall amount of space	66	44	+22
9. Obtaining replacement parts	63	43	+20
10. Quality of environment	35	16	+19
11. Cell window frames & glass	41	24	+17
12. Emergency evacuation	25	10	+15
13. Public-inmate view conflict	28	14	+14
14. Communicating thru barriers	29	17	+12
15. Improper sound levels	39	29	+10
AVERAGE	**50%**	**29%**	**+21**

The data on facility problems cross-tabulated with data on numbers of staff trained is presented in Table 31. The underscored numbers indicate where the scores for the "some

trained" category do not fall between the scores for the "all trained" or "none trained" categories.

Table 31

FORMAL STAFF TRAINING/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	All Trained	Some Trained	None Trained	All/none Difference
1. Emergency evacuation	14%	14%	39%	+25
2. Cell window frames/glass	27	33	50	+23
3. Ease of movemt. thru jail	21	22	39	+18
4. Remote view into cellblks	38	43	54	+16
5. Basic location of rooms	35	31	50	+15
6. Improper sound levels	34	29	39	+ 5
7. Overall amount of space	51	51	54	+ 3
8. Commun. thru barriers	20	24	23	+ 3
9. Durability of materials/ hardware	45	46	46	+ 1
10. Public-inmate view conflicts	21	14	18	- 3
11. Equipment failures	62	67	58	- 4
12. Quality of environment	22	24	17	- 5
13. Physical separation of inmates	48	49	42	- 6
14. Obtaining replacement parts	50	51	42	- 8
15. Obtaining repair services	49	47	33	-16
AVERAGE	**36%**	**36%**	**40%**	**+ 4**

F. Written Policies and Procedures

Effective staff training often depends upon the content of the training. A key element of training content is training staff in the daily operation of their own facility, that is, in their own policies and procedures. The most consistent and comprehensive training can be done when the policies and procedures of a given facility are written down. They are then consistently available for study, guidance, and organized revision. Prior to the 1970's, however, very few jurisdictions had written jail policies and procedures, particularly in the smaller jurisdictions of America. Their development in the last decade, as documented by the survey data and by the just demonstrated importance of training to facility operations, raises the question of how the availability of written policies and procedures correlates with the incidence of operational problems.

The quality and the comprehensiveness of the written policies and procedures claimed by small jail respondents cannot be determined. If the on-site experiences of the survey team are taken into account, it would be fair to say that the quality and extent of the various written materials vary widely. Nonetheless, the materials that do exist tend to be helpful in spelling out the proper policies and procedures for at least the most basic and typical jail operational issues.

Whatever the exact nature and quality of the policy and procedure manuals that do exist, survey data, as presented in Table 32, provides clear and consistent evidence that those facilities that have them have fewer operational problems. However, the data also suggests that the influence of written policies and procedures is not as great as is the influence of adequate numbers of staff and staff training.

Table 32

WRITTEN POLICIES & PROCEDURES/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Have P&P	No P&P	Difference
1. Law suits	39%	67%	**+28**
2. Escapes	38	63	+25
3. Suicides or suicide attempts	62	75	+13
4. Damage to jail property	76	89	+13
5. Untrained staff	31	44	+13
6. Fires	23	33	+10
7. Staff shortages	59	67	+ 8
8. Contraband passage	60	67	+ 7
9. Assaults/attacks on staff	30	33	+ 3
10. Inmate-inmate assault/attacks	43	44	+ 1
11. Standards compliance	24	22	- 2
AVERAGE	**44%**	**55%**	**+11**

The problems of law suits and escapes are clearly the two categories most favorably influenced by written policies and procedures. The impact on law suits makes sense since the majority of the topics raised in law suits deal with operational errors caused by an inconsistent or negligent performance by inadequately trained staff who probably have kept no documentation to prove otherwise. Escapes frequently occur because of

carelessness and other inconsistencies of performance that policies and procedures are meant to combat. Written policies and procedures are clearly a key to offsetting these problems.

G. Staff Numbers, Staff Training, and Policies and Procedures

There is clearly an interrelationship between the issues of staff numbers, staff training, and written policies and procedures. In this regard, it is interesting to record some consistencies in the operational problems crosstabs just reviewed in Sections D, E, and F, above.

Written policies and procedures and staff training have apparently had an especially consistent and strongly beneficial impact on the problems of law suits and escapes across three separate cross-tabulations (one for policies and procedures, two for training). In all three, the differential on the issues has been between 24 and 36 percentage points in favor of preventing the problem of escapes, and between 25 and 29 percentage points in favor of preventing the problem of law suits. These then would seem to be the two areas where staff training and written policies and procedures have the greatest impact. Adequacy in staff numbers seems to affect these issues to a lesser degree.

Another more comprehensive level of consistency has been attained on the problems of damage to jail property and suicides or suicide attempts. These topics record consistent, although not overwhelmingly high, differentials in favor of the full trio of issues of sufficient staff, trained staff, and written policies and procedures. The differentials on the four cross-tabulations on damage to jail property are from 11 to 18 percentage points. The differential in suicides or suicide attempts is even more consistent at 11 to 16 percentage points. This data would suggest that the three factors in combination would have a powerful effect on reducing problems of suicides and jail damage.

Another noteworthy consistency in the findings occurs in favor of having sufficient staff and trained staff to deal with the problem of contraband passage. Here the differential on the relevant three cross-tabulations was from 20 to 26 percentage points. Written policies and procedures were also helpful, but to a much lesser degree.

A comparison of the differentials on each of the cross-tabs is given in Table 33.

Table 33

CROSSTAB DIFFERENTIALS/STAFF, TRAINING, POLICIES AND PROCEDURES

Yes, had problems with...	Sufficient Staff Crosstab	Trained Staff Crosstab	Formal Training Crosstab	Written P&P Crosstab
1. Law suits	+14	+25	+29	+28
2. Escapes	+11	+24	+36	+25
3. Suicide or suicide attempts	+11	+16	+15	+13
4. Damage to jail property	+11	+15	+18	+13
5. Untrained staff	+38	--	--	+13
6. Fires	+23	+17	+32	+10
7. Staff shortages	--	+42	+28	+ 8
8. Contraband passage	+20	+26	+24	+ 7
9. Assaults/attacks on staff	+13	+27	+10	+ 3
10. Inmate-inmate assault/ attack	+21	+27	+13	+ 1
11. Standards compliance	+18	+26	+27	- 2

H. Inmate Rules

Written rules of inmate conduct are required in most jurisdictions of the United States. The concept behind them is to insure fairness to inmates by clearly stating behavioral expectations and consequences and by defining inmate rights. The desired results of the rules are smoother operations and better behavior and, if better behavior is not attained, the orderly execution of less disputable and pre-determined consequences.

As with written policies and procedures, the survey only revealed where written rules existed and thus did not determine their quality. The results of a crosstab of rules with operational problems are mixed (Table 34).

Table 34

WRITTEN INMATE RULES/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Have Written Rules	No Written Rules	Difference
1. Law suits	38%	55%	+17
2. Escapes	37	52	+15
3. Contraband passage	60	68	+ 8
4. Inmate-inmate assaults/attacks	43	46	+ 3
5. Assaults/attacks on staff	29	32	+ 3
6. Damage to jail property	76	78	+ 2
7. Fires	24	19	- 5
8. Standards compliance	24	18	- 6
9. Suicides or suicide attempts	63	52	-11
AVERAGE	**44%**	**47%**	**+ 3**

The operational problem categories most strongly suggesting that written inmate rules have a beneficial impact on the jail are law suits and escapes. The impact on law suit problems is not surprising since one might expect some law suits to be deterred by a clear statement of inmate rules and rights, particularly if these were generally perceived as reasonable and if they were, in fact, based on existing case law. Strong results with respect to escapes make sense as well if rules result in a more fair and less threatening operation and if rules clearly state the punishment for an escape attempt. What makes less sense, but what must be accepted, are favorable but weak results with respect to problem areas one might logically feel would benefit from a set of written rules: contraband passage, assaults, and damage to the jail.

Unfavorable results (a negative differential) on the problem of suicide attempts are somewhat excusable given the elusive nature of the suicide problem and given that inmate rules are unlikely to deter a suicidal inmate. Less understandable are negative results on fires and standards compliance. The survey team hesitates to suggest that, based on the findings, a jurisdiction would likely have more problems in these areas if they had written inmate rules. At worst, the team prefers to think that there is little relationship between those problems and the existence of inmate rules. Overall, one is tempted to suggest that the effect of written inmate rules on operational problems in new small jails is positive in selected areas and non-existent in others.

I. Method of Surveillance

The method of surveillance preferred by the vast majority of new small jail respondents was the intermittent surveillance approach. A small minority used other approaches, some of which are advocated for jails by many professionals as well as national agencies. The key issue, however, again has to do with performance. Does one form of surveillance work better than others for the small jail? Cross-tabulations with the survey question on operational and facility problems provide some insights.

Before discussing the findings, it should be noted that the direct supervision option will not be considered. Given that only 2 of 255 survey respondents identified the direct supervision mode of surveillance as their primary mode, considering it would serve no useful purpose. The principal comparison will be of the two concepts being considered today by most small jail planners, the frequently utilized intermittent surveillance concept and the increasingly popular podular remote concept.

Podular remote surveillance records consistently lower operational problem scores than does intermittent surveillance, with podular remote scoring better in eight of nine categories (Table 35). The exception is the category of standards compliance where there is a significant advantage for intermittent surveillance. While the results are not overwhelmingly in favor of the podular remote method (or conversely overwhelmingly against the intermittent approach), they are strong in a couple of areas. Specifically, the podular remote method has a much lower incidence of problems with suicide or suicide attempts (a 19% differential), assaults or attacks on staff (a 17% differential), and damage to jail property (a 14% differential). These advantages are logical given the greater constancy of surveillance and the clearer separation of inmates and staff offered by the podular remote concept, which places staff in a better vantage point to view dayrooms, cells, and shower areas.

Table 35

METHOD OF SURVEILLANCE/OPERATIONAL PROBLEM CROSSTAB

Yes, had problems with...	Podular remote	Inter-mittent	Difference
1. Suicides or suicide attempts	44%	63%	**+19**
2. Assaults/attacks on Staff	13	30	**+17**
3. Damage to jail property	63	77	**+14**
4. Fires	13	25	+12
5. Contraband passage	50	61	+11
6. Escapes	31	39	+ 8
7. Law suits	31	38	+ 7
8. Inmate-inmate assaults/attacks	38	43	+ 5
9. Standards compliance	38	22	-16
AVERAGE	**36%**	**44%**	**+ 8**

Also worth noting in this case are the problem seriousness scores. Podular remote had no reports of "very serious" problems in eight out of nine operational problem categories, whereas intermittent surveillance had reports of very serious problems in every category. This significant and striking result (very serious problems of some degree were cited for virtually all other issues throughout the survey) only serves to strengthen the advantage of podular remote in seeming to reduce the level of operational problems.

Cross-tabulations with facility problems yield an opposite result. Intermittent surveillance facilities have lower problem scores in every category but two. The survey team believes that these results have legitimacy even though many people might find the connection between methods of surveillance and facility-related problems difficult to associate. The team ascribes legitimacy because the two different surveillance methods do impose very different design requirements on a facility. Therefore, certain facility problems bear a direct relationship to the method of surveillance chosen. Table 36 gives the most directly relevant facility problems and the results of their cross-tabulation against surveillance methods. For consistency, the plus and minus signs used in the "difference" category will be associated with podular remote and intermittent surveillance in the same way as in Table 35. In other words, a "difference" score with a plus sign favors podular remote facilities. A minus sign favors intermittent surveillance facilities.

Table 36

METHOD OF SURVEILLANCE/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	Podular remote	Inter-mittent	Difference
1. Overall amount of space	38%	52%	+14
2. Basic location of rooms	25	35	+10
3. Cell window frame & glass	31	30	- 1
4. Durability of mtls/hardware	50	46	- 4
5. Ease of movement thru jail	25	21	- 4
6. Equipment failures	69	64	- 5
7. Physical separation of inmates	56	48	- 8
8. Public-inmate view conflict	25	17	- 8
9. Quality of environment	31	20	-11
10. Communicating thru barriers	38	20	-18
11. Remote view into cellblocks	63	39	-24
12. Jail evacuation	38	14	-24
13. Improper sound levels	56	31	-25
AVERAGE	**42%**	**33%**	- 9

Given the main concepts behind the podular remote approach--an officer posted full-time in a position to constantly look directly into the cellblocks--several of the scores are of particular interest. The primary finding that gains attention is that the podular remote facilities did so poorly in the category in which one might expect them to do best, obtaining a remote view into the cellblocks. On this issue there was a 24 point differential in favor of intermittent surveillance. One must surmise that the relatively limited number (5%) of new small jails designed along the podular remote concept did not successfully create good sight lines because of the arrangement of each cellblock around the central control position.

Another problem of particular interest was improper sound levels. Problem scores indicate a 25 point differential in favor of intermittent surveillance facilities. This perhaps points up a special design problem for podular remote facilities when all of the cellblocks, and all of their noises, are literally across from each other and are focused on a central staff position. With intermittent facilities, the cellblocks are usually dispersed throughout the building, thus avoiding the creation of a focal point for sound as well as for sight, even though many of the intermittent facilities use steel and bars, both notoriously bad for containing sound and improving the quality of sound.

Physical separation problem scores in favor of intermittent surveillance facilities (an 8 percentage point advantage) are perhaps explained by the fact that separating different types of inmates physically, visually, and acoustically is easier when cellblocks are dispersed throughout a facility as needed. When all or most of the cellblock areas are focused on a single staff position as they are in podular remote surveillance, it is difficult to screen views, control sound between groups, and create a large number of separate cellblocks.

The strong performance of the podular remote method in operational problems is encouraging, as one might expect with a concept advocating a constant staff presence over an intermittent, or periodic, staff presence. However, it would seem that the overall workability of this growing concept would depend on more careful designs that are more successful in addressing the facility problems documented by the survey.

J. Electronic Surveillance Equipment

Some jurisdictions support the surveillance efforts of their staff, or even replace some staff, by installing electronic monitoring equipment in the facility. This equipment generally consists of closed circuit television (CCTV) or listening devices within the cellblock area. Because these systems are frequently used, their performance value is of great interest. To develop some sense of this value for new small jails, the survey team prepared a cross-tabulation with operational and facility problems.

In brief, survey results tend to suggest that the use of listening devices in the cellblocks is more effective than the use of CCTV. This conclusion is based on a generally positive set of results for facilities using listening devices (Table 37) and a fairly negative set of results for facilities using CCTV (Table 38).

Listening devices received negative results only in the critical area of suicides, where a major gap of 20 percentage points was found, and inmate-to-inmate assaults or attacks, where a negative difference of 8 percentage points was found. Both findings give rise to concern, particularly if local officials expect listening devices to help resolve those problems.

The most significant benefits of providing listening devices were in preventing law suits and escapes. The data on law suits is interesting given the last decade's preoccupation with inmate privacy concerns and the possible violation of that privacy posed by electronic surveillance. Perhaps randomly picking up

conversations involving escape plans or simply detecting the noise of a destructive form of escape plays a role in the positive findings in those areas.

Table 37

LISTENING DEVICES/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Have Listening Devices	No Listening Devices	Difference
1. Law suits	35%	55%	+20
2. Escapes	35	51	+16
3. Standards compliance	21	33	+12
4. Damage to jail property	74	85	+11
5. Assaults/attacks on staff	28	33	+ 5
6. Fires	22	26	+ 4
7. Contraband passage	60	63	+ 3
8. Inmate-inmate assaults/ attacks	45	37	- 8
9. Suicides or suicide attempts	67	47	-20
AVERAGE	**43%**	**48%**	**+ 5**

The only positive operational result for CCTV was in preventing escapes. At 1 percentage point, however, the advantage was so slim as to be statistically negligible. The remainder of the scores were negative, but by so small a margin that it would be inappropriate to argue that CCTV was a clear and substantial detriment to the operation of a facility. What can be said is that for the operational problems defined by this survey, there appears to be no advantage, and perhaps a slight disadvantage, to having CCTV in the cellblock areas for surveillance. A review of problem seriousness scores only strengthens the conclusion that CCTV has a negative impact.

Particularly disappointing about the CCTV was that it scored poorly with three problems at which it is targeted. CCTV scored surprisingly bad on suicides or suicide attempts (-11 percentage points), inmate to inmate assaults or attacks (-9 percentage points), and damage to jail property (-4 percentage points).

Table 38

CCTV/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	CCTV	No CCTV	Difference
1. Escapes	38%	39%	+ 1
2. Standards compliance	25	23	- 2
3. Assaults/attacks on staff	31	28	- 3
4. Law suits	42	39	- 3
5. Damage to jail property	79	75	- 4
6. Contraband passage	63	59	- 4
7. Fires	28	20	- 8
8. Inmate-inmate assaults	49	40	- 9
9. Suicides or suicide attempts	69	58	-11
AVERAGES	**47%**	**42%**	**- 5**

Facilities having CCTV more frequently cited equipment failures (8 percentage points more) and had a more difficult time obtaining replacement parts (5 percentage points more) and repair services (9 percentage points more). CCTV did seem beneficial in terms of a lesser incidence of cell window problems (+12 percentage points) and a lesser incidence of problems with the durability of materials and hardware (+7).

K. Perimeter Guard Corridors

The guard corridors that surround the perimeter of traditional style cellblocks have been historically considered a security benefit. Problem cross-tabulations to evaluate the impact of this thesis on new small jails are recorded in Table 39. This was considered a valuable test since guard corridors have been an important and an expensive feature in jail design, sometimes adding as much as 25% and more to the floor area of a cellblock.

Table 39

GUARD CORRIDOR/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Guard Corridor	No Corridor	Difference
1. Assaults/attacks on staff	26%	31%	+ 5
2. Escapes	39	39	0
3. Damage to jail property	78	76	- 2
4. Contraband passage	64	59	- 5
5. Law suits	44	38	- 6
6. Fires	31	20	-11
7. Inmate-inmate assaults/attacks	51	39	-12
8. Suicides or suicide attempts	72	58	-14
9. Standards compliance	33	18	-15
AVERAGE	**49%**	**42%**	**- 7**

Guard corridors seemed to provide no operational problem advantage to new small jails. Indeed, facilities with perimeter guard corridors had a greater occurrence of the kind of operational problems identified in the survey. In the key areas where guard corridors should be the most helpful, the results were mixed. For instance, guard corridors had a slightly lower citation of staff assault problems (5 percentage points less). However, facilities with guard corridors and those without had no difference in problems with escapes, and a negative result (-5 percentage points) on the issue of contraband passage. (Isolating inmates from the outside wall via the guard corridor had been thought to be beneficial in this regard.)

In terms of facility problems, the perimeter guard corridor survey results are mixed, but are slightly positive overall. Whether or not these results justify the operational problems and construction costs that come with it, the guard corridor is another question. Nonetheless, the guard corridor seems beneficial primarily in one fairly sensitive area, the cell window problem. A fairly new feature of modern jails, the cell window has been a problem in a number of jurisdictions. With facilities having the typical cellblock surrounded by a guard corridor, thus isolating the cell from any windows, the prospect of cell window problems is eliminated. According to the data, this is easily the chief benefit of the guard corrider.

L. Single Occupancy Cells

Creating cells for one inmate is a controversial concept that involves a significant expenditure of money, especially given the modern square foot requirements that accompany single occupancy cells. Their value to new small jails can be somewhat evaluated by correlating those facilities that use single occupancy cells exclusively and those that have some or all multiple occupancy cells with the incidence of operational and facility problems.

In terms of operational problems, single occupancy cells obtain consistently positive results when compared to facilities utilizing some or all multiple occupancy housing (Table 40). While the data favors single occupancy, it does not do so overwhelmingly, as did the data on adequate numbers of staff and staff training. Nonetheless, there is no category in which single occupancy facilities recorded a higher incidence of problems than did those with multiple occupancy housing.

Table 40

SINGLE OCCUPANCY/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	All single Occupancy	Some or all Mult. Occ.	Difference
1. Suicides or suicide attempts	44%	69%	+25
2. Damage to jail property	65	82	+17
3. Contraband passage	51	66	+15
4. Inmate-inmate assaults/ attacks	38	47	+ 9
5. Escapes	33	42	+ 9
6. Fires	20	26	+ 6
7. Assaults/attacks on staff	28	33	+ 5
8. Standards compliance	21	25	+ 4
9. Law suits	41	42	+ 1
AVERAGE	**38%**	**48%**	**+10**

Surprisingly, the strongest support for single occupancy appears under the category of suicides or suicide attempts. The data is favorable by a substantial 25 percentage points on this issue. Historically, one of the primary arguments against single, and for multiple occupancy, has been suicide prevention. The argument has been that single occupancy and the isolation that it may bring provides the climate and the opportunity for suicide. The data here suggest otherwise.

Two historical arguments for single occupancy have been the reduction of damage to the jail and the reduction of physical and sexual assaults between inmates. In the former case, the notion was that increased accountability was possible with only one person in each cell, and such accountability would reduce the incidence of damage. In the latter case, the idea was that the isolation afforded by single cells would reduce assaults during quiet night shifts when staffing is low and lights are out. The data seems to support both concepts. On the question of damage to jail property, single occupancy is favored by 17 percentage points. The issue of inmate assaults is in favor of single occupancy by 9 percentage points.

Additional support for single occupancy and its exclusive use in small jails comes from the problem seriousness scores. In seven out of the nine categories listed in Table 40, none of the problems cited are categorized by the respondents as "very serious," a significant finding.

The facility problem scores presented in Table 41 give a mixed result on single occupancy.

Table 41

SINGLE OCCUPANCY/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	All single Occupancy	Some or all Mult. Occ.	Difference
1. Physical separation of inmates	40%	49%	+ 9
2. Remote view into cellblocks	33	41	+ 8
3. Overall amount of space	43	51	+ 8
4. Basic location of rooms	28	35	+ 7
5. Equipment failure	58	64	+ 6
6. Ease of movement through jail	18	23	+ 5
7. Improper sound levels	30	32	+ 2
8. Durability of materials/ hardware	50	44	- 6
9. Communicating thru barriers	28	20	- 8
10. Quality of environment	30	22	- 8
11. Cell window frames & glass	40	28	-12
12. Public-inmate view conflict	28	16	-12
13. Jail evacuation	25	13	-12
AVERAGE	**35%**	**34%**	- 1

The scores are more negative than positive on those issues that relate most closely to the mere fact of a single occupancy cell. Some of this response, however, is to be expected. For example, having all single occupancy cells results in a greater incidence of cell window problems. This is somewhat predictable since the development of the concept of single occupancy cells has been closely affiliated with the elimination of guard corridors and, through that change, the creation of cell windows to the outside. Nonetheless, it is a problem that has grown out of the use of single occupancy cells. In response to this problem, 20 percent of the respondents having facilities with only single occupancy cells have blocked or severely altered their cell windows. This finding reinforces an earlier conclusion that special care must be taken in the design of cell windows and in the surveillance of the cellblock.

A related negative that was not altogether unexpected is public-inmate view conflicts. Cell windows look directly to the outside in single occupancy cells and, because many small jails are located on the town square or in the downtown, view conflicts can more readily occur. This too is a problem that requires careful design attention.

The chief positive results come in areas like ease of movement through the jail and basic room location, general categories more loosely affiliated with the single occupancy issue. One clear advantage that directly relates to the concept, however, is that of providing physical separation of inmates. Single occupancy has a favorable problem score here by a margin of 9 percentage points.

One other relevant finding might be useful in measuring single occupancy's performance. The operators of facilities having all single occupancy cells tend to be more satisfied with their buildings. Specifically, only 22 percent of the respondents having some or all multiple occupancy housing were "very satisfied" with their facility, but 45 percent or nearly half of the operators of single occupancy facilities were "very satisfied."

M. Physical Separation of Inmates

Properly separating the various types of inmates from each other has always been and, apparently remains to be, a problem for the small jail. Determining the degree to which this problem may affect the incidence of other problems in the jail is the purpose of cross-tabulating the separation issue against the occurrence of facility and operational problems.

In so doing, the KPA survey team found a strong and consistent correlation between difficulties in separating various groups of offenders and other forms of operational problems (Table 42). In fact, data on every problem identified in the survey shows a favorable result for facilities not claiming problems of physically separating inmates. This, in turn, suggests that the problem of separating inmates clearly compounds itself and adversely affects other areas of operation.

Table 42

INMATE SEPARATION/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Separation Problems	No Problems	Difference
1. Inmate-inmate assaults/ attacks	58%	29%	+29
2. Contraband passage	73	50	+23
3. Standards compliance	35	13	+22
4. Assaults/attacks on staff	38	21	+17
5. Suicides or suicide attempts	70	55	+15
6. Damage to jail property	81	71	+10
7. Fires	27	19	+ 8
8. Law suits	42	37	+ 5
9. Escapes	40	37	+ 3
AVERAGES	**52%**	**37%**	**+15**

The strongest correlation came in a serious but not unexpected area: inmate-to-inmate assaults or attacks. Facilities with separation problems show a 29 percentage point greater frequency of the assault problem. The contraband passage problem shows 23 percentage points in favor of facilities without separation problems. This difference may in part be explained by a recurrence of the common historical problem of being unable to separate the incoming work releasees from the regular detainees, thereby providing a natural pipeline for contraband passage.

The difference in the scores for standards compliance is also big, 22 points. Since properly separating inmates has become an increasingly important standards issue in recent years, some of the earlier new facilities may now be faced with compliance problems.

N. Overcrowding

Overcrowding has been cited as a problem in 44 percent of the new small jails built in the United States. Fifteen percent cite very serious or somewhat serious overcrowding problems. Yet, according to the survey, many of the new small jails hold inmates for other jurisdictions. They also hold special types of inmates who might be better placed in other facilities, such as juveniles, or inmates who might be better placed in shared facilities, such as female adults. To determine the degree to which facilities with overcrowding problems may be compounding or relieving their problems, the survey team made a series of cross-tabulations.

Survey results show that a fairly high percentage of counties claiming overcrowding problems also have formal agreements to board inmates from other jurisdictions. Though the actual numbers taken in may be small, they may also be enough to exacerbate overcrowding problems. Table 43 shows that the most frequently housed are the inmates from surrounding counties, the source from which the biggest average daily population increase might come. The exceptions to this might be the times when several federal prisoners are brought in at once or where states with prison overcrowding problems back up convicted felons in the local jails.

Table 43

BOARDED INMATES/OVERCROWDING CROSSTAB

Have Formal Agreement to...	Facilities w/ Overcrowding Problems
House inmates for other counties.	59%
House federal inmates	39%
House state inmates	39%

On the other side of the coin is the transfer of various offenders to other facilities (Table 44). Survey data shows that this in fact occurs more where there is overcrowding pressure. Nonetheless, there is still a good deal of holding of smaller and more special populations in the face of overcrowding problems.

Table 44

INMATE TRANSFERS/OVERCROWDING CROSSTAB

Inmates Transferred	Have Overcrowding Problems	No Overcrowding Problems
Sentenced misdemeanants	61%	39%
Special inmates	44	36
Juveniles	42	26
Female adults	22	16

Sentenced Misdemeanants are most frequently transferred to other facilities. This group, or part of it, is transferred out by 61 percent of the new small jails having overcrowding problems. By contrast, this same group is transferred by only 39 percent of those facilities not having overcrowding problems. Forty-two percent of the overcrowded new jails house their juveniles in other jurisdictions, meaning that 58 percent of them hold, and perhaps reserve cell space, for this small group in spite of their problems. Juveniles are transferred to other facilities by only 26 percent of the facilities with adequate capacity.

Female adult offenders are transferred out by only 22 percent of the overcrowded facilities. In that females normally represent 5 to 10 percent of a jail population, the 78 percent not transferring their female offenders to other facilities may be missing an opportunity to relieve crowding pressures.

Although data on planning before design shows that planning seems not to have had an appreciable impact on overcrowding, the data on one facet of planning presents an interesting contrast. Those jurisdictions that evaluated alternatives to incarceration during their pre-architectural planning had a lesser incidence of overcrowding problems. Specifically, 57 percent of those jurisdictions not having crowding problems explored alternatives before design, while only 43 percent of the facilities having problems did so.

O. The Value of Facility Amenities

Activities and privileges such as television viewing, indoor exercise, and commissary are relatively new to county jails. While they are in some cases required by state standards or court rulings, they are generally considered amenities that assist in the control of inmate behavior and assist in the maintenance of

the inmate's mental and physical well-being. To test the notion that inmate behavior can be controlled or moderated by the use of amenities, the survey team cross-tabulated the set of operational problems identified in the study with the existence of the following five facility amenities.

1. Dayroom telephones
2. Dayroom televisions
3. Outdoor exercise
4. Indoor exercise
5. Commissary.

Overall, the survey results do not allow one to conclude that these amenities each clearly improve inmate behavior and, conversely, minimize operational problems. However, one can say that operational situations are slightly improved overall and that several particular problems can be reduced measurably. The data from the survey is summarized for each amenity in Table 45 by stating the differences in the problem scores between those that do have the amenity and those that do not. A number with a plus (+) sign indicates that the existence of the amenity has been to the advantage of the facilities. The underscoring is used to highlight sets of scores for a particular problem.

Table 45

AMENITIES/OPERATIONAL CROSSTAB BY DIFFERENCES IN PROBLEM FREQUENCIES

Problems with...	Dayroom Phone	Dayroom TV	Outdoor Exercise	Indoor Exercise	Commissary
1. Damage to jail property	+ 4	+18	+ 7	**+24**	+ 7
2. Escapes	+22	+ 9	-13	**+15**	+ 9
3. Assaults/attacks on staff	+ 2	- 5	- 1	**+10**	- 1
4. Inmate-inmate assaults/attacks	+ 9	- 1	- 1	**+12**	-13
5. Suicides or suicide attempts	- 9	+ 8	+ 5	**+14**	-13
6. Contraband passage	+12	+ 5	- 3	**+21**	- 8
7. Law suits	0	+ 6	+ 9	**+14**	+17
8. Standards compliance	+10	0	+ 8	**+11**	0
9. Fires	- 4	+ 1	- 3	+ 5	0
AVERAGES	**+ 5**	**+ 5**	**+ 1**	**+14**	**0**

Indoor exercise has the most beneficial impact on operations according to the survey data. The findings are favorable in all problem categories and are consistently strong, with an average 14 percentage point advantage over facilities without indoor exercise. In that 31 percent of the new small jails do not now have any space for indoor exercise, they would have to bear additional construction costs to take advantage of this apparently valuable control feature.

Collectively, the amenities listed seem to have the greatest overall impact on the problem of the inmates' damaging jail property. All five amenities demonstrate an advantage for facilities with regard to this issue, with indoor exercise having the greatest impact. Having a television in the dayroom also seems to offer a significant advantage (+18 percentage points) in helping to control damage to jail property.

All of the amenities, with the exception of dayroom telephones, appear collectively to have a positive effect in reducing law suits, a key concern to the modern jail. Indoor and outdoor exercise are logical elements of this (as they are in reducing standards compliance problems), but dayroom TV and especially commissary (at +17) are not quite as readily understandable. It may be that the presence of these amenities simply helps placate inmates and helps create a more "hassle-free" environment that reduces the motivation to sue.

Besides indoor exercise, no other amenity demonstrates a clear, consistent advantage in helping to minimize the frequency of the classic operational problems listed. However, some isolated advantages and disadvantages are worth noting. One interesting disadvantage is that outdoor exercise seems to be more conducive to escapes, a probably predictable result to most jail administrators. Since outdoor exercise does have its advantages and is frequently required, this data should remind designers and jail officers to be particularly alert when designing and operating this area.

One curious but statistically clear advantage found is that the presence of a telephone results in a much lower incidence of escapes (a 22 percentage point advantage). Initially, one might expect the presence of a telephone to provide a much greater opportunity to plan and coordinate an escape. However, given the nature of the small jail detainee and the risks associated with escape, perhaps easy communication with family and friends eliminates some of the reasons why inmates make an escape attempt. Such communication, if beneficial regarding escapes, seems detrimental regarding suicides and suicide attempts. This result may be a fluke, however, if one can assume that most

suicide risks are identified in modern facilities (through better policies and procedures and classification) and are, in fact, in special holding areas without dayrooms.

P. Improper Sound Levels

Sound has presented jails with one of their most noticeable and enduring environmental problems. This is due to the many sources of sound and to the many hard surfaces characteristic of jails. The hard surfaces, such as concrete, steel, and concrete block, predominate in small jails and exaggerate the effects and duration of sound through echoing (reverberation) in much the same way that mirrors and light-colored surfaces exaggerate the effect of light. The many sources of sound include flushing toilets, electric locks, sliding door mechanisms, television sets, audio communication systems, and the voices of the inmates. The unwanted sound, or noise, that results is not only a problem for the individual cellblock, but for the entire jail since sound transferability between housing areas can also be great. Many observers of jails, including the KPA survey team, believe that the constant presence of improper sound levels and sound transference tends to aggravate conditions and worsen behavior in jail, much like constant abrasive sounds can aggravate the average individual at home or in the workplace.

A cross-tabulation of the operational problem set with improper sound levels tends to confirm the opinion that noise in jails contributes to operational problems (Table 46). The cross-tabulation shows that new small jails citing improper sound levels also cite a greater frequency of problems in every problem category. Somewhat muting the strength of the results is the fact that the gap in the frequency of problems for those having and those not having improper sound levels is significant but not great. Further, the gap in key areas is only moderate. Nonetheless, the results are clearly in favor of facilities with no complaints about sound levels.

Table 46

IMPROPER SOUND LEVELS/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Improper Sound Levels	No Sound Problems	Difference
1. Standards compliance	36%	17%	+19
2. Contraband passage	71	56	+15
3. Damage to jail property	85	72	+13
4. Suicides or suicide attempts	70	60	+10
5. Fires	30	20	+10
6. Law suits	46	37	+ 9
7. Escapes	44	35	+ 9
8. Inmate-inmate assaults/attacks	49	41	+ 8
9. Assaults/attacks on staff	33	27	+ 6
AVERAGES	**52%**	**41%**	**+11**

Two areas of direct relationship in Table 46 where the results are positive but moderate are those of inmate-to-inmate assaults or attacks and assaults or attacks on staff. While favoring facilities with better control of their sound levels, the percentage point difference is only 8 and 6 percentage points, respectively. A directly related problem issue with a more significant difference is damage to jail property. Facilities not citing improper sound levels had a 13 percentage point lower problem rate.

In all, it is clear that controlling sound levels in new small jails results in a less frequent occurrence of operational problems.

Q. The Impact of Standards

The development of new or significantly updated jail standards has been a phenomenon of the 1970's and 1980's with which virtually every county in the country has become familiar. Motivated by the many federal and state court cases concerning jails and prisons, the intention of these standards has been to improve the conditions, adequacy, and performance of jails, including small jails.

According to survey results, the state standards, in all their variations, have satisfied their objectives as far as new small county jails are concerned. This conclusion is based on a

cross-tabulation of the operational and facility problem sets against the question of whether or not the jail was required to meet state standards. Having to meet state standards has not been and is not today a given since some states still do not have standards and still others have standards that are not mandatory. At any rate, the cross-tabulations basically reveal favorable scores regarding operational problems and very favorable scores regarding facility problems.

Table 47 presents the cross-tabulation for jail standards and operational problems.

Table 47

JAIL STANDARDS/OPERATIONAL PROBLEMS CROSSTAB

Yes, had problems with...	Had Standards to meet	No Standards	Difference
1. Damage to jail property	73%	87%	+14
2. Assaults/attacks on staff	27	40	+13
3. Inmate-inmate assaults/ attacks	40	53	+13
4. Law suits	38	50	+12
5. Contraband passage	58	65	+ 7
6. Escapes	37	40	+ 3
7. Fires	23	24	+ 1
8. Suicides or suicide attempts	63	60	- 3
AVERAGES	**45%**	**52%**	**+ 7**

Every category of operational problem evaluated but one evidenced problem frequencies supporting the influence of state jail standards on new small jails. The one problem receiving a negative score was suicides or suicide attempts, which had a 3 percentage point difference to the detriment of standards. The remaining problem frequencies give solid support for the benefit of state standards, with the greatest impact being in three important areas of jail operations: damage to the jail (+14), assaults or attacks on staff (+13), and inmate-to-inmate assaults or attacks (+13). Another key advantage for local officials is that standards-based facilities reported a lower incidence of law suits, specifically 12 percentage points to the advantage of jail standards.

Jail standards have a much greater impact on facility problems, as Table 48 indicates.

Table 48

JAIL STANDARDS/FACILITY PROBLEMS CROSSTAB

Yes, had problems with...	Had Standards to Meet	No Standards	Difference
1. Overall amount of space	44%	73%	**+29**
2. Physical separation of inmates	42	68	**+26**
3. Ease of movement through jail	17	41	**+24**
4. Remote view into cellblocks	35	57	+22
5. Improper sound levels	30	51	+21
6. Communicating through barriers	19	38	+19
7. Public-inmate view conflict	14	32	+18
8. Jail evacuation	11	27	+16
9. Basic location of rooms	31	46	+15
10. Durability of materials/ hardware	44	54	+10
11. Quality of environment	20	27	+ 7
12. Equipment failures	62	68	+ 6
13. Cell window frames & glass	29	32	+ 3
AVERAGE	**31%**	**47%**	**+16**

The difference in problem frequencies favors jail standards in every category and does so very clearly and strongly in many categories. Facilities designed according to state jail standards perform most strongly in several key categories that have chronically been problems for jails and where one might expect standards and state standards personnel to exercise their influence most greatly.

The most significant area of impact is in the amount of space provided in the jail, with a 29 percentage point gap in favor of facilities meeting standards. The often-cited problem of adequately separating various types of inmates was also much less frequent in facilities meeting standards. Specifically, the data showed a 26 percentage point gap, thereby implying a significant benefit. Ease of movement through the jail and the basic location of rooms, two key elements of a good design and two frequently cited problem areas, also reveal strong advantages for facilities having to meet jail standards. The problem of improper sound levels also occurs in significantly fewer facilities, a 21

percentage point difference, where state jail standards have been involved.

These figures and others show that the application of state jail standards is one of the most beneficial influences on small jail facilities.

R. Compliance with Professional Accreditation Standards

Many professionals believe that modern facilities should strive to meet not only their state jail standards but the standards of accreditation formulated by the corrections profession. These standards, like the many state jail standards, were formulated in response to the changes inspired by federal court orders and the perceived failures of existing facilities. They were created by the Commission on Accreditation for Corrections (CAC) and first published in 1977 as the Standards for Adult Local Detention Facilities. The accreditation process that was begun in conjunction with these standards has involved a good number of local jurisdictions.

Table 49 provides a comparison of several of the key physical plant standards with the findings of the small jail survey. Although some of the jails were designed prior to the publication of the standards, the comparison may provide a final, useful perspective on where the recently built small jails fit into the modern day picture.

Table 49

ACCREDITATION STANDARDS/SMALL JAIL COMPLIANCE COMPARISON

CAC Standard - 1981 edition	Small Jail Compliance
A. All single occupancy cells	A. 36% of capacity is single occupancy.
B. 70 square feet per cell	B. Average size = 63.5 square foot, 49% of cells below 70 s.f., 30% below 60 s.f.
C. Dayroom for each cellblock	C. 76% of all facilities comply.
D. Indoor and outdoor exercise	D. 69% provide indoor exercise areas, and 58% provide outdoor exercise areas.
E. Cells for mentally ill and non-ambulatory	E. 56% provide space for mentally ill; 85% provide detoxification space.
F. Proper physical separation of inmates	F. A problem for 48% of the facilities, a very or somewhat serious problem for 30%.
G. Multi-purpose room for programs	G. 77% provide program space; 39% have adequate space.
H. Administrative or staff space.	H. 94% provide; 49% have adequate space.

In all, one would have to conclude that the new small jails opened since 1974 represent a significant improvement over their predecessor facilities. Further, new small jails collectively represent a reasonable level of compliance with professional accreditation standards with the exception of the key areas of single occupancy cells and inmate separation. It is hoped that future facilities will come even closer to the attainment of design standards embraced and promoted by the corrections profession.

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