



Jail Planning and Expansion

Local Officials and Their Roles

Second Edition

Needs Assessment

Facility Program Development

Project Definition

Design and Construction

Transition and Occupation



U.S. Department of Justice
National Institute of Corrections
320 First Street, NW
Washington, DC 20534

Morris L. Thigpen
Director

Tom Beauclair
Deputy Director

Virginia A. Hutchinson
Chief, Jails Division

Vicci Persons
Project Manager

Fran Zandi
Project Manager

National Institute of Corrections
www.nicic.gov

Jail Planning and Expansion

Local Officials and Their Roles

Second Edition

James R. Robertson

January 2010

NIC Accession
Number 022668

This document was originally prepared under Technical Assistance award number 99–J1224 from the National Institute of Corrections, U.S. Department of Justice. It has been updated under Technical Assistance award number 07–J1038. Points of view or opinions stated in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Foreword

Jail Planning and Expansion: Local Officials and Their Roles describes a process to help elected officials and other policymakers develop jail facilities. It outlines all participants' roles, the decisions they make, and the products they create.

The facility development process includes the phases required to plan, locate, design, construct, and open a new jail—or expand an existing one. This process was developed by local policymakers, builders, architects, city and county planners, and criminal justice professionals who have experienced this process firsthand.

The nine phases of the facility development process incorporate both concurrent and consecutive activities that begin with identifying the need for a new facility and end with evaluating how well the new facility is working. The discussion of each of the nine phases lists the major work activities and the products developed. Accompanying exhibits show the roles that key stakeholders play in these activities.

Morris L. Thigpen

Director

National Institute of Corrections

Preface

This publication was originally developed to help communities plan and construct new jails and major expansions of existing jails. It provides the framework for understanding the facility development process and the roles and responsibilities of key stakeholders. The document is based on a review of publications and other resources used in the National Institute of Corrections' (NIC's) Planning of New Institutions Program, interviews with NIC's consultants, and my experiences as a correctional facility employee and manager (1972–88), NIC correctional program specialist (1988–90), and correctional consultant and planner (1990–present).

In 2006, NIC initiated a critical evaluation of the facility development process. In this evaluation it was noted that the process was shown as very linear, with one step occurring after another and tasks occurring in rigid sequence. However, the process is actually fluid rather than rigid or linear, with a number of activity tracks that continue through multiple phases of the process.

To illustrate this more fluid process, NIC has developed a Facility Development Process Flowchart for this edition of *Jail Planning and Expansion* (see the appendix). The flowchart and this edition's updated text provide an accurate depiction of a process that has been used successfully for many years.

Many individuals and organizations contributed ideas and materials to the first edition of this document. The following colleagues involved in the Planning of New Institutions Program since 1979 have contributed ideas found in these pages: Gary Bowker, Gail Elias, Gary Frank, Dennis Liebert, Butch Reynolds, Ken Ricci, and David Voorhis. Richard Geaither, a correctional program specialist in NIC's Jails Division, was the project manager who initiated the project and was a reliable supporter and adviser. Karin Platt and Carrie Robertson helped produce the initial draft.

In revising this publication, I again received assistance from Dennis Liebert and Gail Elias. Seth Robertson helped with the initial draft by providing expertise in creating exhibits. Vicci Persons, previously a correctional program specialist with NIC, initiated a revision of the facility development process and of this document and also assisted with the development of this updated edition. Fran Zandi, a correctional program specialist in NIC's Jails Division, assumed the role of project manager, and I thank her for her patience and assistance.

James R. Robertson

Contents

Foreword	iii
Preface	v
What Is the Facility Development Process?	1
Who Are the Participants?	3
Elected and Appointed Officials	4
Project Manager	4
Planning Committee	4
Community Advisory Committee	5
Facility Managers	5
Representatives of Justice Agencies	6
Transition Team	6
Design Team (Architects, Technical Advisers, and Specialists)	6
Contractor	7
What Types of Decisions Must Be Made?	9
How Much Time and Money Are Spent on Each Phase?	11
How Is the Budget Developed?	11
Can Participation by Local Officials in the Beginning Save Money at the End?	13
Phases, Tasks, and Tracks	15
Phase 1: Project Recognition	16
Phase 2: Needs Assessment	18
Phase 3: Facility Program Development	20
The Facility Program	20
Site Evaluation	20
Options for Project Delivery	23
Phase 4: Project Definition and Implementation Plan	24
Phase 5: Design	26
Phase 6: Bidding and Negotiations	33
Phase 7: Construction	33
Phase 8: Occupancy and Operation	36
Phase 9: Postoccupancy	39

Conclusion	43
Resources	45
Appendix: Facility Development Process Flowchart	48

Exhibits

Exhibit 1.	A Participant's Influence on a Project.	1
Exhibit 2.	Sample Organization Chart for Jail Facility Planning Process	3
Exhibit 3.	Facility Development Process Phases	12
Exhibit 4.	Typical Allocation of Project Time (Phases 2–8)	12
Exhibit 5.	Typical Allocation of Project Funds	13
Exhibit 6.	Cost of Change Over Time	13
Exhibit 7.	Selecting Consultants	17
Exhibit 8.	Needs Assessment	19
Exhibit 9.	Sample Operational Scenario Flowchart	21
Exhibit 10.	Functional Programming	22
Exhibit 11.	Site Evaluation	23
Exhibit 12.	Project Definition and Implementation Plan	25
Exhibit 13.	Sample Site Master Plan	26
Exhibit 14.	Site Analysis and Development of Preliminary Site Master Plan	27
Exhibit 15.	Sample Adjacency Diagram for Jail Receiving and Discharge Area	28
Exhibit 16.	Schematic Design Development	29
Exhibit 17.	Design Development	31
Exhibit 18.	Development of Construction Documents	32
Exhibit 19.	Bidding and Negotiations	34
Exhibit 20.	Oversight of New Facility Construction	36
Exhibit 21.	Oversight of Construction Completion	37
Exhibit 22.	Transition Activities: Construction	38
Exhibit 23.	Occupancy and Operation	40
Exhibit 24.	Postoccupancy	41

What Is the Facility Development Process?

The facility development process includes the phases, tasks, and activity tracks associated with planning, designing, constructing, and opening a new jail facility. The same process is also required for the renovation or expansion of an existing jail. Planning and constructing a jail is more technically complex and costly than most other construction projects, partly because of the special construction materials and systems used to make it secure. Because such a facility also tends to be more expensive to operate than a conventional building, decisions made during the development of such a project have a long-term impact on the community it serves. A participant's ability to influence a change in the project, however, decreases as the process moves from planning to design and construction, when the costs of implementing change increase (see exhibit 1).

This document is intended to serve two primary purposes. It outlines the process elected officials and other policymakers follow when planning, building, and occupying new or expanded jails. It also describes the roles participants play in the process, the decisions they make, and the products that result from the process. When making these decisions, participants should not simply recreate the old

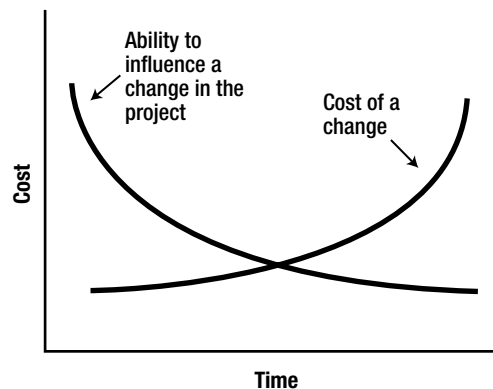
jail; this is an opportunity to develop new strategies for managing inmates and creating a facility that will serve the community well for the next 20–30 years.

Understanding the facility development process allows those involved to more effectively perform their roles in the process. Each participant will feel greater ownership in the project and be able and willing to assume control of the process when appropriate. Ideas can then be readily shared, and the project can be brought to successful completion.

exhibit 1

A Participant's Influence on a Project

A participant's ability to influence the project decreases as the process moves along.



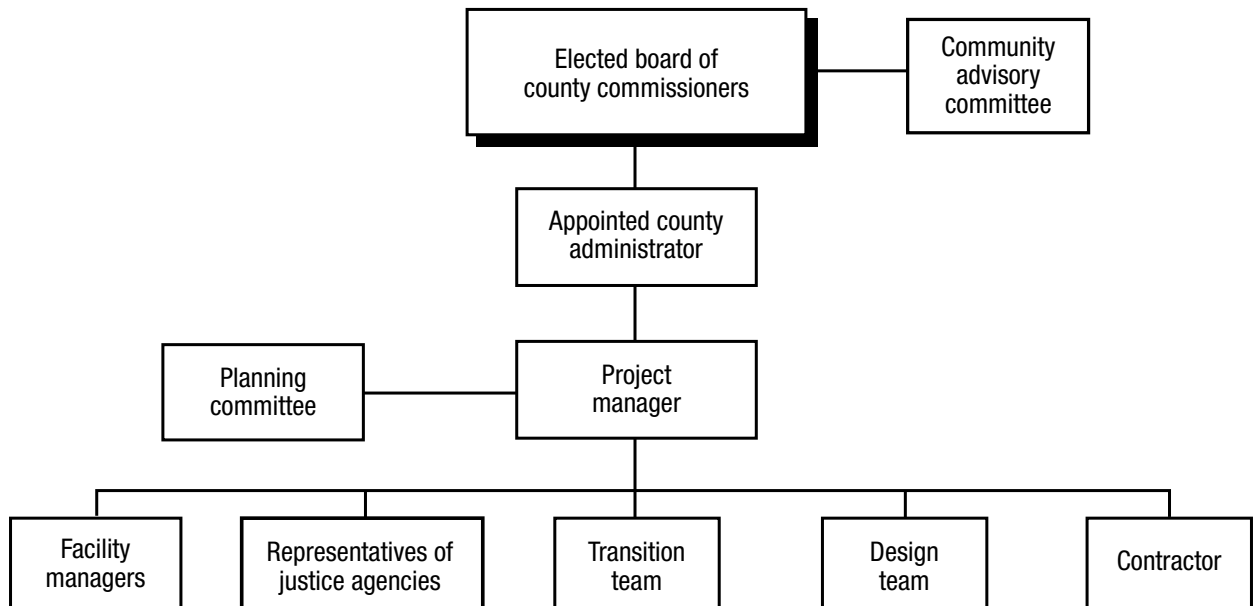
Who Are the Participants?

The types of participants typically involved in the planning, design, and construction of jails include the elected and appointed government officials with fiscal responsibility for incarceration and corrections activities; the project manager; the planning committee; the community advisory committee; facility managers; representatives of justice agencies; the

transition team; the design team (architects, technical advisers, and specialists); and the contractor. (Participants' titles and positions vary by jurisdiction.) Exhibit 2 presents a sample organization chart for the jail facility planning process. The remaining sections of this chapter discuss the role each group shown in the exhibit plays in the process.

exhibit 2

Sample Organization Chart for Jail Facility Planning Process



Elected and Appointed Officials

Elected and appointed officials include county commissioners, supervisors, legislators, freeholders, administrators, and city/county managers. This group of officeholders and lawmakers represents the interest of the citizens by authorizing appropriate funding for law enforcement and detention services. They must also ensure that these services are provided in the most cost-effective way possible.

These officials grant final approval for many steps in the planning process, including the program and operational budgets, use of consultants, site selection, establishment of the community advisory committee, designs, specifications, bidding procedures and documents, contract documents, construction, staffing, and other activities that support and guide the jail's development and use. Although the officials have final approval responsibility for these activities, they are generally not involved in many of the details and instead rely heavily on the recommendations of the planning team and project manager as they make their decisions.

Project Manager

As the hub of all planning, design, and construction activities, the project manager coordinates the entire facility development process. He/she either performs the tasks outlined for each phase or delegates the work to another planning committee member or consultant. Responsibilities include monitoring the project throughout all phases, attending all critical meetings, and producing the official project record. A current employee of the jurisdiction with the required skills and resources—a correctional staff member, an engineer, a city or county planner, a county or state architect, or a criminal justice planner—may serve in this role.

Frequently, two individuals share the project manager role, with both representing the owner. One manager will assume oversight of the new facility's design and construction and the other will manage facility transition—the planning, development, and implementation of the new facility's operations. These roles overlap throughout the course of the project, with the design and construction manager having a larger role in the beginning stages of the project and the operations manager having a larger role closer to the end. The operations manager will usually be responsible for leading the transition team (see section titled “Transition Team” later in this chapter).

A jurisdiction may choose to contract for the services of the design and construction manager and hire an independent professional consultant. In most cases, the responsibility for selecting this manager rests with the organization that has fiscal control of the project. The operations manager is generally selected from the user agency.

Planning Committee

The planning committee meets regularly and includes the individuals who will perform most of the planning tasks throughout the facility development process. This committee includes the project manager and members of the groups most affected by the construction of a new facility, such as elected and appointed officials, facility managers, and representatives of justice agencies.

The project manager supports the planning committee and guides it through each phase of the facility development process. For example, in the needs assessment phase (phase 2), the planning committee helps collect and analyze data about the populations to be housed in the jail and reviews draft reports prepared by the correctional planning consultant. Later in the facility development process, the committee supports

and reviews the work of the consultants hired for the project, reviews construction progress, and advises on change orders. Committee members also review draft reports, recommend sites for the facility, review the design against the completed space and functional programs, approve final plans and specifications, review bids, provide support for the move, and develop the activation plan.

Community Advisory Committee

Community participation in planning is important because the jail belongs to the community it serves; it is not solely the concern of the sheriff or director of corrections. The type of facility a community builds and the way it is used are as much a reflection of community values as they are of local, state, and federal laws. It is common for stakeholders such as victim advocates, business leaders, the clergy, educators, and elected officials to actively participate on the community advisory committee. Stakeholders who have overall responsibility for the jail, such as county commissioners and the sheriff, should also be represented on the community advisory committee.

The community advisory committee can provide insight into the types of concerns and questions the community will have when discussing a new jail project. Throughout the process, the committee offers advice and may also review planning committee reports. Committee members are kept informed of the progress and act as ambassadors to the community, particularly in the early phases of the project.

Generally, community advisory committees are established during the needs assessment phase. However, communities that have attempted to gain voter approval for a new jail project and have not been successful will often form the committee before the start of a needs assessment.

In such cases, the committee may be involved in discussions of alternatives to construction and the evaluation of alternative programs that may affect the number of beds required.

Facility Managers

Facility managers, including the sheriff, jail administrator, and warden or director of corrections, must take an active role during the entire facility development process. Facility managers have immediate responsibility for detention and correctional services and are often placed in the difficult position of having to explain past decisions or practices and suggest future approaches.

Throughout the project, facility managers participate in the decisionmaking process and also collect information to help other planners responsible for decisionmaking. Facility managers serve as planning resources and are often consulted for information, policy interpretation, and input on the development of site criteria, schematic designs, and contract documents. They also review bids and construction progress and advise on change orders. Finally, facility managers assign staff to, coordinate the move to, and activate the new facility.

Included in this group is the transition team leader. Although the transition team may not be formed until later in the process, it is advisable to have the leader participate in the process from the earliest phases and, as the project proceeds, take an increasingly active role in decisionmaking.

Correctional staff have a tremendous amount of knowledge to contribute to the planning process. Because they are on the “front lines,” they can inform planners about the difficulties they face daily in the current facility. They ultimately will work in the new facility and will approach their new environment more enthusiastically when they have been involved in its early planning stages.

Representatives of Justice Agencies

Typically, members of justice agencies (such as court personnel; prosecutors; defense attorneys; and probation, parole, and pretrial services staff) are asked to serve on an advisory or planning team because the agencies' policies and practices have a direct impact on the jail. Each of these agencies makes many decisions that influence who goes to jail and for what length of time. Representatives of justice agencies also serve as planning resources and are consulted for information and policy interpretation. They also provide input in determining the need for consultants and developing site criteria that support a close relationship between justice system components and the new facility. The agencies that will be housed in the new facility will assist in the planning process, help coordinate the move, and contribute to the annual facility performance report.

Transition Team

The transition team is charged with planning, developing, and implementing the new facility's operations. Because most jurisdictions have little experience with facility construction or transition, considerable uncertainty often exists about who should actually do the work associated with transition. In many jails, this situation is further complicated by inadequate staffing for current operations. Jurisdictions that have had the greatest success with transition have used a full-time team dedicated to the transition process.

Although there is no simple answer to the question of how to organize staff for the transition process, experience has shown that transition to a new facility is not a part-time job. The role of transition team leader is pivotal; he/she will be accountable for coordinating the overall transition process. Even in the smallest facilities, a great deal of work is required to get ready to start operations in the new facility. These tasks

are primarily the jurisdiction's responsibility. Although the architect, contractor, and/or consultant can help with the process and some of the tasks in specific areas, much of the work has to be done by the jurisdiction.

The transition team leader is responsible for establishing and meeting transition goals and time and cost objectives; to ensure success, the team leader should routinely and systematically evaluate the jurisdiction's progress in meeting these objectives. He/she must be able to manage many tasks at once, set and monitor deadlines, delegate effectively, and identify and track the thousands of tasks associated with transition.

Design Team (Architects, Technical Advisers, and Specialists)

Most jurisdictions hire consultants to help with specific tasks throughout the facility development process. Criminal justice planners, architects, landscape architects, engineers, security and electronics consultants, financial professionals, master planners, energy specialists, construction managers, real estate assessors, geologists, environmental specialists, cost estimators, and food service consultants may be hired to serve as technical advisers and help develop each phase of the project, depending on the required task. Many of these consultants are included in the design team because they have a role in the design process. Although they may not be designers, they are used to support the design effort and are part of the team.

Many of these consultants may act as subconsultants to the criminal justice planner and/or architect. Consultants may collect and analyze data, prepare draft reports and final documents, conduct evaluations and special studies, prepare documents for approval, and serve as project manager. More specifically, consultants may develop the site master plan, prepare the

schematic design, complete the plans and specifications, manage bidding and negotiations, advise on change orders, and prepare the punch list and as-built drawings.

Although specialists may be involved in and may even perform major tasks, the jurisdiction must control the planning process. Whether or not consultants are used, the process is the same and requires considerable involvement in time and resources from the jurisdiction.

Contractor

The contractor is charged with constructing the building using the specifications and drawings prepared by the design team. In a traditional construction project (design-bid-build), the jurisdiction

hires the contractor when the construction specifications and drawings are completed. In other types of projects, such as design-build, the contractor may actually participate as part of the design team. (Different project implementation plans are discussed in the chapter “Phases, Tasks, and Tracks.”)

The contractor is responsible for reviewing the bid documents, carrying out the directions provided in those documents, hiring and managing the subcontractors, submitting alternative materials for approval, and other tasks. The contractor must work closely with the project manager, the onsite design team representative (generally an architect), the transition team leader, and the transition team to ensure that the project is completed as planned.

What Types of Decisions Must Be Made?

Planning and developing a new jail is a complex and specialized process. The decisions made early in the process have a long-term impact. For example, what may appear to be a straightforward decision, such as purchasing furniture, can be complicated when it is considered as part of the total life cycle of the facility. Effective decisionmaking can be hampered when tasks are not organized and roles are not clear. Therefore, throughout the process, project managers must determine what decisions are needed and who is responsible for making them.

Participants in the facility development process perform one or more of the following actions for the tasks and track activities within each phase: produce, approve, coordinate, advise, and be informed. In a few instances, groups have no role in an activity.

- **Produce.** The participant performs all or part of the task or track activity during a given phase. For example, the individual or committee that produces an item gathers and analyzes the information needed, prepares a draft report, and finalizes the document. The individual

or group also is accountable for the quality of the information used to make the decision.

- **Approve.** The participant must authorize or veto a decision before it is implemented. The individual or group also is accountable for the quality of the decision.
- **Coordinate.** The participant takes the initiative in a particular decisionmaking area, develops the alternative options, analyzes the situation, coordinates group activity, and is accountable if no decisions are made.
- **Advise.** The participant must be consulted for specific input and policy interpretation at various times during the project. The individual or group serves as a resource for decisionmaking but may not be involved in the decision.
- **Be informed.** The participant may be notified after a decision is made but before it is publicly announced. The individual or group must be aware of and understand the issue but is not required to provide input.

The exhibits accompanying discussions of the nine phases of the facility development process in the chapter “Phases, Tasks, and Tracks” show which of the above actions

are performed by participants for key tasks and track activities. For example, exhibit 8 (page 19) shows that elected and appointed officials such as county commissioners approve the mission statement during the needs assessment phase.

How Much Time and Money Are Spent on Each Phase?

The facility development process consists of nine phases:

- Phase 1: Project Recognition.
- Phase 2: Needs Assessment.
- Phase 3: Facility Program Development.
- Phase 4: Project Definition and Implementation Plan.
- Phase 5: Design.
- Phase 6: Bidding and Negotiations.
- Phase 7: Construction.
- Phase 8: Occupancy and Operation.
- Phase 9: Postoccupancy.

Although the activities in each phase are distinct, overlap occurs among phases and decisions are made that transcend phases. Therefore, one phase cannot simply be started and finished without consideration of the previous and subsequent phases. At certain points in the planning process, the decision to proceed is contingent on the results of previous phases; in other words, they are “go/no-go” decision points.

In addition, facility development process tracks affect and support the project but do not result in a new building. For example, site selection is a major component

of the facility development process, but it does not result in the construction of a facility. The Facility Development Process Flowchart in the appendix addresses these overlapping activities as tracks that flow throughout the process. They include multiple activities that occur as the planning progresses, construction begins, and occupancy takes place. The nine phases and estimated number of months to completion are shown in exhibit 3 (page 12).

On average, the jail facility development process takes 50 months from needs assessment (phase 2) through occupancy (phase 8) (see exhibit 4, page 12). The construction phase consumes the greatest proportion of time. However, planning and design require significant blocks of time as well. Planning, design, and construction usually can be accomplished in approximately 47 months, but often more time is needed because of the complexity of the process.

How Is the Budget Developed?

The project budget includes all of the costs that are necessary to plan, design,

exhibit 3

Facility Development Process Phases

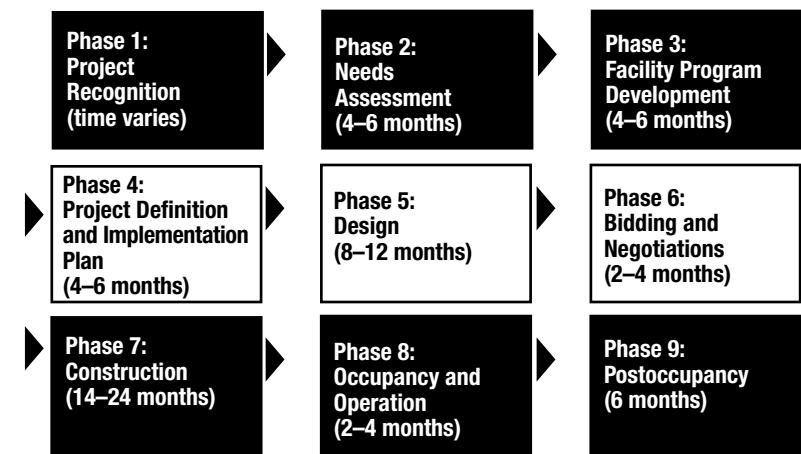
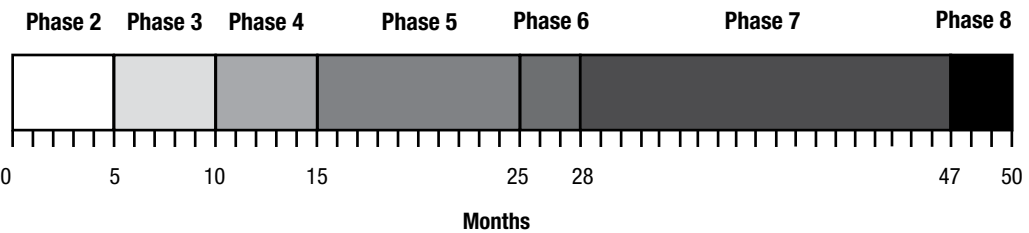


exhibit 4

Typical Allocation of Project Time (Phases 2-8)



Note: Phase 1 is not shown because the amount of time involved in identifying the need for a new facility varies significantly by jurisdiction. Phase 9 is not shown because this phase occurs after occupancy.

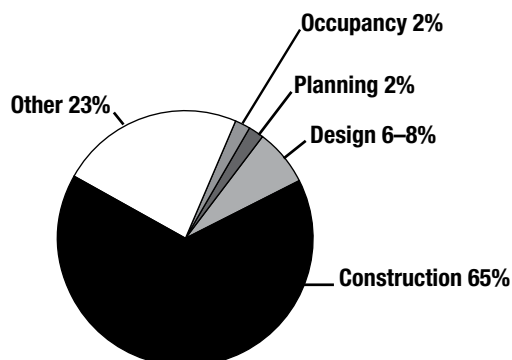
locate, construct, and occupy a new jail. Planning and design costs include the work of the criminal justice planner; the design team (architects, engineers, and specialty consultants to help plan food service, security, and laundry); and the project manager. On average, 65 percent of the project budget is dedicated to construction (see exhibit 5). Construction costs include site acquisition and development; actual construction; fixed furniture and equipment, also known as FF&E (typically laundry machines, food service equipment, bunks and other housing unit items, and security equipment); profit and

overhead for the contractor; and a contractor's contingency.

A separate owner's contingency must be maintained throughout the project to address any unforeseen costs such as wetland mitigation, a special code requirement for additional smoke evacuation systems, or change orders that occur during construction. The contingency should be maintained until most of the construction has been completed (typically when construction is 95 percent complete) and can then be substantially reduced through the occupancy period.

exhibit 5

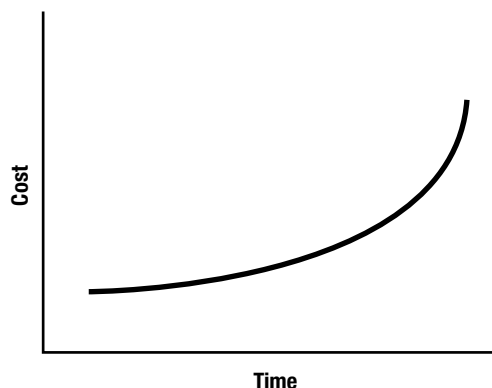
Typical Allocation of Project Funds



The costs of occupying the jail include owner-provided furniture and equipment and the costs associated with the transition team. Typical owner-provided furniture and equipment include facility data and communication wiring (with the contractor providing the conduit), loose items of furniture, linens, inmate uniforms, computer and management information systems (with the contractor providing the security system), a telephone system, inmate and staff exercise equipment, training-room equipment, and facility signage. Costs for the transition team include both full- and part-time staff assigned to the team, equipment and supplies for the team, a travel budget to tour other projects and attend conferences, and the leasing of office space for the team.

exhibit 6

Cost of Change Over Time



Can Participation by Local Officials in the Beginning Save Money at the End?

Throughout the project, the degree of participation by local officials varies with each phase. Early on, their decisions affect the design of the facility and have a great impact on the project's outcome. Therefore, local officials have the greatest impact at the lowest cost in the early stages. The cost of making changes to the project increases more dramatically as time progresses, as shown in exhibit 6.

Phases, Tasks, and Tracks

This chapter describes the nine phases of the facility development process and the tasks associated with each phase. The major work activities and anticipated products resulting from each phase are also discussed. Because the facility development process is not a simple linear process and decisions can affect multiple phases, a series of activity tracks was developed to demonstrate activities that may occur throughout the process and are not limited to a single phase. Each of the following tracks identifies activities for participants to consider at certain times during the process:

- **Nonfacility alternatives:** Charts and monitors the outcomes of alternatives to incarceration and/or criminal justice policy changes recommended during the needs assessment phase.
- **Transition:** Includes all of the activities required to implement the operational plan that was established during program development.
- **Site:** Focuses specifically on site selection actions. Site selection can be one of the most intensive tracks of the facility development process.

- **Capital and operational funding:** Includes all of the activities associated with developing, managing, monitoring, and financing both the building and future operations. These activities include cost checkpoints that occur throughout the process, particularly in the early phases. The cost checkpoints are ultimately used to inform the cost benefit analysis (also known as an economic feasibility study).
- **Project delivery method:** Identifies when the project delivery method is evaluated and selected.
- **Outcomes:** Identifies those outcomes and/or products that occur at each phase and become part of the project's documentation.
- **Professional services acquisition:** Identifies the primary tasks involved in selecting, coordinating, communicating with, and managing the work of non-government professionals who work on the project.
- **Building support for the project:** Focuses on the activities required to build a constituency inside and outside of government to support the project. This track shows when a community advisory committee should be formed and when public hearings and public

information activities may be conducted. The facility development process is typically a very public process that requires constituent support at each phase.

This chapter includes exhibits summarizing many of the tasks and track activities to be performed during the nine phases of the facility development process; the participants (e.g., elected and appointed officials, project manager, facility managers); and the type of action each participant is responsible for (i.e., produce, approve, coordinate, advise, or be informed). (See also the Facility Development Process Flowchart in the appendix for a comprehensive summary of the nine phases of the planning process and associated tasks and activity tracks.)

Phase 1: Project Recognition

In phase 1, participants are involved in the following tasks:

- **Recognizing the problem.** Is jail crowding the precipitating event? Is the facility in need of expansion, repair, or replacement?
- **Developing the project's organizational structure.** Who can and should be included in the process? What role will they play?
- **Identifying resources.** Where can data be found? Who can retrieve needed data? What information technology is available?
- **Identifying the agency taking the lead.** Which agency will be responsible for facilitating the process, ensuring assignments are completed, and noting the decisions that are made?

This phase includes the following activity tracks:

- **Site:** Gathering information for the selection of the facility site.
- **Capital and operational funding:** Identifying the financial considerations for the project.
- **Professional services acquisition:** Evaluating the need for a criminal justice planner or an architectural firm with a criminal justice planner for project guidance.

The first phase of the facility development process is often initiated by those responsible for managing the current facility and is supported by those who authorize appropriate funding for law enforcement and detention services, such as county commissioners and supervisors or city managers. Unfortunately, although the issue may be raised early in the process, the discussions usually begin after it is determined that the current facility is unable to operate efficiently and effectively under current conditions, and not in anticipation of these events occurring.

Once there is interest in exploring the problems, it is important to identify which agencies and activities are affected and to invite representatives from these agencies to help resolve these issues. An agency will need to be appointed to take the lead in the discussions. A member (or members) of the governing body must participate in the process. It is important for them to be visibly involved and to recognize that a crowding problem or deteriorating facility is not solely the operating agency's responsibility. As the process moves ahead to the development of a needs assessment, the county may choose to begin analyzing its financial options for proceeding and to consider alternatives to the construction of a new facility.

Most jurisdictions do not have full-time staff available to plan and build a new facility, nor do they have staff with the specialized skills required to perform all the tasks in each phase; they also may not be able to hire such specialized staff. If the jurisdiction does not have staff with these specialized skills, it will be important to carefully evaluate the need for a consultant (a criminal justice planner) during the project recognition or needs assessment phases. The design team and construction managers are selected as the project progresses. To avoid delays or the temptation to make quick decisions, consultants should be hired early in the process so they will have sufficient time to complete their work.

Consultants are typically selected through an objective process that uses the formal mechanism of a request for proposal (RFP). Two types of RFPs are available:

- **Open RFP.** The open RFP solicits responses from all qualified firms. The county or city establishes basic criteria for the consultant, advertises in appropriate media such as newspapers and trade journals, and accepts proposals from all firms that meet the established criteria.
- **Invitational RFP.** The invitational RFP first issues a request for qualifications to selected

firms and then issues the RFP to the firms on the “short list” of those that qualify.

It should be emphasized that consultants need substantial input from key jurisdictional representatives if they are expected to develop workable solutions. A consultant’s approach to the jurisdiction’s needs and openness to the involvement of the jurisdiction’s representatives are as important to the project as are his/her technical skills. Exhibit 7 shows the roles that participants play in selecting consultants.

exhibit 7

Selecting Consultants

Track Activity*	Elected and Appointed Officials County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Project Manager Correctional staff, engineer, city planner, county architect, criminal justice planner	Planning Committee Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Community Advisory Committee Business leaders, clergy, educators, elected officials	Facility Managers Sheriff, jail administrator, warden, director of corrections, correctional staff	Representatives of Justice Agencies Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Evaluate need for consultant (CJ planner or architectural firm with CJ planner)	Approve	Coordinate	Advise	Not yet formed	Advise	Advise
Hire consultant	Approve	Coordinate	Advise	Not yet formed	Advise	Advise
Finalize consultant contract	Approve	Advise, approve	Advise	Not yet formed	Advise	Advise
Manage consultant	Advise	Approve, coordinate	Advise	Not yet formed	Advise	Advise

CJ = criminal justice

* This exhibit shows activities in the professional services acquisition track during the early phases of the facility development process. Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all track activities.

Phase 2: Needs Assessment

In phase 2, participants are involved in the following tasks:

- Developing a policy group.
- Reviewing applicable standards and legal requirements.
- Developing the system mission statement and goals.
- Evaluating the current criminal justice system and policies.
- Evaluating the existing facility for standards compliance.
- Evaluating existing alternative programs.
- Evaluating current staffing levels against the staffing levels that are needed.
- Identifying options, including:
 - Evaluating changes (policies and practices) in criminal justice systems.
 - Evaluating the facility to determine whether renovation/expansion or new construction is required.
 - Evaluating new nonfacility alternative programs.
- Deciding to begin program development.

This phase includes the following activity tracks:

- **Transition:** Appointing a transition team leader who will be involved in all parts of the project.
- **Capital and operational funding:** Developing cost estimates for the project and staffing/operational costs for the first cost checkpoint for the project and the project budget model.
- **Outcomes:** Developing and producing a needs assessment report and a determination of inmate capacity needs by year.
- **Building support for the project:** Forming a community advisory committee.

The needs assessment report is often the first document to be developed as part of a comprehensive

criminal justice system master plan. The needs assessment analyzes trends in the criminal justice system and helps direct the criminal justice master plan. Historical patterns in crime rates, arrest rates, facility admissions, and average lengths of stay are examined to determine the impact these trends have on the size and type of the inmate population. Profiling the inmate population establishes its criminal, adjudication, behavioral, social, and demographic characteristics.

This data analysis allows the county or city to consider alternative, noncustody sanctions, which are less expensive than adding more beds to a detention facility. The analysis also identifies the needs of the particular facility and provides information for subsequent phases in the facility development process.

The needs assessment report summarizes the policies and practices guiding the operation of the jail and the criminal justice system. It also includes the system mission statement, which clarifies its purpose and defines the jurisdiction's goals and objectives. The underlying philosophy that reflects the community's values must be established during this step. In addition, the needs assessment report includes the first cost checkpoint (based on estimates of staffing and operational costs).

The criminal justice master plan will examine in greater detail the policies and practices of the entire local criminal justice system. This document includes information about criminal justice agencies' current practices and operations, defines policies that specify how each criminal justice agency should carry out its duties and responsibilities, the nature of the agencies' relationships to one another, and their responsibility for managing jail resources. The criminal justice master plan will also identify functional and space deficiencies and subsequently become a critical instrument not only for the construction of a new jail facility but also for its operation for years to come.

Exhibit 8 shows the roles that elected and appointed officials, facility managers, representatives of justice agencies, and other participants in the facility development process play in the development of the needs assessment. Participants' roles in each area are spelled out according to the type of action required of them. Once appointed, the transition leader initially operates as part of the facility manager group, but later in the process moves into a role that more closely resembles that of the project manager.

Go/no-go decision point. At this point in the facility development process, those involved must evaluate whether the process can feasibly continue or whether alternative options provide better opportunities for addressing the problems (e.g., if the problem is crowding, the evaluation may determine whether adjustments in criminal justice system practices can shorten the length of time between arrest and sentencing, thereby reducing the jail population).

exhibit 8

Needs Assessment

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Review applicable standards and legal requirements	Approve	Coordinate	Advise, approve	Advise	Advise, approve	Advise, approve
Develop facility's mission statement and goals	Approve	Coordinate	Advise, produce, approve	Advise	Advise, produce, approve	Advise, approve
Determine whether renovation, expansion, or new construction is required	Advise, approve	Coordinate	Advise	Advise	Advise, produce	Advise, produce
Evaluate new nonfacility alternative programs	Advise, approve	Coordinate	Advise, approve	Advise	Advise, produce, approve	Advise, produce, approve
Track Activity						
Conduct first cost checkpoint	Approve	Produce, coordinate	Advise, approve	Be informed	Advise, approve	Be informed
Develop/produce needs assessment report	Approve	Coordinate, produce	Advise, approve	Advise	Advise, approve	Advise

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Phase 3: Facility Program Development

In phase 3, participants are involved in the following tasks:

- Developing a functional program, which includes:
 - Developing operational principles and functional scenarios.
 - Reviewing applicable state and national standards.
 - Developing a staffing plan for the new facility.
- Developing a space program, which includes:
 - Identifying square footage needs for the new facility.
 - Developing adjacency diagrams.
 - Analyzing design criteria.

This phase includes the following activity tracks:

- **Nonfacility alternatives:** Monitoring the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Involving the user team in the tasks and in the process of making decisions.
- **Site:** Determining basic site requirements, advertising, and evaluating potential sites.
- **Capital and operational funding:** Developing construction/project costs and staffing/operational costs for the new facility and establishing a second cost checkpoint for the project.
- **Project delivery method:** Identifying project delivery options.
- **Outcomes:** Producing the facility program (includes functional and space programs).
- **Professional services acquisition:** If necessary (and not already done), obtaining assistance from a criminal justice planner or an architectural firm with a criminal justice planner.

- **Building support for the project:** Involving the community advisory committee in the decisionmaking aspect of the project.

The Facility Program

The functional and space programs are brought together in the facility program, a document that tells the architects how the jail will function. The facility program defines and describes the desired operation and workflow of each area of the new facility and identifies the spaces (including adjacent spaces), users, and equipment and furnishings that will support the jail's operation. It often includes operational scenario flowcharts, such as the one for a facility receiving area shown in exhibit 9.

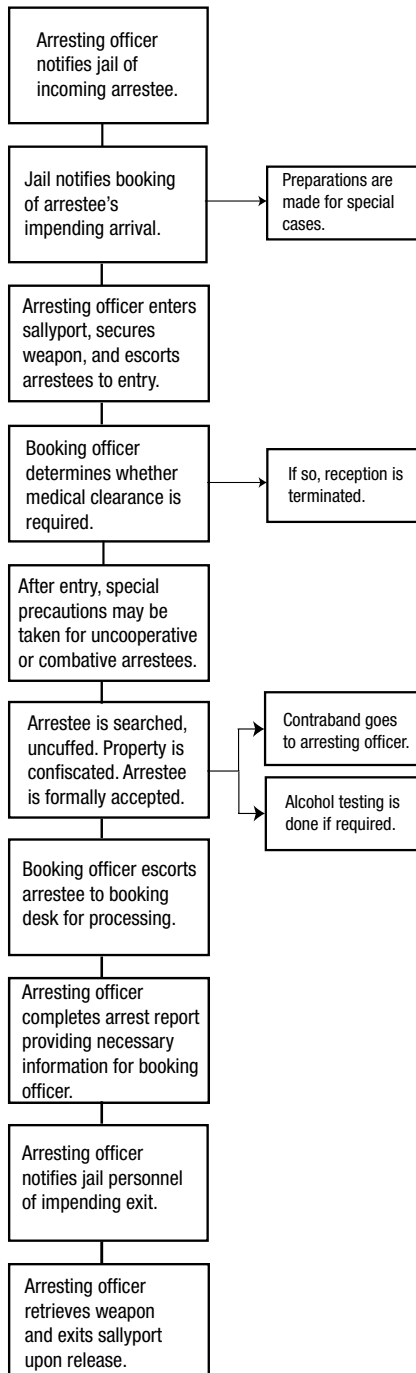
Functional programming, which defines how the jail will operate, is a prerequisite to space programming, which stipulates the physical spaces needed to support the jail's operation. Although functional programming may include space programming, they are often developed as separate documents. Without these program documents, the design phase of the project occurs in a vacuum and it is unlikely that the completed facility will meet users' needs. Facility managers must be actively involved in functional programming. In addition, because this step can be highly technical, the services of criminal justice planners, architects, or other consultants may be required. Exhibit 10 (page 22) shows the roles that participants play in functional programming.

Site Evaluation

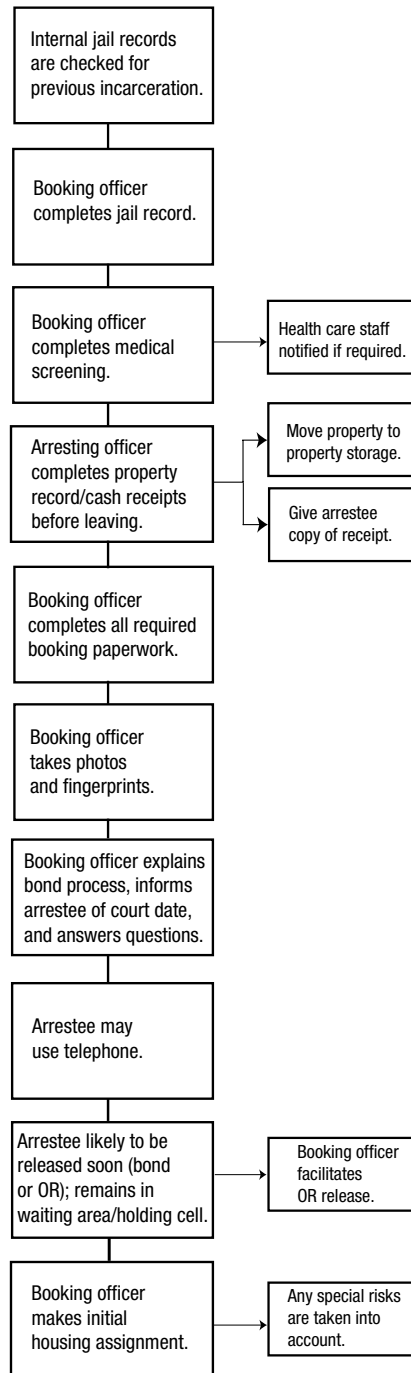
Site evaluation must be approached with care and sensitivity because the selection of a site (which usually takes place in phase 4) has significant technical, financial, and political implications. Historically, jails have not been welcome additions to communities, but advances in design and technology (such as sealed buildings) have reduced noise and made it possible for these facilities to be good neighbors. If necessary,

Sample Operational Scenario Flowchart

Inmate Reception



Inmate Booking



OR = own recognizance
Source: Riley County Law Enforcement Center, Manhattan, KS.

the county or city government may conduct a number of public meetings and hearings during this phase of the process to engage the public in identifying potential sites and establishing criteria for their review.

sites that roughly meet the requirements are identified. After evaluating the alternatives using the established criteria, a site is finally selected and acquired. Exhibit 11 shows the roles that participants play in the site evaluation process.

First, it is necessary to determine the site's size, shape, access, and location requirements. Next,

exhibit 10

Functional Programming

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Develop operational principles and functional scenarios	Advise	Coordinate	Advise	Advise	Advise, produce, approve	Advise
Develop staffing plan for new facility	Approve	Coordinate	Advise	Advise	Advise, produce	Advise
Track Activity						
Develop construction/project costs and staffing operational costs for new facility	Approve	Coordinate	Advise	Advise	Advise	Advise
Establish second cost checkpoint	Approve	Advise, coordinate, produce	Advise	Be informed	Advise	Be informed
Produce functional program (can include space program)	Be informed	Coordinate, approve	Advise	Advise	Advise, approve	Advise

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Site Evaluation

Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Determine basic site requirements (size, shape, location, etc.) and review criteria	Approve	Coordinate	Advise, approve	Advise	Advise, approve	Advise
Advertise for site	Advise, approve	Coordinate	Advise	Advise	Advise	Be informed
Evaluate sites	Be informed	Coordinate, advise	Advise	Advise	Advise	Advise

* This exhibit shows phase 3 activities for the site track. Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all track activities.

Options for Project Delivery

During the facility program development phase, it is necessary to identify options for project delivery. Options to be considered might include the traditional *design-bid-build method*, the *design-build method*, and the *construction manager method*. Depending on the jurisdiction and/or state, some of these options may not be available for project delivery. It is important to consider all available project delivery methods before selecting an option. Each of them has benefits and risks that must be evaluated. Following are brief descriptions of several project delivery methods:

- **Design-bid-build method.** This is the method most familiar to government agencies. Plans and specifications are completed and then advertised for bids from interested construction contracting firms. The firms will bid the project

as it is designed, and the most qualified bidder with the lowest bid wins the award. A construction manager may be hired by the agency and would act as the owner's representative on the project, thus providing an additional resource with technical expertise. The construction manager's exact role and authority are determined by the agency.

- **Design-build method.** The primary construction contractor and the architect/engineer are hired by the agency to deliver the project. A guaranteed maximum price is usually negotiated in the beginning based on design criteria developed by the agency. Frequently, the design criteria will include the needs assessment, functional and space programs, and conceptual or schematic drawings. The architect/engineer/contractor team develops drawings based on the criteria and the guaranteed maximum price; once approved, the team proceeds to construct the building.

- **Construction manager methods.** Following are examples of methods that include expanded roles for construction managers (they frequently assume responsibility for all subcontractor coordination):
 - *The construction manager at-risk method* includes hiring the construction manager during the predesign phase; he/she will work with the architect/engineer team to develop and estimate the design. This method provides a guaranteed maximum price. The construction manager is responsible for receiving proposals from subcontractors and awarding their contracts.
 - *The construction manager agency method* requires the construction manager to be given all the authority of the hiring agency. In this option the construction manager assumes financial authority for the project.
 - *The construction manager multiple-prime method* requires the construction manager to divide the contracting work into distinct packages that are bid separately. Trades (types of labor), rather than project stages, are used to divide the bid packages. The construction manager oversees the multiple contracts and contractors.
- **Nonfacility alternatives:** Monitoring the projected impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Involving the user team in the tasks and decisionmaking.
- **Site:** Selecting and acquiring a site, refining site requirements, conducting a site analysis, and developing a preliminary site master plan.
- **Capital and operational funding:** Determining the methods to finance the project and whether to use a public referendum for funding.
- **Project delivery method:** Selecting a project delivery method.
- **Outcomes:** Producing a conceptual design for the facility, a cost-benefit analysis, and a preliminary site master plan.
- **Professional services acquisition:** Hiring an architect to provide conceptual designs for the project.
- **Building support for the project:** Involving the community advisory committee in the decisionmaking aspect of the project.

The architect will develop conceptual design plans that begin to organize the entire building. The design study provides very basic outlines of the building and some internal areas, and shows area adjacencies. It also provides more detailed information about site needs that can be used to narrow down site options.

A refinement of the site requirements will address issues such as open space, parking, site circulation, potential environmental impacts, access to utilities, and so forth. The data collected will be analyzed and will inform a preliminary draft of the site master plan.

Using the information gathered and developed during the three previous phases, the project team (which includes the criminal justice planner, architect, and financial consultant) conducts a cost-benefit analysis and develops life-cycle costs. This information will provide the decision-

Phase 4: Project Definition and Implementation Plan

In phase 4, participants are involved in the following tasks:

- Evaluating facility options (new construction versus renovation/expansion).
- Developing a conceptual design for the facility.
- Developing a cost-benefit analysis and life-cycle costs.
- Conducting user and owner reviews.

This phase includes the following activity tracks:

making group with an opportunity to determine how much financing will be required and to evaluate financing options. Depending on the jurisdiction's requirements, it may be necessary to prepare a public referendum before proceeding. In some instances, a reduction in the scope of the project or a reevaluation of the operational decisions may be required if the life-cycle costs appear to be more than the jurisdiction can absorb.

A project delivery method must be selected at the end of this phase. The decision must be made before the architect can proceed to the design phase. Depending on the delivery method selected, it may be necessary to contract with a construction manager or general contractor before beginning the next phase. Exhibit 12 shows the roles that participants play in the project definition and implementation plan.

exhibit 12

Project Definition and Implementation Plan						
Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Evaluate facility options (new construction vs. renovation/expansion)	Approve	Coordinate, produce	Advise	Be informed	Advise, produce, approve	Be informed
Develop conceptual design	Approve	Coordinate	Advise	Be informed	Advise, approve	Be informed
Track Activity						
Select and acquire site	Approve	Coordinate	Advise	Be informed	Advise	Advise
Conduct site analysis	Be informed, approve	Coordinate, advise	Advise	Advise, be informed	Advise, approve	Be informed
Determine project finance methods	Approve	Coordinate	Advise	Be informed	Advise	Be informed
Determine need for public referendum for funding	Approve	Coordinate	Advise	Advise, be informed	Advise	Be informed
Select project delivery method	Approve	Coordinate	Advise	Be informed	Advise	Be informed

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

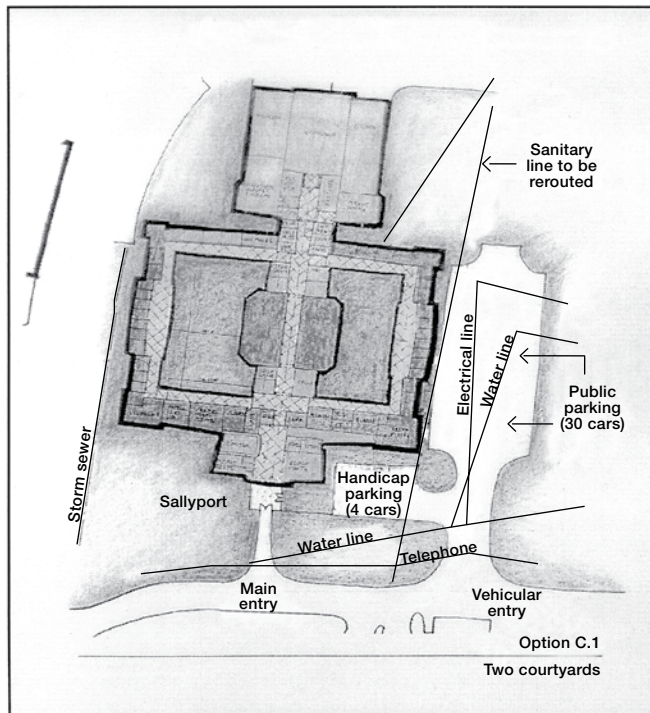
Although the site track may extend into design development before it is complete, the majority of the site track work occurs during project definition; generally, the final site master plan is completed during schematic design. A site evaluation must be completed early in the process so that extensive redesign will not be required if the site fails to qualify for any reason.

Once the site has been selected, the project manager and consultants determine how the site will be used over the long term and create both a preliminary and a final site master plan. The site master plan specifies the building footprint, open spaces, parking, circulation routes, and security zones, as shown in the sample plan in exhibit 13.

The plan must also accommodate the possible need for future expansion. Other factors, such as requirements for access to natural light and the location of recreation yards within individual housing units, also affect site master planning.

exhibit 13

Sample Site Master Plan



Source: Ricci Associates

Site characteristics, including soil and vegetation types, current uses of the site, elevation statistics, and environmental impacts, are appraised during this step in the process and the findings are reported in the preliminary site master plan. Exhibit 14 shows the roles that participants play in developing the site analysis and preliminary site master plan.

Go/no-go decision point. At this point in the facility development process, those involved must evaluate whether the process can feasibly continue.

Phase 5: Design

Phase 5 includes the development of the schematic design, design, and construction documents. Because each of these tasks involves a series of discrete subtasks and the role of the teams will change during the process, each primary task and its associated tracks will be addressed separately.

In phase 5 (schematic design development), participants are involved in the following tasks:

- Developing facility floor plans, elevations, and sections.
- Determining engineering requirements.
- Conducting an agency code review.
- Completing user/owner signoff and approval.
- Updating the new-facility staffing plan.

Schematic design development includes the following activity tracks:

- **Nonfacility alternatives:** Evaluating the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Identifying the transition team members.
- **Site:** Finalizing the site master plan.
- **Capital and operational funding:** Establishing a third cost checkpoint for capital and

operational funding; refining staffing and operational costs.

- **Outcomes:** Producing schematic design documents and a final site master plan.
- **Professional services acquisition:** A project architect will be hired only if the architect who is hired to provide the conceptual design is not selected and/or is not allowed to participate at

this stage of the facility development process because of bidding criteria.¹

The schematic design—the first and most critical task in the design phase—presents a general idea of how the facility will be organized. Spaces are defined in terms of size, shape, and relationship to other spaces. Preliminary engineering studies that typically include structural, mechanical, and electrical engineering analyses are conducted

exhibit 14

Site Analysis and Development of Preliminary Site Master Plan

Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Establish open space requirements	Approve	Coordinate	Advise	Be informed	Advise	Be informed
Establish parking requirements	Approve	Coordinate	Advise	Be informed	Advise	Advise
Establish circulation requirements	Approve	Coordinate	Advise	Be informed	Advise	Be informed
Develop security plan	Approve	Coordinate	Approve	Be informed	Approve	Be informed
Conduct environmental impact studies	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Evaluate environmental variables and impacts	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Develop preliminary site master plan	Approve	Coordinate	Approve	Be informed	Approve	Be informed

* This exhibit shows phase 4 activities for the site track. Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all track activities.

¹ Some jurisdictions do not allow multistage contracts; if someone is hired to assist with one portion of the project, he/she may not be eligible to compete for the remainder of the project.

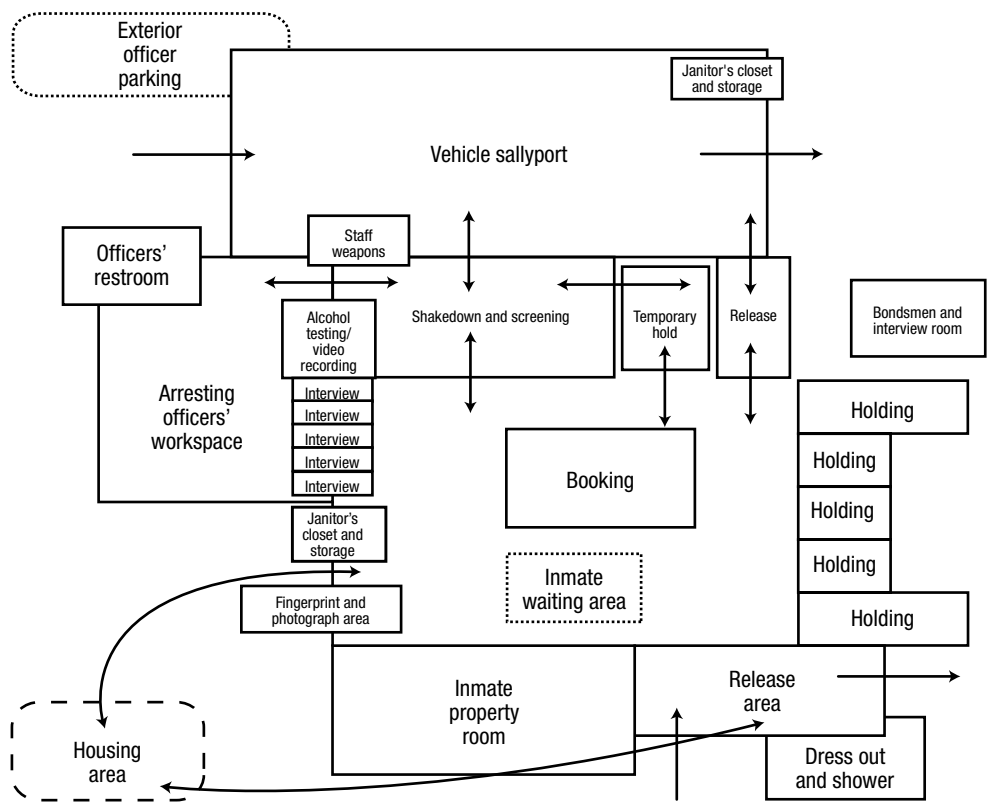
during schematic design. A sense of the facility and how it is organized begins to emerge. A schematic design often includes an adjacency diagram showing how a jail's intake/release area will be organized (see the sample diagram in exhibit 15).

Although facility managers should be involved throughout all design phases, during schematic design they must advise and direct the architects rather than simply react to or approve the

architects' suggestions. At this point, users first glimpse how the functioning jail will perform. Because operating expenses account for at least 90 percent of total expenditures for a correctional facility during its life cycle, facility managers should pay particular attention to operating efficiency during schematic design. Exhibit 16 shows the roles that participants play in developing the schematic design.

exhibit 15

Sample Adjacency Diagram for Jail Receiving and Discharge Area



Note: The diagram is based on information provided by the Riley County Law Enforcement Center, Manhattan, KS.

Schematic Design Development

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Develop facility floor plans, elevations, and sections	Approve	Coordinate	Approve	Be informed	Advise, approve	Be informed
Determine engineering requirements	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Conduct agency code review	Be informed	Coordinate	Be informed	Be informed	Advise, be informed	Be informed
Track Activity						
Identify transition team members	Be informed	Be informed	Be informed	Be informed	Advise, approve	Be informed
Establish third cost checkpoint	Approve	Advise, coordinate, produce	Advise	Be informed	Advise	Be informed
Refine staffing and operational costs	Approve	Coordinate	Advise	Be informed	Advise, produce	Be informed
Finalize site master plan	Approve	Coordinate, advise	Advise	Be informed	Advise, approve	Be informed

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

In phase 5 (design development), participants are involved in the following tasks:

- Developing and refining the architectural design.
- Developing facility design details.
- Selecting finishes.
- Developing schedules.
- Conducting special design studies for security and communications systems, kitchen and laundry equipment, graphics and signage, and furniture.
- Developing outline specifications.
- Conducting a second code review.
- Completing a second user/owner signoff and approval.

- Updating the new-facility staffing plan.

Design development includes the following activity tracks:

- **Nonfacility alternatives:** Evaluating the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Developing a transition plan.
- **Site:** Finalizing the site master plan (if not completed during schematic design). The user/owner signs off and approves.
- **Capital and operational funding:** Establishing a fourth cost checkpoint for capital and operational funding; refining staffing and operational costs.
- **Outcomes:** Producing design development documents. If not completed during schematic design, the site master plan is finalized at this point.
- **Professional services acquisition:** Hiring a construction manager (depending on the need and decisions made about project delivery).
- **Building support for the project:** Keeping the community advisory committee informed.

The design development phase produces detailed and sophisticated drawings of the building, including engineering features. The issues that are relevant for facility managers during schematic design are also relevant at this stage of the project. The design must continue to be evaluated in terms of its performance and cost. Therefore, it is critical for facility managers to remain actively involved during design development.

A transition plan should be developed at this stage. It should include a description of all transition activities and tasks and the estimated time needed for completion. The plan must also specify the number of full-time staff required to complete the activities and tasks and include a timeline for bringing them onto the transition team.

Because correctional facilities must meet the needs of individual cities or counties (each with complex and unique needs), special design studies in areas such as security, equipment, food service, or communications may be required. Such studies are not part of the basic architectural service but are generally contracted as additional services. Exhibit 17 shows the roles that participants play in design development.

In phase 5 (construction documents), participants are involved in the following tasks:

- Developing construction plans/drawings.
- Developing construction specifications.
- Developing bid documents.
- Establishing regulatory agency approvals.
- Completing a third user/owner signoff and approval.
- Updating the new-facility staffing plan.

This phase includes the following activity tracks:

- **Nonfacility alternatives:** Evaluating the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Bringing on transition team members.
- **Capital and operational funding:** Establishing a fifth cost checkpoint for capital and operational funding.
- **Outcomes:** Producing construction documents.

Construction documents specify what will be built and at what cost. They include the drawings (blueprints), specifications, and other highly technical documents that together form the basis for bids and the contract with the builder. Because these documents specify what will be built for the money budgeted, they must reflect exactly what the county or city wants and what the facility needs to operate effectively. A final cost estimate is done at this step. Exhibit 18

Design Development

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Select systems and materials (finishes, etc.)	Be informed	Coordinate	Advise, approve	Be informed	Advise, approve	Be informed
Conduct special design studies	Be informed	Coordinate	Advise, approve	Be informed	Advise, approve	Be informed
Develop outline specifications	Be informed	Coordinate	Approve	Be informed	Advise, approve	Be informed
Conduct second code review	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Track Activity						
Develop transition plan	Approve	Coordinate	Advise	Be informed	Produce, approve	Be informed
Produce design development documents	Approve	Coordinate	Approve	Be informed	Advise, approve	Be informed
Refine staffing and operational costs	Approve	Coordinate	Advise, approve	Be informed	Advise, approve	Be informed
Establish fourth cost checkpoint	Approve	Advise, coordinate, produce	Advise	Be informed	Advise	Be informed

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

(page 32) shows the roles that participants play in developing construction documents.

Approvals must be obtained from various regulatory agencies at the city, county, and state levels to ensure that the project meets legal code requirements. The architects usually prepare and submit the documents for agency review and obtain the

approvals. This step includes obtaining building permits and having representatives of regulatory agencies sign contract documents. The project manager is responsible for coordinating document submission and ensuring that documents are approved or that steps are taken to make required changes so approval can be given.

Development of Construction Documents

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Develop complete set of construction plans/drawings	Approve	Coordinate, approve	Approve	Be informed	Approve	Be informed
Develop complete set of construction specifications	Approve	Coordinate, approve	Approve	Be informed	Approve	Be informed
Develop bid documents	Approve	Coordinate, approve	Advise	Be informed	Advise	Be informed
Develop final project cost estimate	Approve	Coordinate, approve	Advise	Be informed	Advise	Be informed
Track Activity						
Bring on transition team members	Be informed	Be informed	Be informed	Be informed	Approve	Be informed

* Architects, criminal justice planners, technical advisers, and other consultants may assist with developing construction plans/drawings, construction specifications, and bid documents.

If not brought on earlier, transition team members should be brought on during this phase. Involving them early in the process ensures that they will become familiar with the scenarios developed during programming and with the plans and decisions that have been made. It also gives them time to complete the myriad tasks required of a transition team.

A detailed cost estimate is developed when each of the three primary design tasks are completed.

If the estimates are higher than expected, it will be necessary to determine if the additional cost can be absorbed in the budget. If it cannot be absorbed, it will be necessary to reevaluate the operational decisions that affect building size and explore alternative systems that may be less expensive. This process is called “value engineering” or “value analysis.” Usually, the project manager will carry out this process with the design team, members of the planning committee, and facility managers.

Phase 6: Bidding and Negotiations

In phase 6, participants are involved in the following tasks:

- Advertising for bids.
- Receiving and opening bids.
- Selecting the qualified bid with the lowest cost.
- Conducting contract negotiations.

The bidding and negotiations phase includes the following activity tracks:

- **Nonfacility alternatives:** Continuing to evaluate the impacts of nonfacility alternatives and criminal justice system changes.
- **Capital and operational funding:** Receiving the bid cost for the new facility.
- **Outcomes:** Producing bid documents.

Once agency approvals are obtained, contract documents are made available for bids. Bidding and negotiating are typically part of the architectural service, as stipulated in the standard American Institute of Architects contract.

As noted earlier, in the typical procedure (design-bid-build) architects prepare one set of contract documents for bidding, multiple bids are received, a bid is selected, and a single contractor is hired. In a second procedure, architects prepare a number of bidding packages that cover various aspects of the project and each package is bid individually. In a third procedure (a variation of the second), the process is put on the fast track: Parts of the project are bid and constructed before other parts are even designed. Although the third option may sound attractive, this method is not preferred and is generally used only when there are crucial time constraints that do not allow for a more traditional method to be used.

The process of bidding on construction of the correctional facility must comply with the jurisdiction's procedures for sealed competitive bids. This process eventually produces a construction contract that is negotiated with the winning bidder. Exhibit 19 (page 34) shows the roles that participants play in the bidding and negotiations process.

Go/no-go decision point. At this point in the facility development process, those involved must reassess whether the process can feasibly continue. If bids are higher than expected, it may be necessary to search for alternative or additional funding sources. It may also be necessary to step back and determine if design features or operational decisions can be adjusted to allow for reduced square footage, alternative systems that are less expensive, or other revisions.

Phase 7: Construction

In phase 7, participants are involved in the following tasks:

- Overseeing new facility construction, which includes:
 - Administering the construction contract.
 - Reviewing shop drawings.
 - Conducting materials testing.
 - Making field observations.
 - Evaluating and processing change orders.
- Overseeing construction completion, which includes:
 - Developing the facility punch list and ensuring that all items are addressed.
 - Conducting performance tests on the mechanical and electrical systems (also known as "commissioning").
 - Receiving user manuals.
 - Obtaining warranties.
 - Obtaining occupancy permits.
 - Receiving final as-built drawings.

Bidding and Negotiations

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff, transition leader	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Advertise for bids	Advise	Coordinate	Be informed	Be informed	Be informed	Be informed
Receive and open bids	Approve	Coordinate	Be informed	Be informed	Be informed	Be informed
Select lowest cost qualified bid	Approve	Coordinate	Advise	Be informed	Advise	Be informed
Conduct contract negotiations	Approve	Coordinate	Be informed	Be informed	Be informed	Be informed
Track Activity						
Finalize bid documents	Approve	Coordinate, approve	Advise	Be informed	Approve	Be informed

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Overseeing the new facility construction phase includes the following activity tracks:

- **Nonfacility alternatives:** Continuing to evaluate the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:**
 - Finalizing the staffing plan for the new facility.
 - Developing documents (including policies and procedures, facility post orders, new facility schedules, and so forth).
- Specifying and ordering furniture, fixtures, equipment (FF&E) and supplies.
- Drafting a logistics plan for moving to the new facility, a process commonly known as “move logistics.”
- Recruiting, selecting, and hiring staff.
- Developing training plans (staff training schedule, and so forth).
- Monitoring construction.
- **Capital and operational funding:** Monitoring change orders.

- **Outcomes:** Developing and producing policies and procedures for the new facility, finalizing the staffing plan, writing training/lesson plans, and developing a draft of the move logistics plan.
- **Professional services acquisition:** Selecting a construction team to build the new facility.
- **Building support for the project:** Keeping the community advisory committee informed.

Overseeing the construction completion phase includes the following activity tracks:

- **Nonfacility alternatives:** Continuing to evaluate the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:**
 - Conducting training sessions.
 - Installing FF&E.
 - Finalizing the move logistics plan.
 - Conducting shakedowns.
 - Conducting public events.
 - Assisting with commissioning.
- **Capital and operational funding:** Monitoring change orders.
- **Outcomes:** Developing and producing policies and procedures for the new facility, finalizing the staffing plan, writing training/lesson plans, and producing the move logistics plan.
- **Professional services acquisition:** Selecting a construction team to build the new facility.
- **Building support for the project:** Keeping the community advisory committee informed.

Typically, construction begins after 28 months of planning, programming, and design. During this phase, the architects and/or project manager administer the construction contract. They visit the site regularly, check the progress of the work, and interact with the contractor to ensure that construction is carried out in accordance

with project specifications. Counties and cities typically have an agent who is assigned to carry out similar responsibilities. Sometimes, the jurisdiction allows an employee to spend part of his/her time in this role; in other situations, the project manager fulfills this role. In any case, this individual must work collaboratively (not competitively) with the architects and the contractor. The county should identify a single point of contact for transmitting information to the architect and the contractor during the construction phase. At this point, the transition team will also spend time onsite to oversee construction and evaluate their operational scenarios as they develop policies and procedures for the new jail.

Exhibit 20 (page 36) shows the roles that participants play in overseeing new facility construction. At this stage, the transition leader moves from the facility managers category to the project manager category and now assumes a more active role in managing the project from a user perspective. The facility manager group role becomes less active and operates more as an advisory group, with fewer decisionmaking responsibilities.

Once construction is completed, the architects, contractor, and project manager develop a punch list (a list of items to be completed or repaired). Performance tests (commissioning) are conducted on mechanical, electrical, plumbing, and other systems. The transition team members should participate in the punch list and commissioning process. Warranties and guarantees are acquired for all installed equipment and furnishings along with technical user manuals for equipment and for the facility as a whole. Most important, the county obtains as-built drawings that reflect how the facility was actually constructed (rather than the way it was represented on the original drawings).

Exhibit 21 (page 37) shows the roles that participants play in overseeing construction completion.

Oversight of New Facility Construction

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Administer contract	Approve	Approve	Be informed	Be informed	Be informed	Be informed
Review shop drawings	Be informed	Approve	Be informed	Be informed	Be informed	Be informed
Conduct materials testing	Be informed	Approve	Advise	Be informed	Advise	Be informed
Make field observations	Approve	Approve, advise	Advise	Be informed	Advise	Be informed
Evaluate and process change orders	Approve	Advise	Be informed	Be informed	Be informed	Be informed
Track Activity						
Select construction team	Approve	Advise, coordinate, approve	Advise	Be informed	Advise	Be informed

*Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Preparing staff for moving to the new facility is the most important operational activity that takes place during construction completion. Staff receive training in the operations of the new facility. This is also an opportunity to test the operational decisions that have been made and formalized in policies and procedures, and to make adjustments as needed before occupancy. A transition team finalizes move logistics and addresses issues related to staff training, equipment testing, identifying and removing contraband, transferring inmates, and beginning operations in the new building. Exhibit 22 (page 38)

shows the roles that participants play in transition during both the construction oversight and construction completion components of phase 7.

Phase 8: Occupancy and Operation

In phase 8, participants are involved in the following tasks related to occupancy:

- Preparing the facility for staff and inmates, and preparing staff and inmates for the facility (searching/cleaning the building, training staff in building operations, and so forth).

Oversight of Construction Completion

Task*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Develop punch list and ensure that all items are addressed	Be informed	Coordinate, advise, approve	Advise	Be informed	Advise	Be informed
Complete commissioning (performance tests on mechanical/electrical systems)	Be informed	Coordinate, advise, approve	Be informed	Be informed	Advise	Be informed
Receive user manuals	Be informed	Approve	Be informed	Be informed	Be informed	Be informed
Obtain occupancy permits	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Receive as-built drawings	Approve	Approve	Be informed	Be informed	Be informed	Be informed
Obtain warranties	Be informed	Approve	Be informed	Be informed	Be informed	Be informed

* This exhibit shows tasks associated with overseeing construction completion in phase 7 of the facility development process. Track activities associated with construction completion are generally related to transition. Transition track activities during the construction phase are summarized in exhibit 22. Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

- Developing a preventive maintenance program.
- Moving staff to the new facility.
- Moving inmates to the new facility.
- Operating the new facility.

The occupancy phase includes the following activity tracks:

- **Nonfacility alternatives:** Continuing to evaluate the impacts of nonfacility alternatives and criminal justice system changes.

- **Transition:** Conducting an operational evaluation of the facility and fine-tuning policies and procedures.
- **Capital and operational funding:** Monitoring the operational budget.
- **Building support for the project:** Maintaining community relations.

Near the end of the project, there may be significant political pressure and/or pressure from the community to open the new facility. Nevertheless, the operating agency must make

Transition Activities: Construction

Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Finalize staffing plan (hiring schedule, etc.)	Approve	Coordinate, produce (TL), approve (TL)	Approve	Be informed	Approve	Be informed
Develop P&P manuals	Be informed	Coordinate, produce (TL)	Approve	Be informed	Approve	Advise
Develop facility post orders	Be informed	Coordinate, produce (TL)	Approve	Be informed	Approve	Be informed
Recruit, select, hire staff	Be informed	Coordinate, advise (TL)	Advise	Be informed	Advise	Be informed
Develop training plans (lesson plans, schedules, etc.)	Be informed	Coordinate, approve (TL)	Advise	Be informed	Advise	Advise
Conduct staff training	Be informed	Coordinate, produce (TL)	Advise	Be informed	Advise	Be informed
Install FF&E	Be informed	Coordinate	Advise	Be informed	Advise	Be informed
Finalize move logistics	Approve	Coordinate	Approve	Be informed	Approve	Advise
Conduct public events	Advise	Coordinate	Advise	Advise	Advise	Advise

FF&E = furniture, fixtures, and equipment; P&P = policies and procedures; TL = transition leader

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all track activities.

the decision about when to move into the new jail. It is important to realize that although construction has been completed, the facility may not be ready for occupancy.

The contractor may declare that substantial completion has been reached, once everything required in the contract documents has been

completed. However, punch-list items critical to the safe operation of the new jail may still need to be addressed (e.g., the sallyport doors for a housing unit may need to be adjusted so they can be electronically opened from a control screen). In addition, the building must be thoroughly searched and cleaned before inmates can move in. Without exception, there will be items of

construction debris in the building that could be fashioned into weapons.

Another consideration is that staff must learn how the new building operates, including its sophisticated electronic security systems. Because of the enormous amount of time, effort, and money spent to make the new jail a reality, initiating a preventive maintenance program to ensure that the facility is maintained and repaired regularly is a wise investment.

Searching and cleaning the building, training staff in building operations, and establishing a preventive maintenance program generally take place for at least 2 months after substantial completion has been achieved. Public relations activities also are conducted at this time. Exhibit 23 shows the roles that participants play in the occupancy and operation phase.

Phase 9: Postoccupancy

In phase 9, participants are involved in the following tasks:

- Completing facility operational checklists.
- Fine-tuning the facility and the policies and procedures.
- Conducting a postoccupancy evaluation.

This phase includes the following activity tracks:

- **Nonfacility alternatives:** Continuing to evaluate the impacts of nonfacility alternatives and criminal justice system changes.
- **Transition:** Closing out the transition team's function.
- **Outcomes:** Producing a postoccupancy evaluation report.

- **Professional services acquisition:** Selecting professional services for facility evaluation.
- **Building support for the project:** Maintaining community relations.

As mentioned earlier, staff and inmates move into new correctional facilities an average of 50 months after the needs assessment begins. Facility managers must continuously monitor the criminal justice master plan and evaluate facility operations against this plan to ensure that the facility is used properly. Jails can reach capacity or become overcrowded quickly unless they are monitored continuously. Any policy departures from the original plans must not result in overcrowding of the new facility. The justice system should not automatically assume that available beds in the facility mean that sentencing practices should be altered or alternative sentencing programs abandoned.

This is the time to assess the facility's efficiency and effectiveness. There is usually a discrepancy between the desired, and actual, operation of the facility. Unforeseen circumstances usually arise that lead to adjustments in facility operation. The integrity of the jail and its operations will be protected when participants take the time to update policies and procedures and address changes through staff training.

Eventually, the facility will begin to age, and conflicts often arise between the desired operations and goals and the building's actual performance. In this phase, it is important to reassess the building's potential and its anticipated longevity. Although the building will become obsolete in the future, incorporating flexibility into the design will help minimize future problems. Exhibit 24 (page 41) shows the roles that participants play in the postoccupancy phase.

Occupancy and Operation

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Conduct an in-depth search of the facility	Be informed	Coordinate	Be informed	Be informed	Be informed	Be informed
Clean the facility	Be informed	Coordinate	Be informed	Be informed	Advise	Be informed
Make decision to move into the new facility	Advise, be informed	Coordinate, approve	Advise, be informed	Be informed	Advise, approve	Be informed
Develop preventive maintenance program	Be informed	Coordinate	Advise	Be informed	Advise	Be informed
Move staff to new facility	Be informed	Approve	Advise	Be informed	Advise	Be informed
Move inmates to new facility	Be informed	Coordinate, approve (TL)	Approve	Be informed	Approve	Advise
Operate new facility	Approve	Approve	Approve	Be informed	Approve	Be informed
Track Activity						
Maintain community relations	Be informed	Coordinate	Coordinate	Coordinate	Be informed	Be informed

TL = transition leader

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Postoccupancy

Task/Track Activity*	Elected and Appointed Officials	Project Manager	Planning Committee	Community Advisory Committee	Facility Managers	Representatives of Justice Agencies
	County commissioners, supervisors, legislators, freeholders, administrator, city/county manager	Correctional staff, engineer, city planner, county architect, criminal justice planner, transition leader	Fiscal agents, facility owners/users, representatives of justice agencies, project manager	Victim advocate, business leaders, clergy, educators, elected officials	Sheriff, jail administrator, warden, director of corrections, correctional staff	Court personnel; prosecutor; defense attorney; probation, parole, and pretrial services staff
Task						
Complete facility operational checklists	Be informed	Coordinate, advise	Advise	Be informed	Advise	Advise
Fine-tune facility and P&P	Not involved	Coordinate, approve (TL and correctional staff only)	Not involved	Not involved	Advise, approve	Not involved
Conduct post-occupancy evaluation	Advise, approve	Coordinate, advise	Advise	Be informed	Advise	Advise
Track Activity						
Select professional to evaluate facility	Approve	Advise, coordinate, approve	Advise, coordinate, approve	Be informed	Advise, coordinate, approve	Be informed
Receive post-occupancy report	Be informed	Coordinate	Coordinate	Be informed	Be informed	Be informed

P&P = policies and procedures; TL = transition leader

* Architects, criminal justice planners, technical advisers, and other consultants may assist with any and all tasks/track activities.

Conclusion

The process of planning and building a new jail requires participation from many players, both inside and outside the government and justice system structure. A jail that does not meet standards or is crowded is not only the sheriff's problem; it affects all participants who contribute to the planning process. Every individual

involved in the process has a role to play, and how they carry out those roles will significantly affect all aspects of the project. The success of the planning, construction, and occupancy phases of a new jail project hinges on each group addressed in this document and how they carry out their roles in the process.

Resources

A variety of resources are available on the subject of new jail planning. Some address the planning and construction process, some address transition issues, and others address justice systems and agencies and how they impact jails. The documents listed below are all available from the National Institute of Corrections Information Center (800-877-1461; asknicic@nicic.gov). They also can be downloaded or ordered from the NIC website, www.nicic.gov.

Bowker, G.M. 2002. *Jail Resource Issues: What Every Funding Authority Needs to Know*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 017372.

Bureau of Justice Assistance. 2000. *A Second Look at Alleviating Jail Crowding: A Systems Perspective*. Washington, DC: U.S. Department of Justice, Office of Justice Programs. NIC Accession Number 016543.

California Board of Corrections. 1999. "Corrections Planning Handbooks: Guides for California's Counties in Planning Adult and Juvenile Detention Facilities."

In *Jail Crowding and Planning Resource Documents*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 020648.

Cunniff, M.A. 2002. "Jail Crowding: Understanding Jail Population Dynamics." In *Jail Crowding and Planning Resource Documents*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 020648.

Cushman, R.C. 2002. *Guidelines for Developing a Criminal Justice Coordinating Committee*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 017232.

Cushman, R.C. 2002. *Preventing Jail Crowding: A Practical Guide*, 2d ed. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 016720.

Elias, G. 2006. *Building Community Support for New Jail Construction*. Washington, DC: U.S. Department of

Justice, National Institute of Corrections. NIC Accession Number 021328.

Elias, G. 2007. *Facility Planning To Meet the Needs of Female Inmates*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 022247.

Elias, G. 2007. *How To Collect and Analyze Data: A Manual for Sheriffs and Jail Administrators*, 3d ed. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 021826.

Goldman, M. 2003. *Jail Design Review Handbook*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 018443.

Kimme, D.A. 1998. *Jail Design Guide: A Resource for Small and Medium-Sized Jails*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 015061.

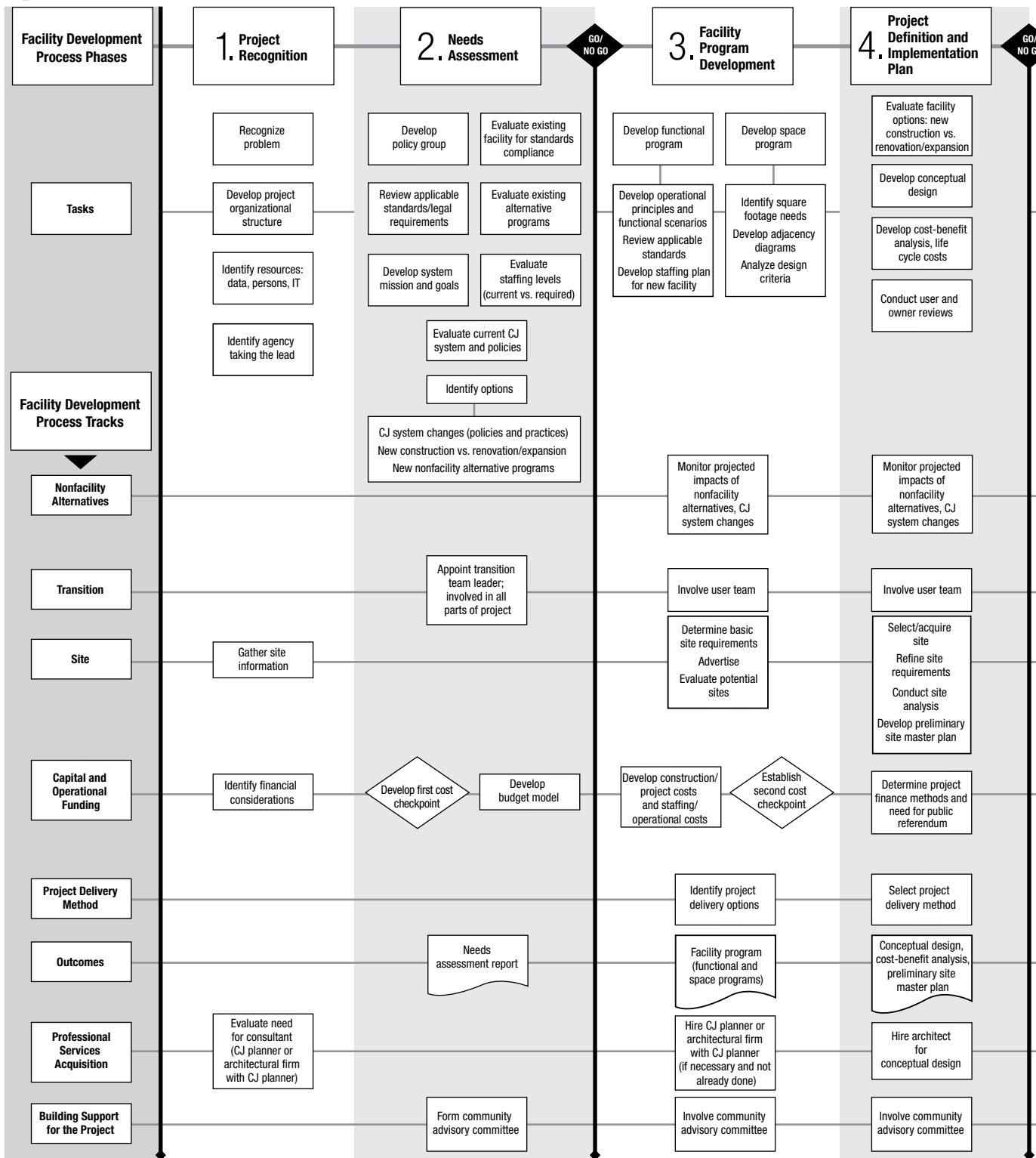
Liebert, D.R., and R. Miller. 2001. *Staffing Analysis Workbook for Jails*, 2d ed. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 016827.

McGarry, P., and M.M. Carter, eds. 1993. *The Intermediate Sanctions Handbook: Experiences and Tools for Policymakers*. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 000213.

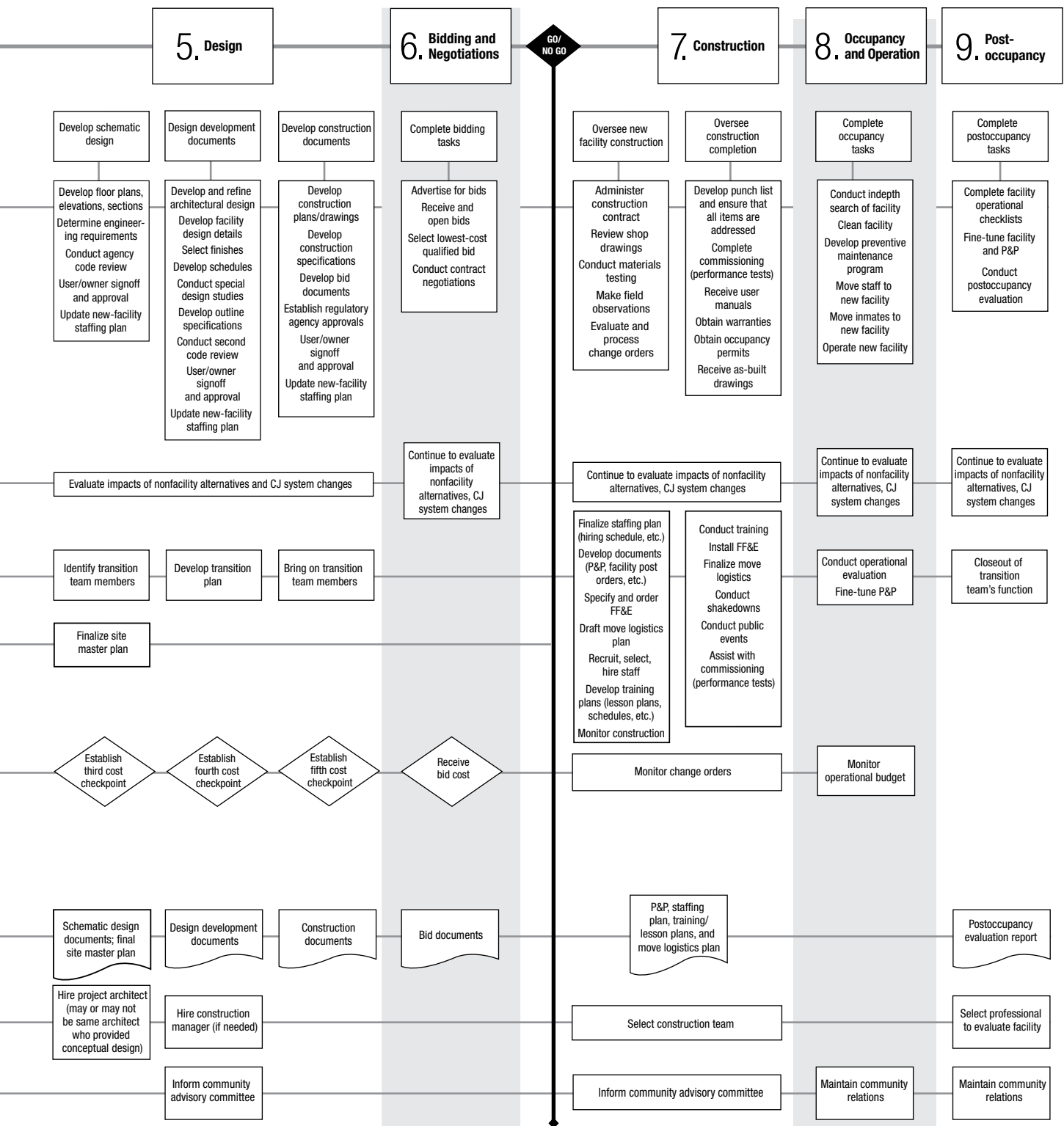
National Institute of Corrections. 2006. "Beyond the Myths: Jails in America." Video presentation on CD-ROM. In *Jail Crowding and Planning Resource Documents*. Washington, DC: U.S. Department of Justice. NIC Accession Number 020648.

Ricci, K. 2004. *Jail Site Evaluation & Selection*, 2d ed. Washington, DC: U.S. Department of Justice, National Institute of Corrections. NIC Accession Number 020647.

Facility Development Process Flowchart



CJ = criminal justice; FF&E = furniture, fixtures, and equipment; IT = information technology; P&P = policies and procedures.
 Note: Facility Development Process Flowchart developed by Dennis Liebert, Gail Elias, and James Robertson for the National Institute of Corrections.



U.S. Department of Justice
National Institute of Corrections

Washington, DC 20534

Official Business
Penalty for Private Use \$300
Address Service Requested

PRESORTED STANDARD
POSTAGE & FEES PAID
U.S. Department of Justice
Permit No. G-231

www.nicic.gov

