State of Washington
Legislative Budget Committee

DEPARTMENT OF CORRECTIONS CAPACITY PLANNING AND IMPLEMENTATION

Report 94-1

January 27, 1994

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Facts About
The Legislative Budget Committee

Established by Chapter 44.28 RCW, the Legislative Budget Committee (LBC) provides oversight of state funded programs and activities. As a joint, bi-partisan legislative committee, membership consists of eight senators and eight representatives equally divided between the two major political parties.

Under the direction of the Legislative Auditor, committee staff conduct performance audits, program evaluations, sunset reviews, and other types of policy studies. Study reports typically focus on the efficiency and effectiveness of agency operations, impact of state programs, and compliance with legislative intent. As appropriate, recommendations to correct identified problem areas are included.

Reporting directly to the legislature, the LBC generally meets on a monthly basis during the interim between legislative sessions.

State of Washington
Legislative Budget Committee

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DEPARTMENT OF CORRECTIONS CAPACITY PLANNING AND IMPLEMENTATION

Summary

Overview

The operating budget of the Department of Corrections (DOC) has been one of the major growth areas in the state budget, increasing from $562 million last biennium to $705 million in the current biennium. In January 1993, the executive committee of the LBC directed staff to develop a study proposal that would focus on the largest component of budget growth within DOC — the operating costs associated with adding new prison beds. On June 25, 1993, the executive committee recommended, and the full LBC approved, a performance audit of the Department of Corrections Capacity Planning and Implementation.

Report addresses legislature's questions about costs

As discussed by the LBC in June, two questions about DOC operating costs have been of particular interest to the legislature. They are:

- Why are there large variations in costs per inmate among this state's correctional facilities?
- If some facilities are less efficiently operated than others, what can be done to reduce their costs?

The results of our analysis suggest that the legislature's interest in why costs vary so much among prison facilities and institutions was well placed. In the process of answering these questions, new information has emerged about the importance of the factors that contribute to operational efficiency and inefficiency. Use of this information will enable the Department of Corrections to improve an already good capacity planning process, and at the same time should result in operational savings.

The major sections of this report are summarized below.

How and Why Operating Costs Vary Among Comparable DOC Facilities

Factors causing cost differences

With the cooperation of the Department of Corrections, we were able to identify how and why costs vary among comparable facilities. Examples are given of four of the factors that are particularly important:

Geographic Location
Facility Design and Layout
Economies of Scale (including collocation)
Housing Unit Size

It was an understanding of the importance of these factors, and how they interact, that allowed us to identify opportunities for lowering the cost of DOC's operations.

Some Opportunities for Lowering the Cost of DOC Operations

Replacing inefficient facilities:

Replacing facilities could save $7.3 million

We worked with DOC to weigh the operating savings against the capital costs, and identify several options for replacing some of the most inefficient prison facilities.[1] The savings from these options have a present value of $60.9 million, and would reduce state spending during the first full biennium of operations by $7.3 million.[2]

This report emphasizes that there may be additional, or different options that the state may want to consider. The point is also made that the use of emergency beds, in lieu of building replacement beds, can be the least expensive of all alternatives, but may have risks that are difficult to quantify.

[1]We also worked with the Department of Natural Resources, which uses inmate work crews from some of the facilities analyzed, and with the Department of General Administration, which has joined with DOC in creating a team approach to facility planning and implementation.

[2]Present value is the one-time, current-dollar (uninflated) value of a stream of savings that would occur over the useful life of the facilities. This is different from the cash flow (the nominal dollars) that is used for budgeting purposes. See Chapter 3.

Better use of existing facilities:

We found that some facilities can be operated at different security levels, or house different programs, with resulting changes in operating costs. In some cases it is possible to maintain (or even increase) the overall current capacity by security level, but at the same time achieve operational savings by changing how facilities are used — sometimes with little or no capital investment.

Other approaches could save $4.5 million or more

An analysis that looks at the optimal use of facilities is called "highest and best use analysis." Although we did not have enough information to conduct a full-scale highest and best use analysis, we did identify one option for a biennial savings of $2.1 million. This is an area for further review by the Department of Corrections.

Take advantage of economies of scale:

Another opportunity for achieving savings is to recognize that the three major, collocated facilities at Monroe can be administered as one institution, thereby realizing economies of scale such as exist elsewhere in the prison system. We estimate that if this were done, the savings would be $2.4 million per biennium.

Review of National Comparative Data

We examined the available national data on prison operating costs to see whether such information would be useful for the purposes of this study. We also conducted our own survey of several states that have comparable demographics, economic indicators, and sentencing practices to Washington State.

We found that although the information from national surveys may raise interesting questions, it has very limited value in providing answers as to how or why our state's costs vary from other states and the federal government. The limitations of the information stem mainly from the fact that different jurisdictions report their data differently, and that some of these jurisdictions have prison systems and practices quite different from ours.

High costs may be due to institution size

In surveying more comparable states concerning their costs, we learned that Washington State may have higher costs in the areas of custody staffing, medical services, and administration. Based

on the analysis of why costs vary *within* this state's prison system, it appears that higher costs for custody staffing may be related more to the diseconomies of small institutions than to overstaffing. The medical and administrative cost areas bear further review by the Department of Corrections to determine if there are opportunities for greater efficiency.

AGENCY COMMENTS

The Department of Corrections concurs with Recommendations 1 and 2 of this report.

DOC partially concurs with Recommendation 3 which states that the Department should develop and implement a plan for consolidation of the facilities at Monroe. The Department's response discusses concerns about including one of the facilities under consolidated management due to its unique operational issues. The auditors agree that the Department should take this type of factor into consideration as they develop a plan for consolidation. The agency's response is included in Appendix 2.

ACKNOWLEDGMENTS

This report would not have been possible without extensive help from dozens of employees at all levels of the DOC organization. We appreciate their assistance.

We also wish to thank the staff of the legislative standing committees, the Departments of General Administration and Natural Resources, and the Office of Financial Management with whom we consulted. Of the several states we contacted, we particularly appreciate the detailed assistance provided by California and Oregon.

We are grateful for the source materials provided by the National Institute of Justice and the American Correctional Association; and for pro bono consultation provided by Stephen A. Carter of Carter Goble Associates, Inc., Columbia, South Carolina; Robert Williams of Robert Williams and Associates, Issaquah, Washington; and Ray Nelson of the Direct Supervision Institute, Inc., Denver, Colorado.

This performance audit was conducted by Bob Thomas, Beth Keating, and Denise Gaither. Cheryle Broom was the project supervisor.

Cheryle A. Broom
Legislative Auditor

On January 27, 1994, this report was approved by the Legislative Budget Committee and its distribution authorized.

Representative Val Ogden
Chair

RECOMMENDATIONS

Summary

Recommendation 1

The Department of Corrections should submit a capital budget request to the Governor and the legislature that incorporates the kind of facility replacement options that have been identified in this report.

Implementation Date:	1995-97 Capital Budget
Fiscal Impact:	$7.3 million savings the first full biennium
Legislation Required:	None, although the legislature would decide whether to include these options in the capital budget.

Recommendation 2

The Department of Corrections should conduct a system-wide highest and best use analysis for the purpose of determining the most cost-effective use of its prison facilities. Such analysis should be an ongoing part of the agency's planning process.

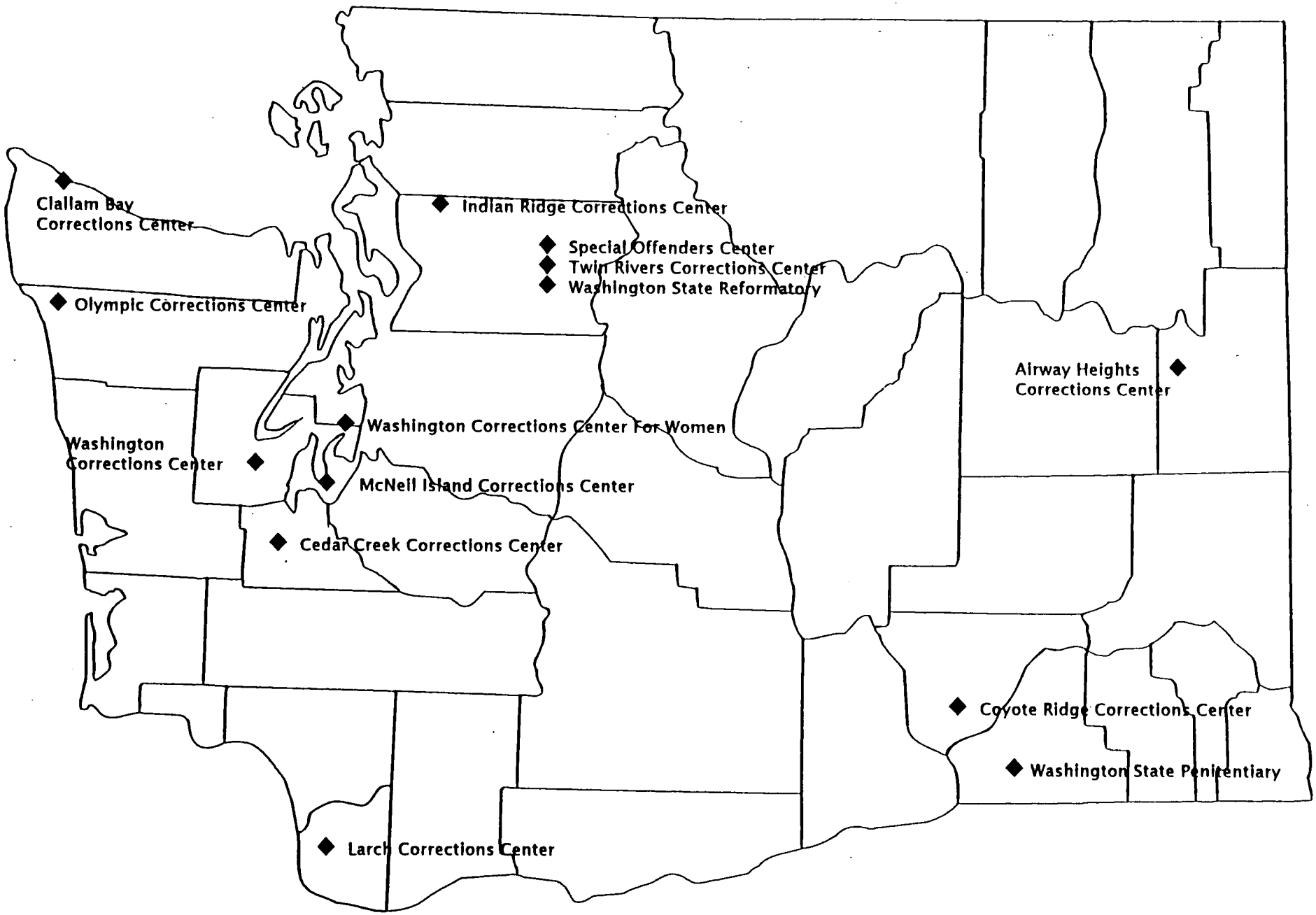
Implementation Date:	September 1994
Fiscal Impact:	At least $2.1 million savings per biennium
Legislation Required:	None

Recommendation 3

The Department of Corrections should develop and implement a plan for consolidating the correctional facilities at Monroe into one institution, thereby achieving the operational savings identified in this report.

Implementation Date:	Current biennium
Fiscal Impact:	$2.4 million savings per biennium
Legislation Required:	None

MAP OF DOC PRISON FACILITIES



SOURCE: Department of Corrections

DIVISION OF PRISONS: INSTITUTIONS AND FACILITIES

NAME	*CUSTODY LEVEL*	*FUNDED OPERATIONAL CAPACITY 6/95*
Airway Heights Corrections Center (AHCC)		
Main Facility	Medium/Minimum	1024
Minimum Camp	Minimum	400
Cedar Creek Corrections Center (CCCC)		
Minimum Camp	Minimum	215
Clallam Bay Corrections Center (CBCC)		
Intensive Management Unit	Maximum	62
Main Facility	Close	396
Medium Security Facility	Medium	400
Coyote Ridge Corrections Center (CRCC)		
Minimum Camp	Minimum	400
Indian Ridge Corrections Center (IRCC)		
Minimum Camp	Minimum	90
Larch Corrections Center (LCC)		
Minimum Camp	Minimum	134
McNeil Island Corrections Center (MICC)		
Main Facility	Medium	1280
Annex	Minimum	270
Olympic Corrections Center (OCC)		
Minimum Camp	Minimum	340
Special Offenders Center (SOC)	Close (Special)	108
Twin Rivers Corrections Center (TRCC)		
Main Facility	Medium/Minimum	816
Washington Corrections Center (WCC)		
Reception	Close	480
Training Center	Medium	684
Intensive Management Unit	Maximum	62
Washington Corrections Center for Women (WCCW)		
Close Custody Unit	Close	142
Main Facility	Medium/Minium	192
Minimum Camp	Minimum	270
Washington State Penitentiary (WSP)		
Intensive Management Unit	Maximum	96
Main Facility	Close/Medium	929
Medium Securtiy Center	Medium	756
Minimum Securtiy Unit	Minimum	183
Washington State Reformatory (WSR)		
Main Facility	Medium	672
Honor Farm	Minimum	110
		10511

SOURCE: Department of Corrections

BACKGROUND

Chapter One

Overview

In January 1993, the LBC executive committee directed staff to develop study proposals for performance audits of some of the major growth areas in state spending. The Department of Corrections (DOC) is one of these areas. Its operating budget for 1993-1995 is up $143 million (from $562 million to $705 million), or 25 percent, over the previous biennium. Most of this increase is for salaries and benefits for new staff; and most of these staff are being added for new housing capacity related to a growing inmate population and the goal of eliminating emergency housing.

In developing a study proposal, staff examined whether ***overall*** system efficiency was being taken into account in DOC's capacity planning process. We found that, by and large, the old facilities that were currently operating were assumed to remain intact and continue to be part of long term operational capacity.

Replace some facilities?

It appeared that a determination of the relative efficiency of DOC facilities would suggest that some facilities should be remodeled or replaced, thereby saving costs over the long run. In any event, a study of the capacity planning process, including a review of relative efficiency, would help to answer some of the basic questions that state legislators have asked about variations in costs per inmate among DOC facilities.

This study was proposed by the LBC executive committee, and approved by the full LBC, on June 25, 1993.

SCOPE AND OBJECTIVES

The scope of this study was to review how the Department of Corrections is accommodating increased demands for institutional housing due to a growing prisoner population and a goal of reducing emergency housing.

Why are some facilities more expensive to operate...

Specific study objectives were as follows:

1. Examine why the cost-per-inmate varies among DOC facilities. To the extent possible, determine the relative efficiency of facilities serving inmates of comparable security classification and programmatic needs.

2. Review whether the relative efficiency of existing facilities should be taken into account in planning for additional capacity. That is, would it be cost effective to replace or remodel less efficient facilities?

3. Review the effectiveness of the DOC Master Plan in improving the overall efficiency of institutional operations. Specifically, do the new facility designs promote lower annual costs per inmate?

...and what can be done about it

In recognition of the possibility that other states and jurisdictions might have prison operations more efficient than the most efficient in this state, we did not limit our review solely to Washington State facilities. We sought and received assistance from national experts familiar with state-of-the-art facility designs and operating concepts; and we were fortunate to receive detailed information and assistance from the State of California concerning their models of efficiently run facilities.

During the course of this review, we also became aware of some public discussion over the issue of how Washington State's cost-per-inmate per year compares to an average derived from the costs of other states and the federal government. Figures cited suggested that Washington's cost-per-inmate is higher than average.

Since a major focus of this study was on how and why costs-per-inmate vary, we examined the available national data, and did some additional data collection, to see whether such information

would be useful for the purposes of this study. Moreover, since we learned that there is a high level of interest among Washington State legislators in the question of how this state compares nationally, we were interested in whether the information from our study might help to explain any of the differences that may exist.

OVERVIEW OF THE DEPARTMENT OF CORRECTIONS' CAPACITY PLANNING PROCESS

In 1989, the legislature directed the Department of Corrections to undertake a comprehensive review of its overall housing capacity, and to identify options for expanding the number of beds to reduce prison overcrowding.

The Department responded with a study, prepared by outside consultants, that identified short- and long-term alternatives for expansion. One of the innovative approaches taken by the consultants for selecting short-term alternatives was to determine the kinds of enhancements to facilities' infrastructures that would allow for housing more inmates within the same space. This approach, endorsed by DOC and adopted by the legislature, had the advantage of providing new beds quickly at a low cost.

DOC's response to overcrowding

Although these were called short-term alternatives, they were short term only in the sense that they were accomplished in a short amount of time. Most of the changes brought about through this process are still in place.

For most of what were considered to be long-term alternatives, the consultants recommended that new institutions, based on multiples of 256 bed housing modules, be constructed. A key element of the consultants' recommendations was that the core facilities (physical infrastructure, services and programming) within these institutions be sized for future expansion. These recommendations were incorporated into the Department's 1991 Master Plan; and this plan, in turn, has received funding support from the legislature within the capital budgets. The most recent capital project to have followed the consultants' concept is the 1024 bed facility at the new Airway Heights Corrections Center near Spokane, for which there are also plans to add another 512 beds.

Good planning process...

To accomplish an ambitious building program, the Department of Corrections and the Department of General Administration have developed a team approach, called Team Program, to facilitate the process of planning, design, and construction of new facilities. Based on our review of some of the latest planning efforts, we found that the process followed by Team Program incorporates the best practices for facility master planning, as suggested in the professional training materials of the American Correctional Association.

...yet there are still more opportunities to lower costs

As will be explained in the following chapters of this report, we also found that there are opportunities for DOC to lower its costs of operations, and thereby decrease the cost per inmate, by creating more efficient facilities. These opportunities do not derive so much from improving the mechanics of the existing planning process as they do from having a better understanding of the major factors influencing operational efficiency over the long term.

We worked with DOC and Team Project staff to identify some of the most critical factors determining operational efficiency, and to develop a methodology and data base for improving how decisions about capital alternatives are made.

HOW AND WHY OPERATING COSTS VARY AMONG COMPARABLE DOC FACILITIES

Chapter Two

Overview

The costs of housing inmates are strongly influenced by security level. As an example, minimum custody inmates require less restrictive security arrangements (particularly supervision by correctional officers) than higher custody inmates. In order to compare the relative efficiency of correctional facilities, it is best to compare facilities that operate at the same level of security. [See Appendix 4, Glossary of Correctional Terms used in this report.]

There are also other cost factors that have nothing to do with *relative efficiency*. For example, there are some institutions that are the medical centers for other correctional facilities in their regions. These other facilities may have some limited medical services but frequently send their sick inmates to the medical centers. Yet the entire cost of the medical centers are part of the host institutions' budgets. Including such costs in a comparison might lead to some misleading conclusions. We found it helpful to segregate the cost differences that may have nothing to do with relative efficiency.

In Exhibits 1 through 4, the costs of DOC prison facilities are compared to one another within the same security levels.[1] The two bottom, darker shaded areas of the bar graphs represent the costs related to relative efficiency in operations. The 1993-95 budget for the operations represented in these exhibits is $506 million.

[1]In Exhibit 2, the Twin Rivers Corrections Center (TRCC) and the main facility at the Airway Heights Corrections Center (AHCC) are shown as medium security facilities, although they both contain some long term minimum security housing units. In neither case would the cost per inmate at these facilities increase appreciably if they were operated as wholly medium security.

Please note that for purposes of making this comparison we used average salaries, and that the cost-per-inmate figures are based on the funded operational capacities of the facilities[2] at the end of the current biennium.[3] Actual budgeted costs-per-inmate will be different from the amounts shown in the exhibits to the extent that individual facilities' salaries vary from DOC averages. In addition, facilities that have emergency beds will have unit costs (cost per inmate) lower than shown in the exhibits on the following pages.[4] (See Appendix 6 for more details.)

Factors causing cost differences

There are many factors that contribute to the differences shown in these exhibits, but four in particular stand out. They are:

Geographic Location
Facility Design and Layout
Economies of Scale (including collocation)
Housing Unit Size

Previous to this study it was known that such factors would influence efficiency. Their relative importance, however, especially on a system-wide basis, did not become fully apparent until much of the data used for this comparison had been gathered and analyzed. One way that this study departs from previous studies of DOC operating costs is that the individual operating costs of facilities within the larger, multi-security institutions have been identified.

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[2]Operational capacity may be defined as the population level that, in the Department's judgment, can be safely, securely, and humanly housed at a facility, given the existing core facilities, services, programming, and staffing. Emergency capacity would be the number of beds over operational capacity.

[3]Since four institutions are currently in the process of adding beds, thus changing capacity, this made comparisons difficult. In order to create a comparable framework, we used full operational capacity as funded in the capital budget, and adjusted the institutions' budgets to reflect the costs of operations at full capacity. The four institutions in transition are the Airway Heights Corrections Center, the Cedar Creek Corrections Center, the McNeil Island Corrections Center, and the Washington Corrections Center for Women.

[4]Since DOC does not add staffing in proportion to population increases at facilities due to emergency housing, the marginal cost of emergency beds is very low, and sometimes negligible. There are, however, unquantified risks and liabilities associated with the extent and duration of overcrowding.

It is important to point out that in some cases a factor that would promote efficiency (such as a good overall facility design and layout) can be offset by a factor that would promote inefficiency (such as having a small housing unit size). For any given facilities, a detailed comparison can now be made that would explain their advantages and disadvantages (the interplay of factors), and how these factors contribute to differences in costs. Of course, such information can be particularly valuable in facility planning.

The following exhibits should help to explain the four factors and illustrate their importance. They are presented here in ascending order of current, system-wide effect.

Geographic Location

Island facility has unique costs

The McNeil Island Correction Center provides the major example of the effects of geographical location.[5] All of the facilities at McNeil have expenses due solely to the fact that they are located on an island. Dockside security posts and the operation of several boats adds $3.2 million per biennium in costs that other institutions do not experience.[6]

Facility Design and Layout

Facility design and layout can have a major impact on costs. An example is provided by considering two functions that are common to most facilities: perimeter guard towers and movement control. With the exception of the Washington Corrections Center for Women, all of DOC's non-minimum security facilities have a perimeter security system that includes perimeter guard towers.

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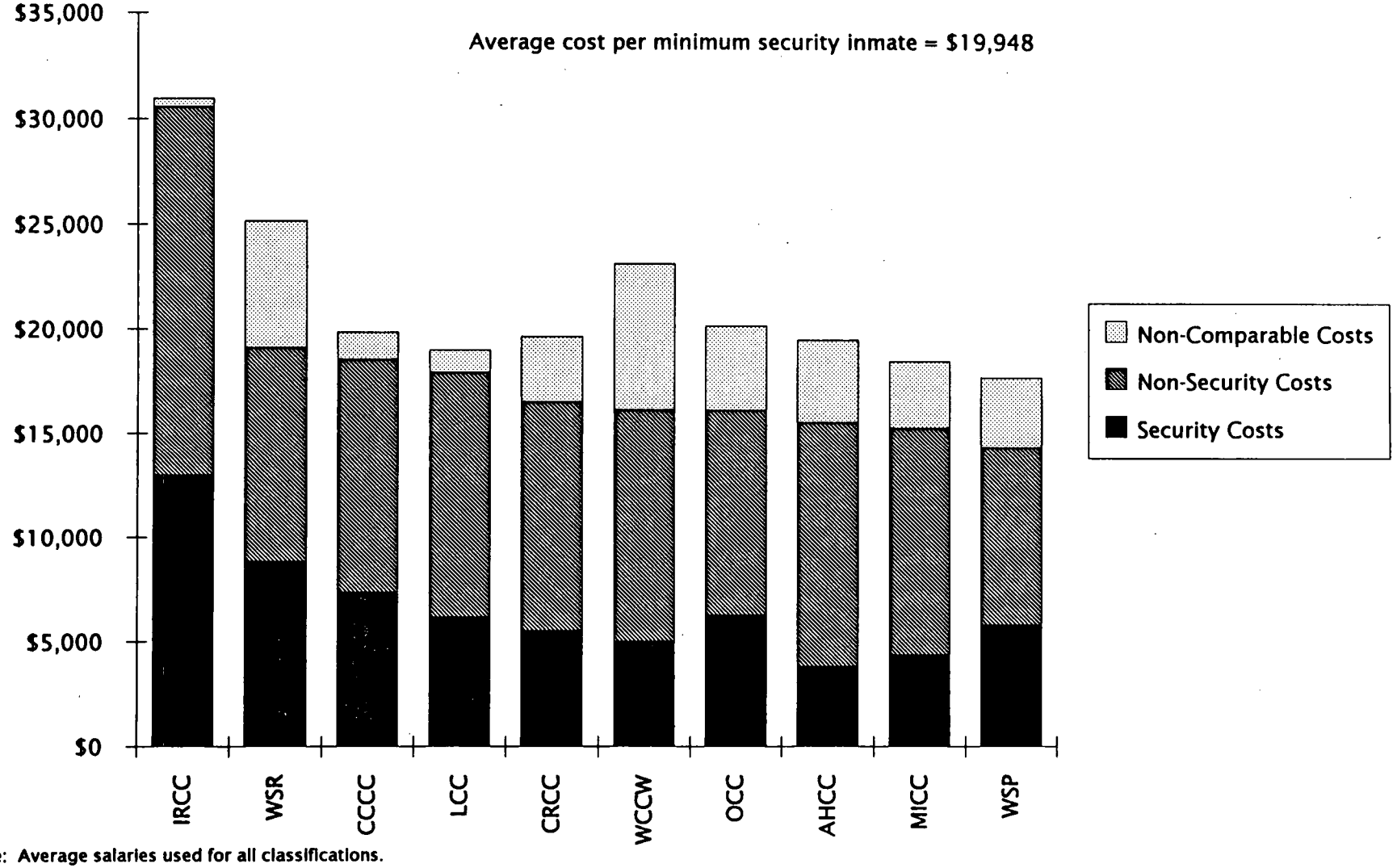
[5]Other examples we found relate mainly to remoteness. For example, the Clallam Bay Corrections Center, due to its remote location, maintains its own sewage treatment plant. Also, according to DOC, the remoteness of Clallam Bay results in more costs associated with higher staff turnover and the need to contract for some services.

[6]There are other costs that we did not quantify that are related to the island location; for example special utility systems, island maintenance, and staff residency costs.

Exhibit 1

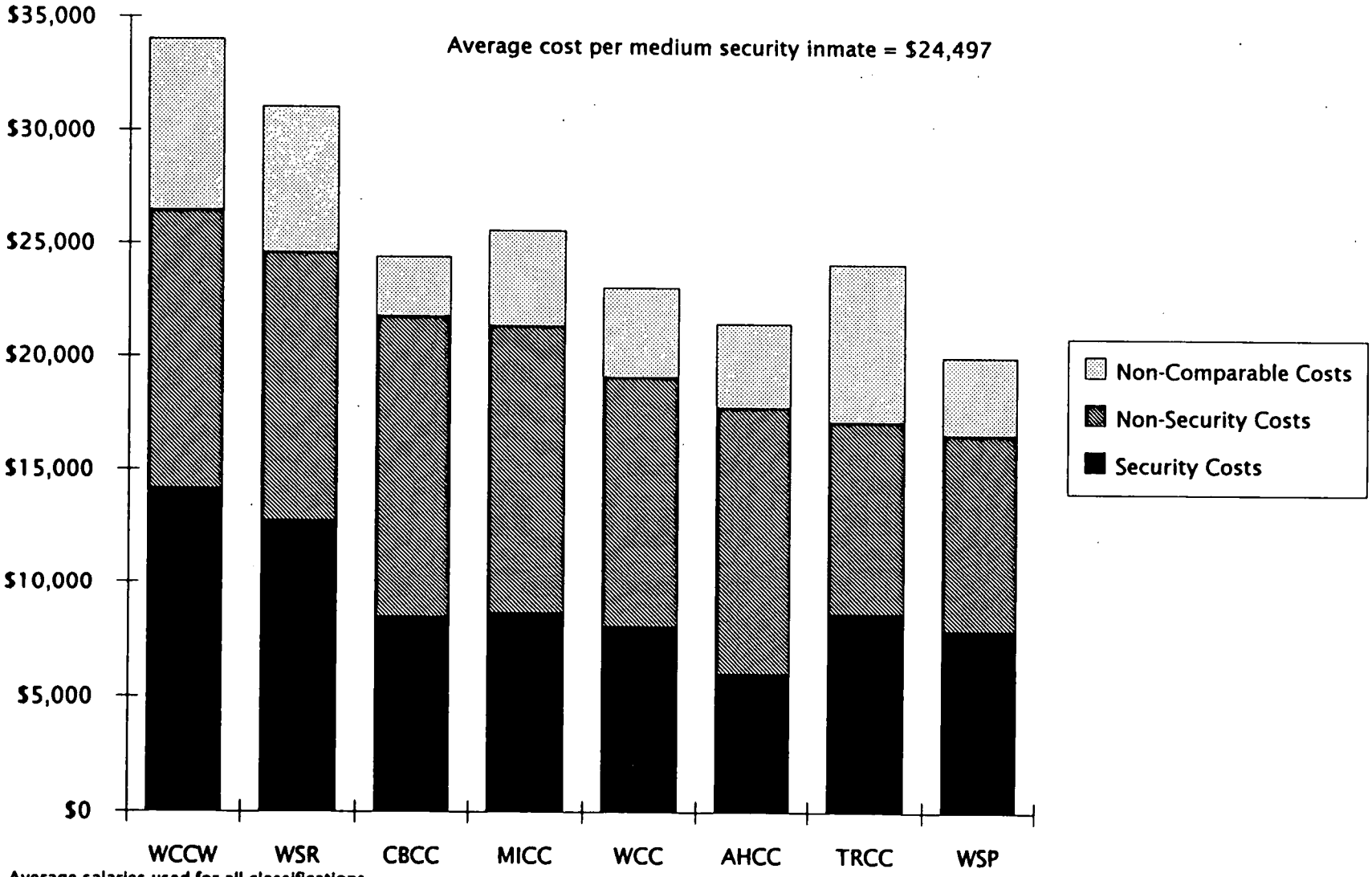
Operating Costs Per Inmate at June 30, 1995 Operational Capacity
Minimum Security Correctional Facilities



Note: Average salaries used for all classifications.
Source: LBC and DOC data, Jan. 1994

Exhibit 2

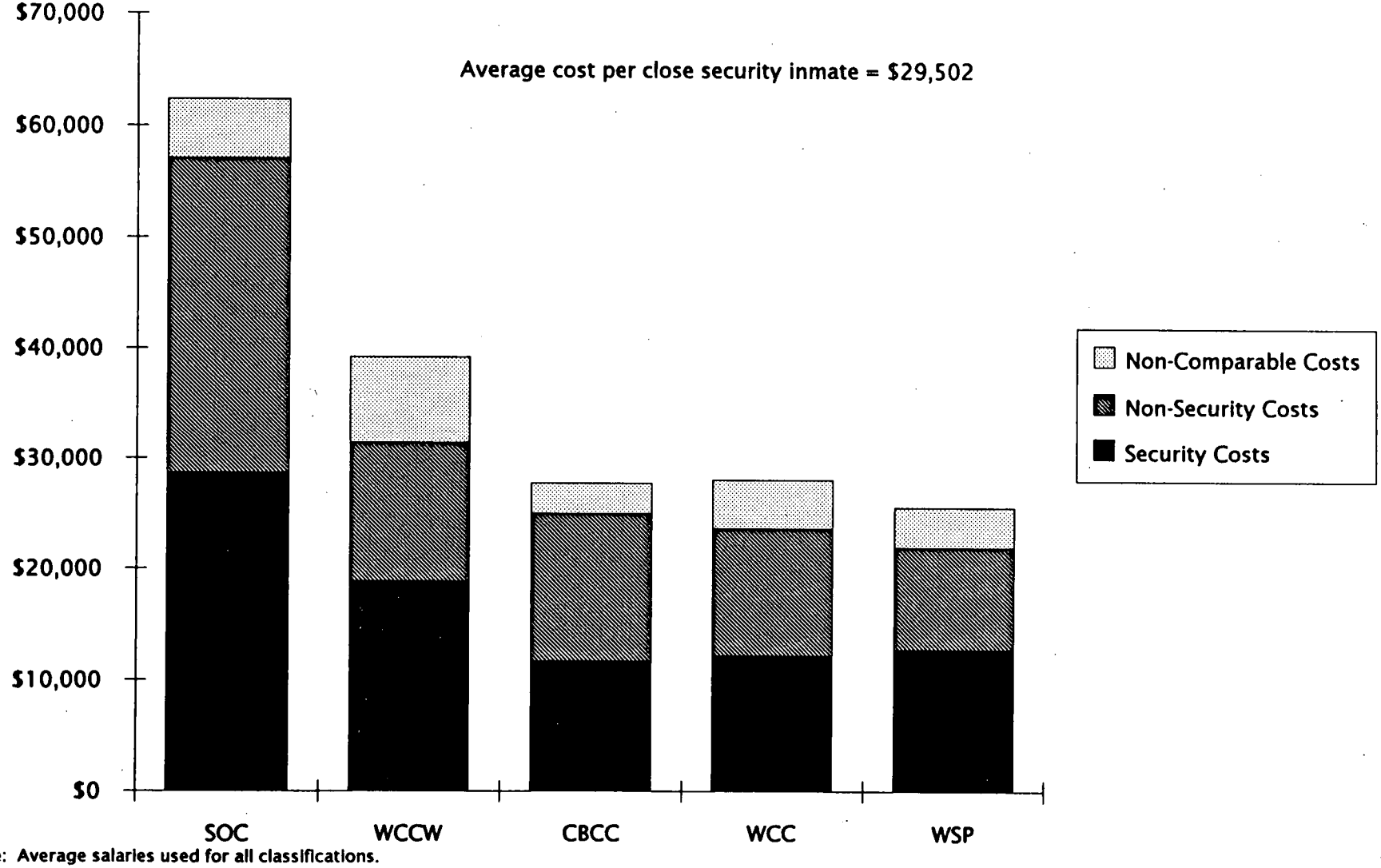
Operating Costs Per Inmate at June 30, 1995 Operational Capacity
Medium Security Correctional Facilities



Note: Average salaries used for all classifications.
Source: LBC and DOC data, Jan. 1994

Exhibit 3

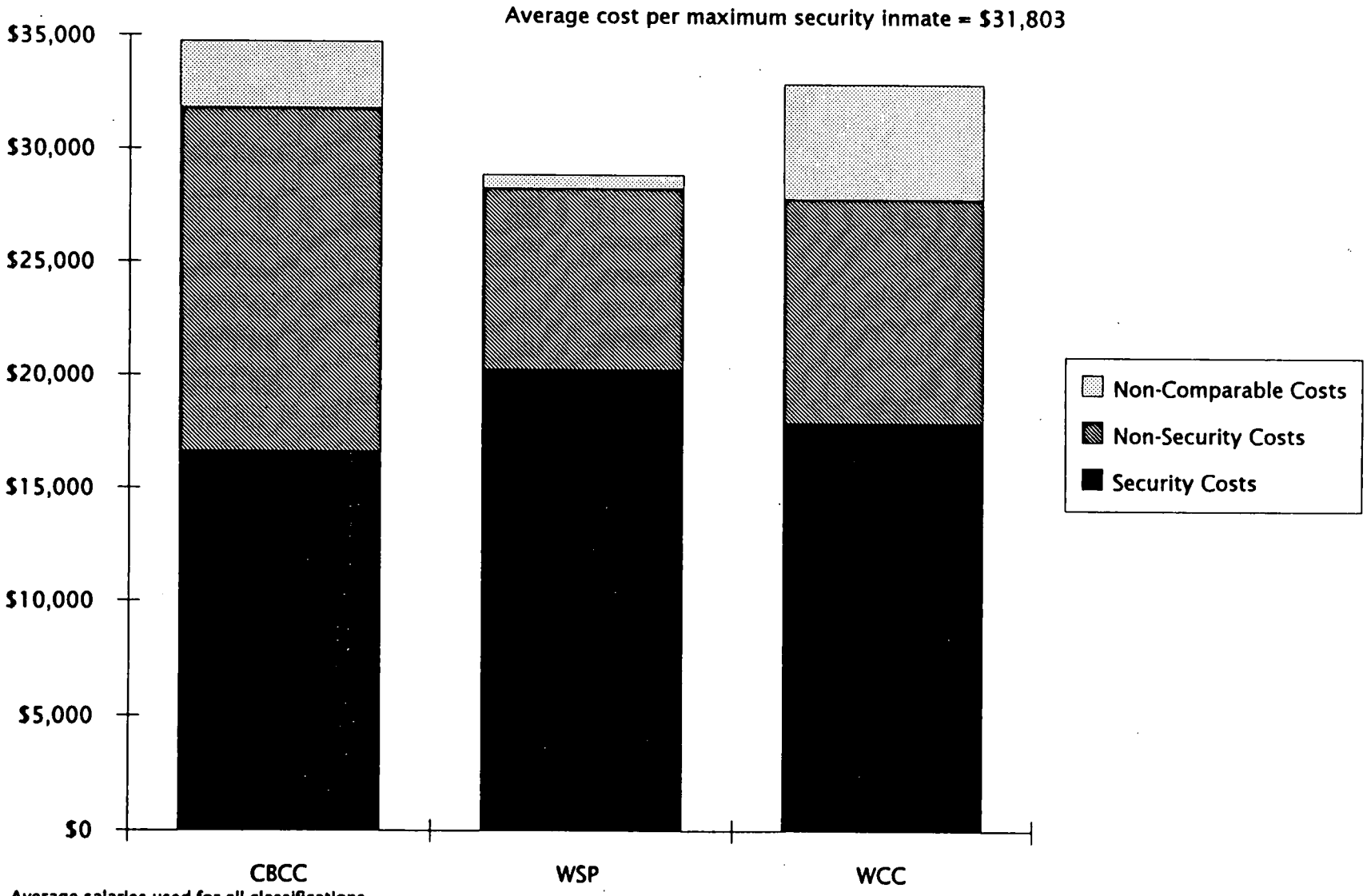
Operating Costs Per Inmate at June 30, 1995 Operational Capacity
Close Security Correctional Facilities



Note: Average salaries used for all classifications.
Source: LBC and DOC data, Jan. 1994

Exhibit 4

Operating Costs Per Inmate at June 30, 1995 Operational Capacity
Maximum Security Correctional Facilities



Note: Average salaries used for all classifications.
Source: LBC and DOC data, Jan. 1994

All non-minimum facilities have posts that control the doors and gates through which inmates and staff move. Frequently, these posts are staffed 24 hours per day, 7 days per week.[7] When operated around-the-clock, the staffing cost of such posts is about $200,000 per year.

Penitentiary layout adds costs

The Washington State Penitentiary at Walla Walla has relatively higher costs for perimeter security and inmate movement control than other facilities. A comparison to the Clallam Bay Corrections Center may help to explain why. The main institution at the Penitentiary has a similar mix of inmates as the Clallam Bay Correction Center but twice the number of beds (at operational capacity). It also has about twice the area enclosed within a secure perimeter.

Nevertheless, the Penitentiary has nearly three times the number of perimeter towers as Clallam Bay, and also three times as many control posts. This results in a biennial cost for these security functions at the Penitentiary ($10 million) that is nearly three times that of Clallam Bay ($3.6 million). The reason for the Penitentiary's higher number of posts and costs is related primarily to the overall layout of the facility. Using perimeter towers as an example, Exhibit 5 shows the difference between the Penitentiary and Clallam Bay.

Economies of Scale

There are many staff positions and functions at prison facilities that have more to do with the fact that a facility is a separate operation than with the number of inmates at the facility. For example, most separate facilities have a Superintendent, a Food Manager, an Accountant, a Correctional Records Manager, and a Correctional Captain regardless of their size. In general, because of such fixed costs, larger facilities and institutions can expect to benefit from economies of scale. Collocation of facilities is one way to achieve these economies.

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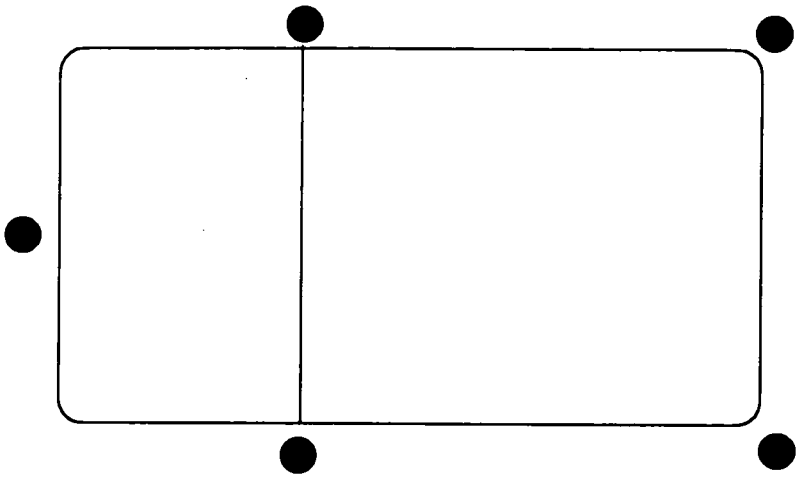
[7]A post is a function (sometimes but not always associated with a specific location, such as a perimeter guard tower) that must be staffed at all hours as determined by policy. This means that if the officer assigned to a post is absent, another officer will be assigned. The officer filling in may come from a relief pool, be an on-call officer, or be an officer working overtime.

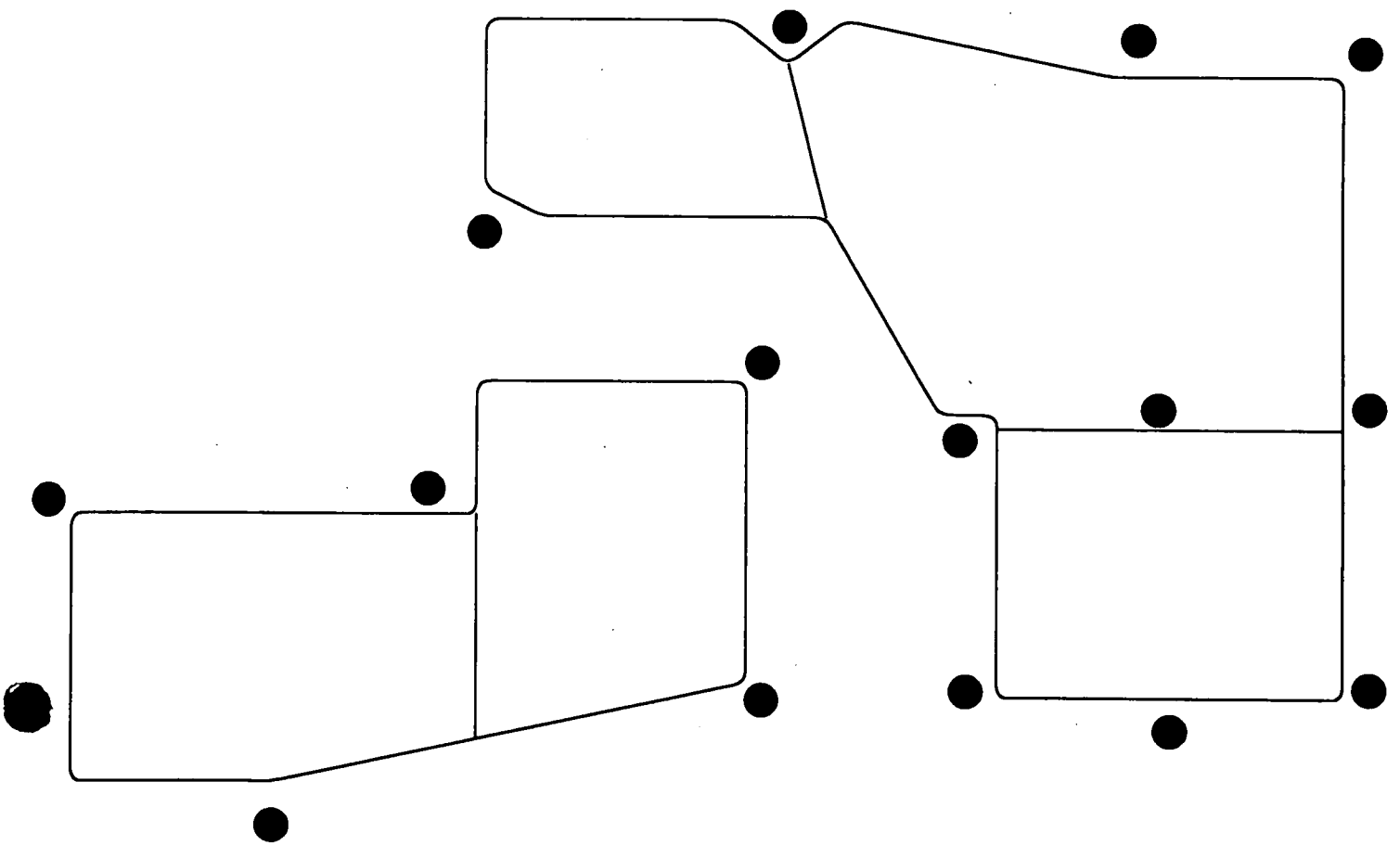
Exhibit 5

Perimeter Guard Towers (●)

Clallam Bay Corrections Center



Washington State Penitentiary



Collocated facilities can cost less

A good example is provided by the Washington State Penitentiary at Walla Walla. At this institution several facilities[8] all share the same command structure and administration. In contrast, three of the four prison facilities located at or near the city of Monroe are operated for the most part separately, even though they are adjacent. They are: the Twin Rivers Correction Center, the Special Offenders Center, and the Washington State Reformatory[9]. As a result, certain costs are higher for these institutions than for the Penitentiary.[10]

Two minimum security facilities, one at Airway Heights and one at Coyote Ridge, provide another example of the effect of collocation (or the lack of it), at least with regard to security costs.[11] These facilities provide a good comparison because they house the same number of inmates (400) and their housing designs are nearly the same. Nevertheless, the comparable ***security*** cost per inmate per year at Coyote Ridge is $5500 versus $3800 at Airway Heights (projected for when the main facility opens).

The difference is explained by the fact that the minimum camp at Airway Heights will share some security administrative costs with the main facility; and because of its proximity to this larger facility, some security posts will also be shared. In contrast, the Coyote Ridge facility, because it is not located next to another facility, does not benefit by collocation.

Housing Unit Size

Among the four factors discussed here, housing unit size has the largest effect on the comparative cost of DOC prison operations. This is especially true when security costs are being considered.

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[8]WSP has a main facility that houses close and medium security inmates (929 operational capacity); the Minimum Security Unit (183 operational capacity); the Medium Security Complex (746 operational capacity); and the Intensive Management Unit (96 beds for maximum security).

[9]The fourth facility, the Monroe Honor Farm, is part of the Washington State Reformatory.

[10]The administrative and management support costs are lower for the Penitentiary, at all security levels, than for other DOC institutions.

[11]Overall savings in non-security costs have not been achieved at the Airway Heights minimum facility.

Housing units are the various sections or wings of buildings where inmate beds are located, either in cells or dormitories. Housing unit size refers to the number of beds. Why this factor is so influential can be explained as follows:

Key cost factor: housing unit size

- Salaries and benefits are the largest part of a facility's budget (about 72 percent)
- Custody staff are by far the largest employee group (60 percent of employees and 54 percent of salaries and benefits)
- The operational area having the largest number of custody staff is housing unit management and security (they account for 42 percent of custody staff salaries and benefits)
- The Department's *Custody Staffing Model* sets minimum custody staffing related to the number of housing units, not to the number of inmates in the units
- Although additional housing unit staff are provided if they are judged warranted due to the number of inmates or to physical design limitations, such situations are the exception rather than the rule. When staff have been added, they have been added sparingly.

A dramatic illustration of the importance of housing unit size is provided in the following example.

> The smallest minimum security housing unit is located at the Indian Ridge Correction Center and has 16 beds. During the two shifts when the inmates are asleep or many are at work, there is only one Correctional Officer on duty in the unit. During the busier evening shift, two officers are assigned. This results in a daily officer-to-inmate ratio of 1 to 4.

The largest minimum security housing units[12] (three) are located at the Airway Heights main facility and have 256 beds. When it opens, the Department plans to staff these units with two Correctional Officers per shift. This will result in a daily officer-to-inmate ratio of approximately 1 to 43.

Airway Heights design is more efficient

A less dramatic but illustrative example of the importance of unit size is provided by a comparison of the medium security units at McNeil Island and Airway Heights. Construction of both of these facilities was completed this year.

The Airway Heights main facility has four 256 bed modules, one of which may initially be used for medium security[13], with the others housing long term minimum security inmates. At Airway Heights, each 256 bed module is one unit. Similarly, the McNeil Island main facility has five 256 bed modules. But there is a difference in staffing costs per unit owing to the fact that the McNeil modules are divided into two units each. The simplified schematic on the next page demonstrates the difference in design.

Although the modules contain the same number of beds, the number of Correctional Officers assigned to manage a housing unit at McNeil is twice as much as at Airway Heights.[14]

It should be noted that there are other correctional posts and program staff that have responsibilities directly related to the housing units. These include unit sergeants, response and movement officers, and classification and counseling staff. In this particular example, there was no difference related to unit size in how the modules at each location were staffed.

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[12]The particular minimum security inmates to be housed in these units are similar to the camp inmates in behavior, but generally have longer to serve and therefore are confined at a facility with a secure perimeter.

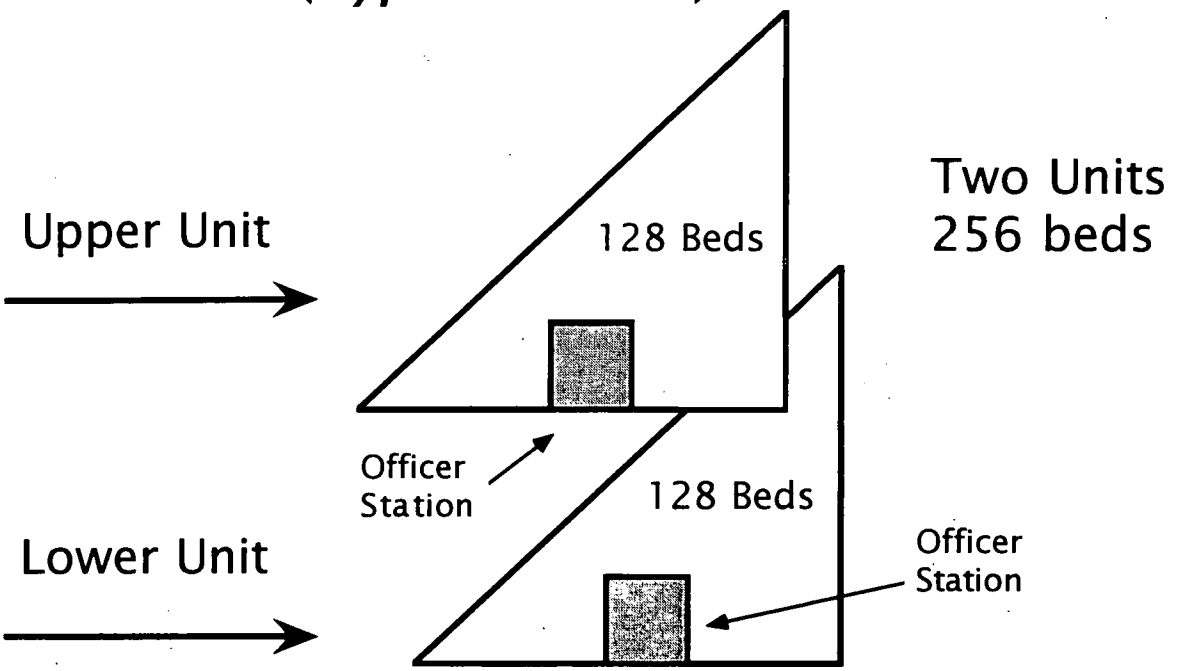
[13]This is also the one unit that has what are referred to as "wet" cells, meaning that each cell has a toilet and sink. Although the Department has been planning to operate this unit as medium security, the need for minimum security beds by the time it opens may dictate otherwise.

[14]The staffing pattern for these units is 2 officers on the first shift, 2 on the second shift, and 3 on the third shift, which is the busiest shift.

Exhibit 6

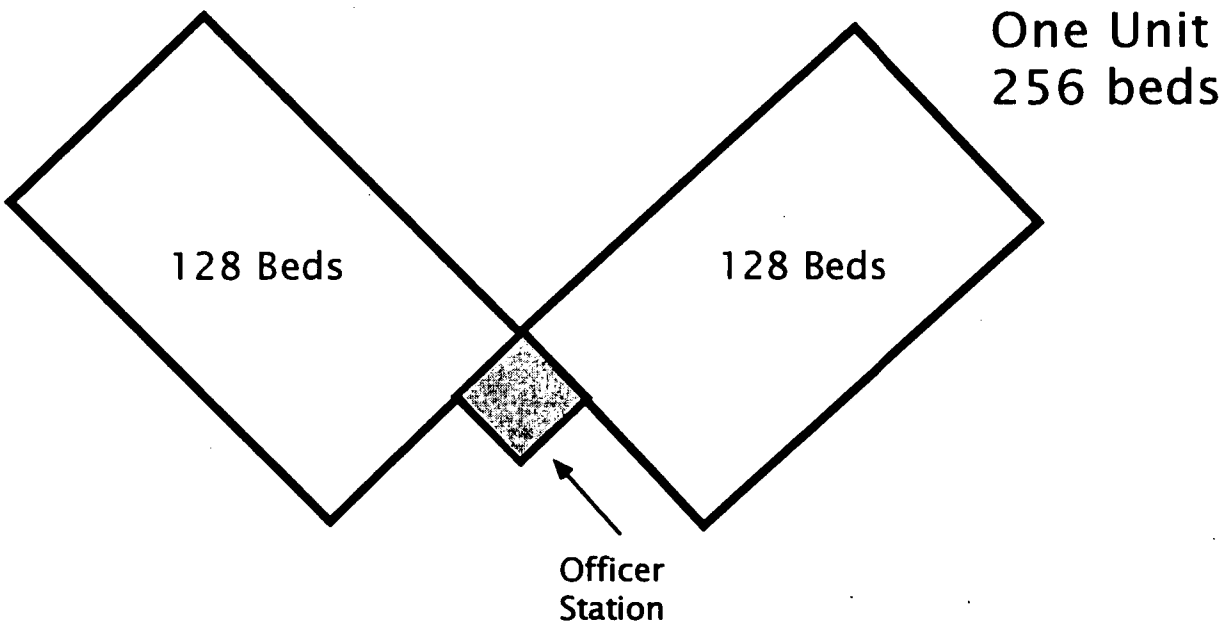
McNeil Island Corrections Center

(Typical Module)



Airway Heights Corrections Center

(Typical Module)



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SOME OPPORTUNITIES FOR LOWERING THE COST OF OPERATIONS

Chapter Three

Overview

Both the Department and the legislature have had a goal of increasing prison capacity to reduce the number of emergency beds. Although the goal of reducing emergency beds from the highest levels of the past has been realized, some emergency beds continue to be used due to budgetary constraints. For instance, in the current biennium, the opening of 1024 beds at Airway Heights has been delayed for budgetary reasons. At the time of this writing (December 1993) there are about 700 emergency beds in use.[1]

The following analysis focuses on options other than the use of emergency beds for lowering operating costs. Indication will be made, however, if pending decisions (for example closing the Indian Ridge Camp or the Monroe Honor Farm) might have a bearing on whether to pursue any of these options.

The remainder of this chapter is divided into three sections. Each section identifies different opportunities, and makes recommendations, for reducing operating costs.

LIFE-CYCLE COST ANALYSIS

A crucial question to be asked about options for replacing or remodeling prison facilities is: Will the operating savings resulting from the change outweigh the capital expenditures over the long run? The long run referred to here is the useful life of the facility.

[1]The figure 700 is the approximate number of emergency beds in use due to a lack of beds within operational capacity. There are a variety of other reasons, such as delays in transporting inmates or backlogs in programs, that may cause facilities to be over or under operational capacity.

A method of answering this question that takes into account the time value of money is called life-cycle cost analysis. A description of the life-cycle model used for the analysis in this report, including a discussion of the assumptions used, is included in Appendix 3.

Examples of efficient facilities suggest opportunities for savings

The information we developed for the comparisons of facilities in Chapter 2 can be used to identify operating savings that would accrue if facilities were collocated, and if some of the less efficient facilities were replaced with facility designs and operating plans that would be less costly. Once these savings are identified, they can then be weighed against all the costs of replacement.[2]

The process we followed was to identify the most likely facilities and housing units that would be candidates for replacement and collocation. In some cases the benchmarks[3] we used were from within DOC, but in other cases they were not. For instance, we found that planned operating costs of the new 1024 bed facility at Airway Heights, at least as far as security costs are concerned, will compare favorably, at minimum and medium security levels, to the most efficient facilities of other states and the federal government.[4] Therefore we used Airway Heights security staffing as a benchmark.

Finding good benchmarks for close security, special populations and maximum security was more difficult. For example, many states do not have a security classification called "close." Inmates that DOC calls close security might elsewhere be housed in maximum security facilities; and as a rule, the housing units at

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[2]For a listing of the many costs that must be considered, see Appendix 3.

[3]A benchmark is a standard by which both efficiency and effectiveness can be measured. For instance, if the Department has internal examples of some comparable operations (e.g., housing units) that cost less to operate than others, yet still meet the Department's objectives for effectiveness, they provide a benchmark to be used in planning for new facilities. In choosing internal benchmarks, we relied on the Department's judgment concerning effectiveness.

[4]This observation is based on comparing prison operations and facility designs that use the direct supervision method of managing inmates, as is used in Washington. There may be more efficient benchmarks elsewhere that are based on a different operating philosophy.

such facilities are small, and costly to build and operate. Internally, DOC's current benchmark for close security are the 99 bed units at Clallam Bay.[5]

Early in our analysis it became clear that a unit size of 99 beds might not result in any options for replacement. We worked with the Department to develop a model that would tell us how much operational savings there would have to be, and/or how much lower capital costs must go, before replacement would be justified.

In the Department's judgment, close security units can be larger than 99 beds and still be managed successfully. For instance, the Department believes that the 158 bed units at the Reformatory could be used for close security inmates (after some minor remodeling). Therefore we used 158 beds as a benchmark for close security. The Department has also asked its pre-design consultants for the planned new 1936 bed facility to research models of efficiently operated close security facilities.

Conservative savings estimate used

Listed on the next page are options we identified for reducing DOC's operating costs. In almost every instance when there was a choice among values to include in our life-cycle analysis, we were conservative in our assumptions. Therefore, we believe that the figures shown below represent minimum savings that would be achieved if the options were implemented.

For each option we show: the capital and start-up costs as a negative number; the pay back period; cash flow savings over the 50 year life-cycle; the present value[6] of the cash flow savings; as well as the cash savings (in nominal dollars) for the first biennium of operation (this number will vary considerably from one biennium to the next).

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[5]This is DOC's policy benchmark. Larger close units can be found at the Penitentiary, but they are either operated with a mix of close and medium inmates, or they are not the single-celled units that in the Department's judgment are best suited for close security inmates.

[6]Present value is a commonly accepted way of recognizing the time value of money, which is particularly important in analyses that compare costs and benefits that occur in different time periods.

The total cash flow savings are the sum of all dollar savings (cash flow) from each year. However, because a dollar that will be received 20 or 30 years from now is worth less than a dollar received today, the cash flow total may not give the clearest picture of the magnitude of savings. The present value of the total savings is the figure that describes the worth, or value, of the savings if they were in hand today. All of these terms are defined more fully in Appendix 3.

Women's Medium Security

Potential savings at Purdy

At the Washington Corrections Center for Women at Purdy, there are three general population[7] medium security housing units of 64 beds each (192 beds total). Since the benchmark for medium security is 256 beds, we looked at the option of replacing the existing 192 beds with a single unit. This was an option that Team Program (the joint DOC/GA team) was already considering at the time we began this study. The results of the analysis are as follows:

Replace three small housing units with one larger unit at Purdy

Capital and start-up costs	($6.9 million)[8]
Pay back period	Less than 4 years
Total cash flow savings (50 years)	$130 million
Total present value savings	$14 million
First biennium cash savings	$1.9 million

In this analysis we used 192 beds in the replacement option in order to provide an "apples-to-apples" comparison. It should be mentioned that if 256 beds had been used, the increase in capital costs

[7]The term general population, as used here, means that no special security or services are required for these inmates.

[8]These costs would be offset by the planned cost of remodeling these units, which is $3.2 million.

would not grow proportionately (by one-third), but would increase by only $750,000 (about 11 percent). If these beds are needed, the difference in costs between operating a 192 bed unit and a 256 bed unit is very small.[9]

We have suggested to the Department that as part of its on-going planning it also look at the possibility of combining two remaining small housing units at Purdy, either as a separate option or in combination with the above option.

Special Offenders Center

This facility, which is adjacent to the Reformatory, is operated as a close security facility. The two main reasons for its relatively high costs, aside from the needs of its special population, are: (1) presently the full benefits of being collocated are not being realized; and (2) the housing units are very small (three units of 36 beds, each having its own control station). Since the savings from collocation could be realized without a capital investment, they are not included in the amounts shown below. See **Recommendation 3** below.

Replace small units

Replace three small SOC housing units with one larger housing unit

Capital and start-up costs	($12.9 million)
Pay back period	Less than 8 years
Total cash flow savings (50 years)	$204 million
Total present value savings	$20.7 million
First biennium cash savings	$2.1 million

[9]This is because staffing is the major component of operation costs, and there would be no staffing increase.

As was the case with the women's medium security option, our replacement option for the Special Offenders Center is based on the same number of beds (108) as currently exist. If population projections for this group of inmates show a need for more beds, the least expensive means for providing them would likely be to increase the housing unit size of this option.

It should also be noted that at the time of this writing the Department is exploring the possibility of remodeling rather than replacing SOC.

Minimum Security Camps

Multiple options for savings at camps

A number of scenarios are possible for combining and collocating some of the least efficient minimum camps. Since many of the inmates at these camps currently do work for the Department of Natural Resources, we included cost impacts on DNR (as estimated by DNR) for each option if there were any.

The major benefit to DNR of the minimum camps is that the inmates help with fire suppression. This assistance, however, can be provided by inmates from locations other than the current camps. For routine work in the forests, such as planting and thinning, the location of the camps is more important. This analysis takes into account the effects of location.

The option shown below is among several we analyzed. Since the various combinations of options all provide efficiencies in the same way (through consolidating two or more smaller facilities and/or collocating them with a larger facility) the magnitude of the savings to be obtained by them turn out to be similar. Programmatic considerations of the Department, or policy objectives of the legislature, might suggest that a different combination than shown here would be preferable.

Minimum Option: Close the Larch and Indian Ridge camps and relocate them at Cedar Creek as one unit (and at the same time eliminate the smallest housing unit at Cedar Creek)

Capital and start-up costs	($9.2 million)
Pay back period	Less than 5 years
Total cash flow savings (50 years)	$249 million
Total present value savings	$26.2 million
First biennium cash savings	$3.3 million

Two competing alternatives to this scenario would involve: (1) A similar option to the above, but close the Monroe Honor Farm rather than the Larch camp; and (2) Create a new camp collocated at the Reformatory by closing the facilities at Indian Ridge, the Honor Farm, and Cedar Creek. The total present value savings from these options would be $20.1 million and $25.7 million.

Either of these two competing alternatives, since they do not involve the Larch camp, would permit a third option of collocating the populations of the Larch and Olympic camps at Shelton. This option would have a present value savings of $8.5 million, but, because of relatively high capital costs, would take 17 years to pay back the investment.

Emergency beds may be less expensive

In response to a recent two percent cost reduction target set by the Governor, the Department identified the closure of Indian Ridge and the Honor Farm without immediate replacement. ***It should be noted, therefore, that the capital investment options discussed above that involve Indian Ridge and the Honor Farm would cost more than the alternative of closing these facilities without replacement.*** This is because there are no immediate capital costs and little if any operating cost increases associated with the use of emergency beds; and emergency bed use will increase if the facilities are closed without replacement. There may, of course, be risks and liabilities associated with the extent and duration of overcrowding, but these would be very difficult to quantify.

Other Possibilities

We do not believe that the options listed above exhaust the possibilities for achieving operating savings by making capital

investments. Moreover, among the options we did consider, but which did not pass our economic test, there may be some that will prove to be cost effective in the future if the Department and Team Program find ways to lower operating and/or construction costs.

It should also be understood that we did not assume the use of any technology other than that which is now being used by DOC. In some of the most labor-intensive areas of operations, such as the staffing of perimeter towers, new technology (or new uses of old technology, such as the electrification of fences) may prove to be the most cost-effective kind of capital investment.

DOC should pursue options

RECOMMENDATION 1

The Department of Corrections should submit a capital budget request to the Governor and the Legislature that incorporates the kind of facility replacement options that have been identified in this report.

HIGHEST AND BEST USE ANALYSIS

In conducting the life-cycle cost analysis, we became aware that some existing facilities can be operated at different security levels, and that not all of DOC's special programs need to be housed at their present locations. As would be expected, the operating costs of the facilities would change with the alternative uses.

Changing use of facilities can result in savings

To take one example, the Reformatory is fairly expensive to run as a medium security facility compared to its benchmark — Airway Heights main facility operated at medium security. However, if operated as a close security facility, the Reformatory would compare favorably to other close facilities (at least at operational capacity). Thus, a facility can become ***relatively*** more or less expensive to operate at one security level versus another. This is especially true if the number of inmates changes with the change in security.

A way of determining whether different uses of existing capacity can result in lower overall system costs is called "highest and best use analysis." To do this analysis the various possible security levels and programmatic uses for each facility are determined, and then their operating costs are identified. With this information one can then compare different use scenarios to see if savings are possible.

At the time of the writing of this report, the Department was in the process of making determinations of alternative uses of facilities. This information, together with some of the analytic tools developed in the process of this audit, will enable the Department to conduct a highest and best use analysis.

Although we did not have all of the information we would need to do a system-wide highest and best use analysis ourselves, we did attempt a limited analysis using data for some of the facilities. One of the results, described below, illustrates the importance and the potential of this approach.

One example saves $2.1 million...

Changes to the use of the McNeil Island and Airway Heights main facilities[10]

Assuming that the Airway Heights main facility (1024 beds) will be used for long term minimum security inmates, and that the McNeil Island main facility (1280 beds) will remain a medium security facility, the biennial security costs[11] would be $34.8 million.

By changing the use of these facilities, such that the Airway Heights main facility becomes entirely medium security, and four of the five 256 bed modules at McNeil are used for minimum security, the biennial security costs would be $32.7 million — a savings of $2.1 million.

...and there may be more opportunities

We wish to emphasize that the example using McNeil Island and Airway Heights may not be the best use of these facilities. There may be better alternatives that would emerge from looking at the entire prison system. Any programmatic issues or community concerns should also be identified and taken into account.

[10]The opening of the Airway Heights main facility has been delayed until later in this biennium. This comparison is based on what the likely use of these beds will be at the end of June 1995. The best available information on the projected inmate population by classification suggests that not only will the 1024 beds at the main facility be needed for long term minimum security inmates, but that the planned additional 512 beds may be needed for this classification as well.

[11]Security costs are the only costs affected by the change being considered here. Some minor non-comparable security costs are also excluded.

The particular benefit of a highest and best use analysis is that long term operational savings can be achieved without large capital expenditures or transition costs.

RECOMMENDATION 2

The Department of Corrections should conduct a system-wide highest and best use analysis for the purpose of determining the most cost-effective use of its prison facilities. Such analysis should be an ongoing part of the agency's planning process.

SAVINGS AT THE MONROE FACILITIES

Consolidate Monroe facilities

As discussed in the previous chapter, we found that the correctional facilities located at Monroe do not achieve the same economies of scale as do those at the Penitentiary at Walla Walla. This is because the three major facilities at Monroe (the Reformatory, Twin Rivers, and SOC) are operated for the most part separately, even though they are adjacent. Certain functions have been consolidated into a central command, but not all.

Altogether there are 258 fewer inmates at Monroe than at the Penitentiary (1706 versus 1964) based on operational capacity, and even fewer if emergency beds are counted (in December 1992 Monroe had 1607 inmates while the Penitentiary had 2436, a difference of 829). The Penitentiary also has a large number of close and maximum security inmates, while the highest custody level of inmates at the Monroe facilities is medium.

Both places have special operations and house several special populations that pose their own management problems. For instance, the Penitentiary and the Reformatory are where the two major medical facilities in the prison system are located. Whereas the Monroe facilities house the Special Offenders Treatment Program (SOTP), and programs for the developmentally disabled and seriously mentally ill offenders, the Penitentiary has residential and outpatient programs for the mentally ill, a protective custody unit, a geriatric unit, and death row.

Although the Penitentiary has more inmates than Monroe, and a similar variety of programs, *total* management, fiscal and administrative costs are higher at Monroe. From our discussions with the management of the facilities at both locations, and with DOC headquarters staff, we have not found a reason for these costs to remain higher at Monroe.

$2.4 million in savings possible

We estimate that if the Monroe facilities were operated as fully collocated facilities, and the management, fiscal and administrative costs were more in line with the Penitentiary, there would be biennial savings of $2.4 million.

RECOMMENDATION 3

The Department of Corrections should develop and implement a plan for consolidating the correctional facilities at Monroe into one institution, thereby achieving the operational savings identified in this report.

REVIEW OF NATIONAL COMPARATIVE DATA

Chapter Four

For the purposes of this study, we analyzed data from the 1993 Corrections Yearbook[1] and the federal Bureau of Justice Statistics Source Book of Criminal Justice Statistics. The Corrections Yearbook is the source most commonly used when people cite comparative statistics about prison costs.

National data has limited value

The information from these sources raises interesting questions, but we found that it is of very limited value in providing answers. As a rule, the broader the comparison being made (e.g., cost per inmate per year), the less valid are the resulting statistics for making such a comparison.

A large part of the reason we have for making this observation is the knowledge that the various jurisdictions that respond to these sources report their costs differently. For instance, some states include headquarters costs, overhead charges, all prisoner programs, or community corrections costs. Others do not. Even if the costs were reported consistently and accurately,[2] many states' prison systems are markedly different from one another.[3]

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[1]Includes data from all fifty states, the District of Columbia, and the federal prison system.

[2]Accuracy is also an issue because we found unexplained differences between the data provided to us by states and the data reported in the Corrections Yearbook.

[3]Because of different laws and sentencing practices, some states have quite different mixes of inmates in terms of offense, security level, and demographics. Also, about half of the states reporting to the Corrections Yearbook indicated that they do, or may, include the costs of jails in their prison costs.

More narrowly focused statistics from these sources are more useful, but even they must be used with care. Information about Correctional Officers' salaries and staff-to-inmate ratios may be reported accurately, but it might not tell the whole story about how security costs compare. For example, such a comparison can be distorted to the degree that different jurisdictions use civilians for security functions, or Correctional Officers for non-security functions.

We were able to learn of these limitations to the data by obtaining the questionnaires used in the national surveys, and by contacting several states who responded to the Corrections Yearbook to ask for clarification of their cost data.

Washington compared to 9 similar states

As an alternative to relying solely on these national data sources, especially for making broader comparisons, we conducted our own survey. Based on information from the Office of Financial Management and the Sentencing Guidelines Commission, we identified 13 states that are comparable to Washington in demographics, economic indicators, and sentencing practices. Of these 13 states, 9 are similar to Washington in that their prison systems do not include jails. The nine states are Ohio, Wisconsin, Minnesota, Michigan, North Carolina, California, Oregon, Pennsylvania, and Illinois.

Our survey asked detailed questions about FY93 spending for specific staff categories, purchased services, and corrections programs. Oregon provided more detailed information than we requested on our survey. From Oregon's data on their FY1993-95 budget, we did further comparisons of Oregon and Washington. We also used information from the Corrections Yearbook in cases where the questions being asked were narrowly focused.

HOW ARE WASHINGTON'S COSTS DIFFERENT THAN COMPARABLE STATES?

Our overall finding is consistent with one of the conclusions already made in this report. That is, institution size and crowding are primary drivers of the cost per inmate. In general, the states that report lower custody and non-custody costs per inmate are also

those that have large institutions and have a larger percentage of emergency beds than Washington. We used data from the average daily population divided by the number of institutions to identify each states' institution size.[4] Washington, with 645 inmates per institution, falls in the middle of the ten states (i.e., 9 states plus Washington) but is well below the average for the ten states (1162).

STAFFING COSTS

Washington salaries are similar...

We compared Washington's total institutional staff levels and custody staff levels to comparable measures in the ten comparable states. Both overall staff levels and custody staff are higher in Washington than the ten-state average. We did not have adequate information to compare salary levels of all staff in other states to make a comparison to Washington. However, we did compare FTE levels as well as custody staff salaries among the ten states.

Custody staff salary and benefit costs make up approximately 39 percent of the cost per inmate in Washington[5]. Data from our survey indicate that Washington's cost of custody staff per inmate is second highest of the states responding. Total custody costs are driven by two factors, 1) the salaries and benefits paid to staff and, 2) the number of custody staff that the state employs.

As shown below, the first factor does not appear to cause the difference in total custody costs. Our data indicates that Washington's correctional officer salaries are mid-range for the comparable states. However, as shown, Washington's ratio of custody staff to inmates is higher than the average of the eight comparable states that responded to this survey question.

...but staff levels are higher

Similarly, total staff levels in Washington are higher than the average for the comparable states. The difference between Washington's staff-to-inmate ratio and the ratio for the average of comparable states translates into approximately $50 million per biennium.

[4]This measure includes both factors of building size and level of crowding. We do not have enough information about other states to separate these effects from one another.

[5]The salaries and benefits for all other staff combined equal 33 percent of the budget, and non labor costs account for 28 percent. This analysis looks only at the costs associated with **custody** salaries and benefits, which are about 55 percent of total salaries and benefits.

Facility size and design influence staffing

This does not necessarily imply that Washington's institutions are overstaffed, meaning that at any facility there are more officers or other staff than there needs to be. Rather, it appears that Washington's smaller institutions have fewer inmates among which the staff costs are divided.[6] This, then, may be more an issue of facility size and design, as discussed in the previous chapters of this report.

	Averages for Comparable States	*Washington Averages*
Correctional Officer Salary/Ben.	*$34,644*	*$34,404*
Custody FTEs to Inmates	*1 to 4.5*	*1 to 4*
Total FTEs to Inmates	*1 to 3*	*1 to 2.5*

MEDICAL COSTS

Reasons for higher medical costs unclear

Another area in which Washington's costs appear higher than comparable states is in medical costs. Washington reports the second highest total medical costs of the six comparable states that reported complete health care information on the survey.[7] Washington's FY 93 medical costs per inmate were approximately $2,212 per year versus a $1,604 average cost for comparable states. Neither the reasons for this difference nor any suggestion as to what would be an appropriate benchmark for medical costs were evident from the data.

OTHER COSTS

We asked the ten comparable states about other costs including food, administration, plant, and program costs such as education, drug and alcohol, counseling, and sex offender treatment.

[6]Since only some of Washington's institutions (particularly the Penitentiary) are used to absorb emergency housing, there likely have been and are times when crowding at these particular institutions exceeds the levels in other states.

[7] We did not use Corrections Yearbook data for medical costs because it appears that Washington may have answered the Corrections Yearbook questions differently than other states. Washington reported cost per treatment per day rather than the cost per inmate per day. This causes the cost per day to look low compared to other states.

Response rates were disappointing and there are indications that these costs may not be identified the same way among states. Therefore, we have not included a discussion of how these costs vary among the ten comparable states. We were able to make a closer comparison of some of these costs between Washington and Oregon.

OREGON/WASHINGTON COMPARISON

The state of Oregon provided us with detail on their projected annual cost per inmate for FY93-95. Oregon reports their projected cost per prisoner per year as about $18,300. Washington's budgeted annual cost per prisoner is approximately $25,800 for FY94.

Washington's costs per prisoner are $200 to $500 per inmate higher in categories of food and plant as well as some program costs such as counseling, mental health, and sex offender treatment. Larger differences are seen in costs per prisoner for custody staff (approximately $2500 per prisoner higher) and medical costs ($900 per prisoner higher). Administration costs per prisoner are also higher in Washington (by about $2500) although it is very difficult to identify and compare common costs. For example, Washington has fiscal, personnel, and training staff in each institution, while much of this work is done in the headquarters in Oregon. This centralization of administrative work in Oregon is likely made easier by the fact the 55 percent of Oregon's inmates are housed in institutions located in Salem, where headquarters is also located.

Administrative and medical costs bear further review by DOC

CONCLUSIONS

The comparisons that we are able to make lead us to conclude that cost areas that are significantly different in Washington than in other states include custody staffing, medical services, and administration. These areas make up almost two-thirds of the cost per inmate in this state. Higher costs for custody staffing, and other such areas as food, plant, and programming, may be related more to the diseconomies of small and separate institutions than to overstaffing. Comparisons of ten comparable states indicate relationships between facility size and emergency housing, and reduced costs per inmate.

Although medical services and administrative costs may also be affected by the diseconomies of small and separate facilities, the differences in costs between Washington and comparable states appear large enough that they bear further review by the Department of Corrections to determine if there are opportunities for greater efficiency.

SCOPE AND OBJECTIVES

Appendix 1

SCOPE

This study will review how the Department of Corrections is accommodating increased demands for institutional housing due to a growing prisoner population and a policy of reducing emergency housing.

OBJECTIVES

1. Examine why the cost-per-inmate varies among DOC facilities. To the extent possible, determine the relative efficiency of facilities serving inmates of comparable security classification and programmatic needs.

2. Review whether the relative efficiency of existing facilities should be taken into account in planning for additional capacity. That is, would it be cost effective to replace or remodel less efficient facilities?

3. Review the effectiveness of the DOC Master Plan in improving the overall efficiency of institutional operations. Specifically, do the new facility designs promote lower annual costs per inmate?

AGENCY RESPONSE

Appendix 2

- Department of Corrections

STATE OF WASHINGTON
DEPARTMENT OF CORRECTIONS
P.O. Box 41100 • Olympia, Washington 98504-1100 • (206) 753-1573
FAX Number (206) 586-3676 SCAN 321-3676

January 18, 1994

Cheryle A. Broom, Legislative Auditor
Legislative Budget Committee
506 - 16th Avenue
Olympia, Washington 98504

Dear Ms. Broom:

This is in response to the recommendations in the Legislative Budget Committee's study of the Department of Corrections' prison facilities and planning process.

I appreciate the professionalism, hard work, fairness, and expertise demonstrated by your staff. It appeared that our respective staffs developed a strong, positive working relationship. We believe that many of the concepts encompassed in the report reinforce the Department's current direction and provide useful data and approaches for future facility use and planning.

RECOMMENDATION 1 - **Concur**

Agency Position and comments: The Department concurs with the recommendation and also concurs with the report's conclusion that other options, in addition to the one's quantified in the report, should be fully evaluated.

For instance, the report recommends that three general population, medium security housing units of 64 beds each at the Washington Corrections Center for Women at Purdy be replaced with a single housing unit for operating efficiencies. Preliminary planning is already underway, including the development of estimated capital and operational costs. Successful implementation will depend on available funding.

The report also recommends that the Special Offender Center be replaced with a new facility with larger housing units that will be more cost efficient. The Department concurs with this recommendation in concept, and is currently considering other options to reduce the operating costs of this facility that may require fewer capital resources. One possibility is remodeling rather than replacing the existing facility. Another approach might be to consider a new facility that addresses multi-agency, statewide needs for specialized populations rather than looking only at the needs of the Department of Corrections.

Recommendations pertaining to efficient forestry camp operations will also be fully evaluated and compared with the prototypical cost-efficient 400-bed correctional camp. The Department of Natural Resources forestry work and fire suppression programs are vital elements of the Department's work programs for inmates. If adequate forestry work is not available to inmates, the Department will have to develop more costly programming.

RECOMMENDATION 2 - Concur

The report recommends that the Department should conduct a systemwide highest-and-best use analysis for determining the most cost-effective use of its prison facilities.

Agency Position and Comments: The Department concurs with this recommendation and will use the economic model provided by the LBC, but will also consider community concerns, union and employee issues, the unique limitations of various facilities and other operational issues in a more comprehensive definition of highest-and-best use.

The Department agrees that highest-and-best use analysis must be an ongoing process. The characteristics of the inmate population shift over time due to changing demographics in the general population, changes in sentencing laws, and other factors.

RECOMMENDATION 3 - Partially Concur

The report recommends that the Department should consolidate correctional facilities at Monroe into one institution.

Agency Position: Partially concur

Comments: The Department does not concur that all of the facilities at Monroe should be operated as a single institution. In particular, Twin Rivers Corrections Center operates one of the largest sex offender treatment programs in the nation. Its unique operational issues do not lend themselves to consolidation with other facilities. The Department agrees that there may be opportunities for operating economies in consolidation of other functions at the Monroe facilities. Further analysis will be conducted.

Thank you for the opportunity to review the preliminary draft.

Sincerely,

Chase Riveland
Secretary

CR:kgb

cc:: Executive Staff

LIFE-CYCLE COST MODEL ASSUMPTIONS AND DEFINITIONS OF TERMS

Appendix 3

Life-cycle

Life-cycle is defined as the useful life of a facility. The useful life assumed for the options analyzed in this report was 50 years. As part of our sensitivity analysis of outcomes, we also looked at shorter periods.

Construction Cost

This includes site acquisition (when applicable), construction, all fees, contingencies and escalation (inflationary increases in costs during the project). Estimates were developed by DOC.

Operating Costs

Much of the analysis for this study involved (1) determining ways to allocate staff and non staff costs to existing facilities, and (2) identifying savings that would accrue from collocation and more efficient facility design. The data and methodologies we used have been reviewed by DOC for accuracy, and in many cases are based directly on DOC policy (e.g., the Custody Staffing Model).

We relied on the Department of Natural Resources for estimates of the cost impacts of relocating and/or replacing minimum camps that have DNR work crews.

Discount Rate

The discount rate is used to convert future dollars into present values. Use of a discount rate that is at least equal to the actual cost of borrowing (interest rate) accounts for debt service in the life-cycle analysis.

To decide whether to recommend a remodel or replace option, we used a discount rate (before inflation) of 10 percent, which is higher than the state's actual cost of borrowing. Use of a discount rate that is higher than the interest rate on state bonds is a way of reflecting the opportunity cost and risk to the public whose taxes pay for the bonds. Use

of a discount rate that is higher than the state's cost of borrowing is consistent with the approach recommended by the federal Office of Management and Budget.

This higher rate was used for economic decision-making only. The savings and cash flow amounts shown in the report are all based on the state's cost of borrowing.

Interest Rate

We used 5.2 percent for a 25 year bond. The latest bond sale by the State Treasurer was issued at 4.95 percent on September 28, 1993. We added 25 basis points (twenty-five one-hundredths) to account for any fees associated with the sale, and perhaps a rise in interest rates by the time of the next sale.

Inflation

The figure used for both operational and capital costs was 3 percent. This assumption is consistent (slightly above) with data for construction cost increases over the last 10 years for Seattle, Tacoma, and Spokane, and is higher than OFM estimates for salary increases.

Salvage Value

Salvage values may enter into life-cycle cost analysis in several ways. For example, if a new facility (at another location) replaces an old one, the old facility and the land it is built on may have value either through sale or alternative use.

These values were very difficult to determine for correctional facilities. Generally we used land values only (a very conservative approach); or land value plus an nominal amount for sale of a facility or alternative use (still a conservative approach). The land values were supplied by DOC.

Start-up Costs

For these costs we used factors, suggested by DOC, to reflect transport, moving-in, training, and other costs related to opening a new facility. For security we used two months of costs and for non custody we used one month.

Demolition

If a building had to be demolished to make room for a replacement, we used $3 per square foot, based on DOC experience.

Major Systems Periodic Replacement

The costs of replacing a building's major systems (such as heating, ventilation, air conditioning, roofs, electrical systems, locking systems, interior finish, etc.) can be quite expensive over the life-cycle. Some systems may be replaced more than once. Also, each system may have a different amount of years before replacement.

This is an important consideration in life-cycle analysis because different options will have different replacement costs over the life cycle. For example, an old facility may have a flat roof that is costly to replace, and must be replaced frequently; whereas a new facility might have a sloped roof that is less expensive to replace, and would be replaced less frequently.

In cases where several facilities were involved, each having different systems of (unknown) different ages, we assumed that the systems were half way through their replacement cycles.

Deferred Maintenance Decision Point

We assumed that if a building was nearing the end of its useful life, major systems would not be replaced within the last four years. Therefore we assumed there would be no replacement costs in these years.

Pay back Period

This would be how long it would take for the operating savings to equal the capital costs, assuming that all the capital costs are paid out-of-pocket. In this report, the play back period is used mainly for illustrative purposes only, since large capital projects are more likely to be financed.

GLOSSARY OF CORRECTIONAL TERMS USED IN THIS REPORT

Appendix 4

Custody

Custody, or custody level, usually refers to a classification based on behavior and security risk. Sometimes the terms custody level and security level are used interchangeably, e.g., minimum security inmates. See security level.

Close Custody/Security

Close custody inmates are long term, have poor behavior and pose a security risk. Close security facilities have a secure perimeter and secure housing unit interiors and exteriors, and there is direct observation of all inmate movement. See Appendix 5 for a matrix of custody and security level.

Emergency Capacity

This is the number of inmates in a facility over operational capacity. The Department of Corrections views the use of emergency capacity as a temporary measure, not suited for long term operations. Additional staff may be added when emergency capacity is used, but usually not in proportion to the increase in inmates.

Facility

One or more buildings of the same security level, and housing inmates at the same (or similar) custody level, are a facility. A facility may stand alone (e.g., Coyote Ridge Corrections Center which is minimum security) or be part of a larger institution (e.g., the Minimum Security Unit at the Washington State Penitentiary).

Institution

In this report, institution refers to the larger prisons that have more than one facility. For example, the State Penitentiary at Walla Walla has several facilities: the Intensive Management Unit (maximum security); the Main facility (close and medium security); the Medium Security Complex (consisting of two facilities); and the Minimum Security Unit.

Maximum Custody/Security

Maximum custody inmates are assaultive, pose a security risk and have chronic behavior problems. Maximum security facilities have a secure perimeter and strict control of all entry to and egress from the facility as well as inmate movement. See Appendix 5 for a matrix of custody and security level.

Medium Custody/Security

Medium custody inmates are long term and may pose a risk to the community. Their programs occur within the secure perimeter and they may have limited behavioral problems. Medium security facilities have a secure perimeter and a secure housing unit exterior. Inmate movement is controlled. See Appendix 5 for a matrix of custody and security level.

Minimum Custody/Security

Minimum security inmates may have few or no behavioral concerns. Within the Division of Prisons (whose facilities are reviewed in this report), inmates with generally good behavior who still have a long time to serve (more than three years) are confined to facilities with secure perimeters, or in a few cases are housed at the McNeil Island Annex. Inmates with shorter remaining sentences may be sent to camps or similar facilities where they may have outside work assignments. Such facilities may or may not have fences. See Appendix 5 for a matrix of custody and security level.

Perimeter Security

This refers to the fences, armed towers, walls, gates, and electronic detection systems that are designed to control entry and egress at prison facilities.

Operational Capacity

This is the number of inmates that, in the judgment of the Department of Corrections, can be safely, securely and humanely housed at a facility, given the existing core facilities, services, programming, and staffing. This is the measure of capacity we used to compare DOC facilities. See also emergency capacity and rated capacity.

Rated Capacity

This term usually means one or two things: (1) the number of inmate beds in a facility as originally designed; and/or (2) the number of inmates that can be housed in a facility based on standards adopted by the American Correctional Association. This number is frequently less than operational capacity and is not used by DOC in determining capacity needs.

Security Level

The physical features of a prison facility (e.g., fences, walls, armed towers, etc.) determine its security level. This term may also apply to the inmates housed in such facilities (e.g., close security inmates). See Custody.

CUSTODY CLASSIFICATON

Appendix 5

CUSTODY CLASSIFICATION

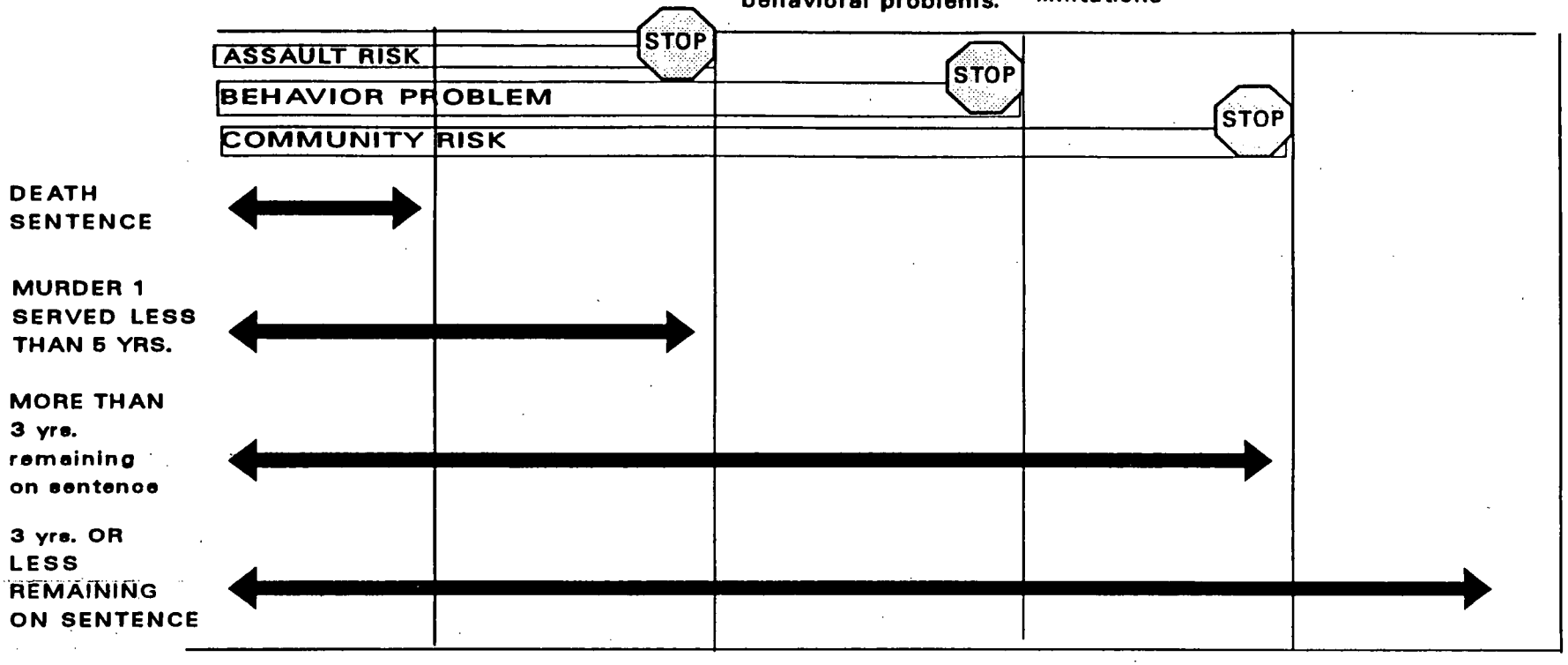
MAXIMUM
Assaultive
Security risk
Chronic behavior problem

CLOSE
Long term.
Poor behavior.
Security Risk

MEDIUM
Long Term
w/community risk concerns. Programs internally. Limited behavioral problems.

MINIMUM 3
Long term community risk w/few internal behavioral concerns. Short term w/camp limitations

MINIMUM 2,P
Not a behavioral or security risk.



LEVEL 5
Secure perimeter w/armed towers. Perimeter/building entry/egress w/strict control. Inmates in secure building and cell. secure control rooms.

LEVEL 4
Secure perimeter w/armed towers. Strict control of perimeter exit/egress Housing interior, exterior is secure. Direct observation of all inmate movement.

LEVEL 3
Secure perimeter w/armed towers. Housing has secure exterior. Controlled movement within facility.

LEVEL 2
Perimeter clearly defined. Domestic housing w/common, controlled access.

FACILITY SECURITY LEVEL

SOURCE: Department of Corrections

IMPACT OF EMERGENCY BEDS ON OPERATING COSTS

Appendix 6

In Chapter 2 of this report, the operating costs of DOC prison facilities are compared to one another based on operational capacity.[1] We used operational capacity for two reasons:

- At the beginning of the biennium, DOC was projecting that the inmate population and operational capacity would be the same by the end of June 1995. This would mean that there would be no emergency beds in use at that time and that the Department would be operating its facilities as intended.

- Use of emergency capacity in the analysis (those beds over operational capacity) would have been problematic because the number of emergency beds fluctuates constantly.

However, more recent population projections show that there will be more inmates than operational capacity beds by the end of June 1995. During presentations of the preliminary report of this audit, several members of the legislature were interested in how our cost figures would change if we accounted for the use of emergency beds.

Using OFM population projections, and taking into account DOC operating constraints[2], we estimate that an average of 227 male inmates will need to be housed over capacity for FY96. The impact on the cost per inmate at operational capacity is only slightly reduced from the operational capacity figure if the additional emergency beds are included in the total population.

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[1]Operational capacity may be defined as the population level that, in the Department's judgment, can be safely, securely, and humanly housed at a facility, given the existing core facilities, services, programming, and staffing.

[2]Operating constraints include: not filling vacancies at the female correctional facilities with male inmates, not filling vacancies in maximum facilities with lower security inmates, assuming an occupancy rate based on actual use (85 percent) for work release facilities, and full occupancy of AHCC.

Effect on Aggregate Cost, FY96

	Cost per Inmate
At Operational Capacity	$24,584
At Average Annual Population[3]	$24,565

While the aggregate cost per inmate changes very little, there are more significant shifts in costs when viewed by security level or by institution.

Effect on Security Level Costs

Most inmates that will need emergency housing in FY96 will be minimum security male inmates, but there will also be a small number of close security male inmates above capacity levels.

Population forecasts suggest that the women's correctional facility at Purdy, and the male maximum security facilities will not be full. And since it is the Department's policy not to fill empty beds at Purdy with men or maximum units with lower custody inmates, vacancies will exist in those facilities while other facilities use emergency beds. This will result in higher costs per inmate for Purdy and for maximum security, and lower costs per inmate for other facilities. Details are shown below for costs by security level for men and women combined.

Average Cost per Inmate, FY96

Security Level	Operational Capacity by Security Level	Total Avg. Population by Security Level
Maximum	$31,803	$49,272
Close	$29,502	$29,276
Medium	$24,497	$24,220
Minimum	$19,948	$19,940

[3]These population projections and costs do not assume changes proposed in the Governor's supplemental budget. If those changes occur, i.e., closing Indian Ridge Corrections Center and the Monroe Honor Farm, there will be a need for 461 emergency beds, and the cost per inmate for FY96 will be reduced to $24,142.

Effects on Individual Institutions Costs

When inmates are housed above operational capacity, they are traditionally not distributed evenly among the state's 14 major institutions.[4] Certain institutions accommodate the majority of emergency beds. In an attempt to estimate the impact of emergency beds by institution, we asked the Department to suggest where the additional FY96 inmates *might* be housed. Below is one example of where emergency inmates might be housed, and the subsequent impact emergency beds will have on cost per inmate for each institution in FY96. Exactly where additional beds will be located and the actual cost impact is not known at this time.

[4]The reasons why some institutions rarely have emergency beds are varied. Some facilities can not physically accommodate more inmates. Some have special programs, such as the Sexual Offenders Treatment program, and the Department believes that overcrowding would interfere with treatment. And others, such as McNeil Island Corrections Center and Airway Heights Corrections Center, are newly operating and the Department's policy is not to overcrowd those facilities if at all possible.

Fiscal Year 1996 Correctional Cost/Bed at Capacity and at Average Annual Population

	Cost per Bed at Operational Capacity	Cost per Bed at Avg. Annual Population	Difference
Minimum Security			
IRCC	$30,950	$26,061	($4,889)
WSR	$25,163	$25,163	$0
WCCW	$23,117	$33,025	$9,907
CCCC	$19,831	$16,346	($3,485)
CRCC	$19,649	$19,649	$0
AHCC	$19,470	$19,470	$0
LCC	$18,981	$16,877	($2,104)
MICC	$18,445	$18,445	$0
WSP	$17,667	$17,667	$0
OCC	$16,625	$16,625	$0
Medium Security			
WCCW	$34,016	$34,016	$0
WSR	$31,052	$31,052	$0
MICC	$25,624	$25,624	$0
TRCC	$24,160	$24,160	$0
WCC	$23,093	$22,242	($851)
CBCC	$24,431	$24,431	$0
AHCC	$21,515	$21,515	$0
WSP	$20,050	$19,095	($954)
Close Security			
SOC	$62,387	$62,387	$0
WCCW	$39,226	$46,417	$7,191
WCC	$28,129	$28,129	$0
CBCC	$27,785	$27,785	$0
WSP	$25,634	$24,658	($975)
Maximum Security			
WCC	$32,957	$51,060	$18,103
WSP	$29,159	$45,175	$16,017
CBCC	$34,743	$53,827	$19,084

Note: Full institution names and acronyms appear on page viii of the report along with operational capacity figures for June 1995.

LBC and DOC data, January 1994.