Secretary of State

State of Oregon

DEPARTMENT OF CORRECTIONS

Prison Construction Program

Long-Range Planning and Budgeting

Audits Division

-

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This report contains the results of our audit of the Department of Corrections' prison construction program. Because this $1 billion construction program is the largest prison construction program in state history, the Oregon Audits Division has been reviewing this program through a series of audits. This audit of the department's long-term planning and budgeting is the third such review. It is our intention that, by reviewing the department's construction program as it progresses, we will provide the state with meaningful and timely recommendations for improvements.

The department is now at an important juncture in its construction program. With the construction of the first two facilities on its plan, the department has an opportunity for re-evaluation. This audit found that the decisions the department made, such as the number and type of beds to construct, the design of the new prisons, and the use of project cost savings, have a substantial impact on overall construction cost. The department, along with the governor, the Legislative Assembly, and other stakeholders, should review these decisions in light of current information and analysis to determine whether changes in the construction program are advisable.

Oregon is now positioned to make lasting decisions about the future of its prison construction. We hope that our recommendations will help the state make the best choices for the future.

OREGON AUDITS DIVISION

John N. Lattimer
Director

Fieldwork Completion Date:
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T A B L E O F C O N T E N T S

EXECUTIVE SUMMARY

The Oregon Department of Corrections (department) is in the early stages of a $1 billion prison construction program. With the construction of the first two prisons on its plan, the department has an opportunity to conduct additional analysis and re-evaluate key decisions made to date.

The department plans to build more prison beds than forecasted need for the next ten years.

- **The Department Should Re-Evaluate Its Long-Range Construction Plan.** The ten-year prison population forecast has been consistently declining, from a high of 19,592 inmates to 14,158 inmates expected by 2008. The department made some revisions to its prison construction plan to reflect population reductions; however, it could make further revisions to achieve significant cost savings. At the completion of the Two Rivers prison in November 1999, the department's current plan will result in surplus prison beds through 2008. This surplus ranges from a low of 426 beds in October 2002 to a high of 1,935 beds in November 2004, and averages 946 surplus beds. This continuous surplus comes at a great cost. If the department could identify opportunities to reduce the surplus prison beds by 400, it could save over $30 million. Further, the department has not begun construction of 7,154 beds remaining on its long-range construction plan. According to the current forecast, the department will need only 3,352 additional beds by January 2008. The department, with the governor, the Legislative Assembly, and other stakeholders, should re-evaluate whether all of the planned and/or existing prisons are necessary to meet the forecasted need and should determine which of the remaining prison beds should be not be constructed.

The department plans to construct beds at security levels higher than the forecasted need.

Because of the significant cost differences between minimum, medium, and maximum security beds, the department should strive to more closely match the forecasted security need. With the November 1999 completion of the Two Rivers prison, the forecast shows that the department will have an excess of 2,438 medium and maximum security beds, but a shortage of 1,060 minimum security beds. While having excess maximum and medium security beds provides flexibility in housing inmates, this comes at a significant price. These higher security level beds cost $34 million more than the optimal mix of beds that would more closely match the security levels of the forecasted population. The department should re-evaluate its planned mix of security level beds to maximize its use of existing medium security space.

- **The Department Should Conduct the Analysis Necessary to Ensure that It Is Building at Least Cost.**
  As required by law, the department must make every effort to construct its new prisons at the least possible cost. If the department is not constructing prisons at the least possible cost, then it should be able to demonstrate that higher cost choices are justified over the long-term on a lifecycle cost basis. However, the department was unable to produce evidence that such an analysis had been done. To determine whether Oregon is building its prisons at the least possible cost, we surveyed other states with new prison construction. The results of our survey found that Oregon's construction costs are higher than most other states, after adjusting for regional differences in the cost of labor, materials, and equipment. Oregon's average cost per bed is about $78,000 compared to an average cost of about $46,000 in other states. Department officials reported that Oregon's construction costs may be high primarily because Oregon's prisons are being built with 100-year life expectancies and with space for prison industries. However, we found that constructing prisons with 100-year life spans does not have a significant correlation to the cost of construction. Further, we also found that if the new prisons had been constructed without space for prison industries, Oregon's cost per bed would still be higher than average at approximately $67,000 per bed. We found that certain decisions, such as the type of facility constructed and the amount of space per inmate, have a substantial impact on cost. Other states have built prisons with similar options for a lower cost. For the remaining projects in its plan, the department should prepare comprehensive lifecycle cost analyses to determine whether those facilities will meet the statutory requirement to construct public improvements at the "least cost."

Oregon's prison construction costs are higher than average.

The department used more than $20 million in savings and contingency funds for project additions.

The department also has missed opportunities for its current construction projects to come in under budget. As reported by construction officials, more than $20 million in potential savings and contingency funds were used for additions beyond the planned scope of work, such as a firing range, acoustic sound panels, and a regional laundry and transportation facility. While some of these additions may have merit, they were not part of the work planned under the initial project maximum price.

Background and Introduction

Oregon Is Engaged in the Largest Prison Construction Program in State History

Voter-approved ballot measures impact prison construction decisions.

The Department of Corrections (department) is in the early stages of a $1 billion prison construction program to accommodate increases in inmate population.

The increase in inmate population was the expected result of Ballot Measure 11, passed by Oregon voters in 1994, which established mandatory minimum sentences for specified violent crimes. According to the Department of Corrections, this ballot measure restricted the department's ability to manage the prison population using parole, probation, and early release. Ballot Measure 11 went into effect April 1995. At this same time, voters passed Ballot Measure 17, establishing the requirement that all eligible inmates engage in fulltime work. While Ballot Measure 17 did not impact the number of inmates in the corrections system, it did impact some of the decisions made during the prison design process.

During 1995, the Legislative Assembly approved funding for an expansion to the Snake River Correctional Institution in Ontario. The Legislative Assembly also established through statute the Corrections Facilities Siting Authority. This siting authority was given the responsibility to make decisions on siting corrections facilities, subject to the governor's approval. Also during 1995, the governor's office issued an Executive Order, requiring the Department of Administrative Services to issue prison population forecasts twice yearly and the Department of Corrections to use these forecasts when preparing its long-range plans.

In October 1995, the Department of Administrative Services' Office of Economic Analysis issued its first prison population forecast. This forecast has been updated subsequently every six months.

The Department of Corrections issued its long-range prison construction plan to the June 1996 Emergency Board. The plan called for the construction of several new prisons, the expansion of several existing facilities, and the closure of some current bed space, bringing the total beds available in the corrections system to 19,694 by 2005. The department also requested that the Emergency Board approve funding for the evaluation and acquisition of potential prison sites. The Emergency Board approved the request.

In December 1996, the governor approved four sites recommended by the siting authority. These sites included Madras, Umatilla, Lakeview, and Oakridge. The Emergency Board approved funding for the facility in Umatilla in January 1997.

The governor accepted the recommendation of the siting authority of the Dammasch site in Wilsonville on May 15, 1997. The following month, the governor accepted the recommendation of the siting authority of sites in Junction City and Medford. On January 30, 1998, the Emergency Board approved funding for the facility in Wilsonville. A chronology of key events can be found in Appendix A of this report.

Current Prison Construction Projects

Two prison construction projects are underway.

The following are two new prisons on the department's construction plan that have already broken ground:

- **Snake River:** a 2,348 bed medium security prison expansion in Ontario is scheduled to be completed in November 1998 at an estimated total cost of $179 million; and

- **Two Rivers:** a 1,536 bed medium security prison with a 96-bed minimum security attachment in Umatilla is scheduled to be completed in November 1999 at an estimated total cost of $149 million.

This is the largest prison construction program in Oregon history, with the Snake River project alone being recognized as the largest state-financed construction project ever. In reality, construction costs are only the down payment on a prison's total cost to society. According to the federal Bureau of Prisons, the cost to operate a prison over its useful life is 15 to 20 times its construction cost. Therefore, the department's $1 billion initial cost of construction translates into a long-term investment by the state of up to $20 billion.

Chapter 1: The Department Should Re-Evaluate Its Long-Range Construction Plan

The prison population forecast has consistently declined from a high of 19,592 inmates to 14,158 inmates expected by 2008.

Oregon's Office of Economic Analysis issues a semiannual Prison Population Forecast under Executive Order EO-95-06. Under the Executive Order, this forecast must be used by the department to prepare its budget and to develop its long-term plans. We reviewed all six forecasts released under the Executive Order, from October 1995 to April 1998. Each of these forecasts predicts Oregon's prison population over a ten-year period.

As shown in Figure 1, the peak prison population forecast was in April 1996. That forecast showed a prison population of 19,592 inmates by July 2005.[1] Since that report, however, each new forecast has shown a lower predicted inmate population. By April 1998, the forecast dropped to 14,158 inmates, a reduction of 5,434 (28 percent) from the highest estimate.

Figure 1: Prison Population Forecasts October 1995 through April 1998

Report date:	Projected to:	Population forecast:
October 1995	July 2005	18,168
April 1996	July 2005	19,592
October 1996	July 2006	17,752
April 1997	January 2007	15,168
October 1997	July 2007	14,346
April 1998	January 2008	14,158

[1] The April 1996 forecast was subsequently revised to 19,246, a reduction of 346. This revised number was to be used for planning purposes until the release of the October 1996 forecast.

The Department Plans to Build More Prison Beds Than the Forecasted Need for the Next Ten Years

The department should ensure that it is only building prisons as they are needed.

Because of the high cost associated with building prison space, the department should ensure that it is only building facilities as they are needed. In May 1996, the department planned to increase the capacity of Oregon's corrections system to 19,694 beds. The department has since made revisions to its long-range plan and presented its most recent plan at the June 1998 Legislative Emergency Board meeting. This revised plan includes the construction of 11,134 beds, bringing the total number of prison beds in the system to 17,814. Construction of 7,154 of these beds had not yet begun as of October 1998. In addition, the completion dates for the medium security facilities in Junction City and White City are listed as "to be determined," even though the department has kept these two facilities on its plan and has taken steps to acquire the land and plan for infrastructure for both facilities. Figure 2 shows the department's current long-range construction plan and describes the facilities and number of beds the department plans to construct.

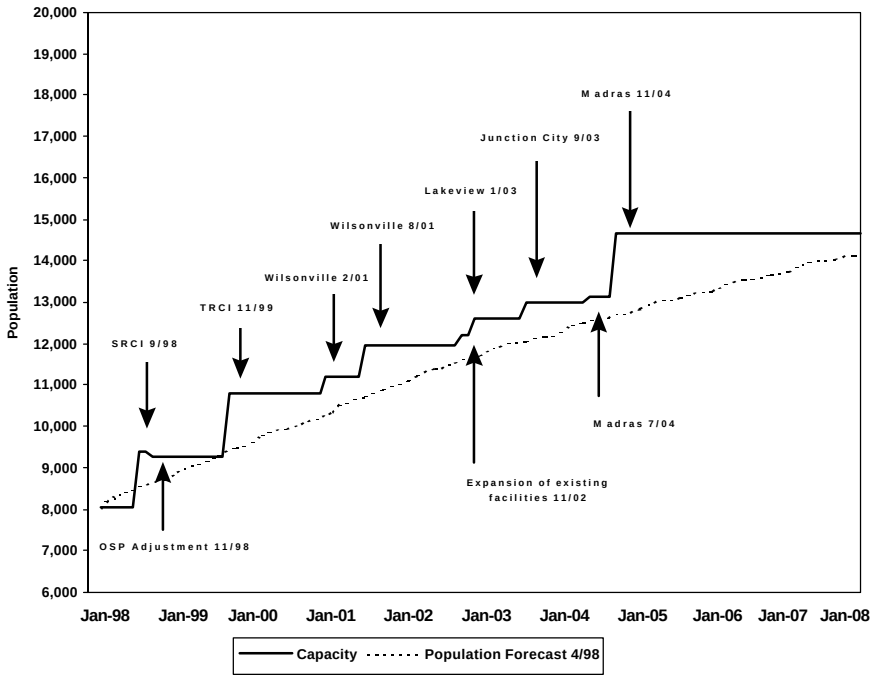
Figure 2: Long-Range Construction Plan May 1998

Facility:	Number of beds:	Completion date:
Snake River expansion	2,348	Sept 1998
Umatilla (medium)	1,632	Nov 1999
Women's/Intake complex	1,304	Aug 2001
Expansion of three existing minimum security facilities	250	Nov 2002
Lakeview (minimum)	400	Jan 2003
Junction City (minimum)	400	Sept 2003
Madras (medium)	1,632	Nov 2004
Junction City (medium)	1,536	To be determined
White City (medium)	1,632	To be determined

The department's current long-range construction plan will result in surplus prison beds.

Although the department has stated that its goal is to construct facilities only as needed, the department's current plan will result in the department building surplus prison beds. According to the April 1998 forecast, the inmate population will reach 14,158 by January 2008. Upon the completion of the Two Rivers prison in November 1999, the department will have capacity for 10,806 inmates. Therefore, the department needs to construct space for 3,352 additional inmates by January 2008. The department should re-evaluate the remainder of its construction plan and its existing space, with input from the governor, the Legislative Assembly, and other stakeholders, to determine whether the excess 3,802 beds are necessary to meet the forecasted need, and if not, which of the remaining beds on the plan should not be constructed.[2] Figure 3 depicts system capacity and the forecasted number of inmates through January 2008.

Figure 3: System Capacity Versus Forecasted Need



[2] This excess capacity was determined by subtracting the number of additional beds needed by January 2008 (3,352) from the number of beds remaining on the department's long-range prison construction plan (7,154).

As can be seen in Figure 3, after the completion of the Two Rivers facility in November 1999, the department will maintain a continuous surplus of beds through January 2008. This surplus ranges from a low of 426 beds in October 2002 to a high of 1,935 beds in November 2004, and averages 946 beds. This continuous surplus comes at a great cost. If the department could identify opportunities to reduce the surplus capacity by 400 beds, it could save over $30 million.

According to the department, 200 to 300 extra beds are needed for inmate and capacity management purposes, such as for moving inmates between facilities and for disciplinary reasons. However, even if the department reduced the surplus by 225 beds, it could still save more than $17 million.

Options Exist For Reducing Surplus Prison Beds

The department, with the governor, the Legislative Assembly, and other stakeholders, should re-evaluate whether all of the planned and/or existing prisons are necessary to meet the forecasted need. If the surplus prison beds are not warranted, the department has a number of options to reduce its capacity.

Reductions in the long-range plan can be achieved by eliminating existing prisons or several combinations of planned prisons.

One option to reduce the surplus beds would be to continue to build the new prisons according to current plans, and concurrently shut down existing prison space when it is no longer needed. For this to be a cost-effective option, the department should show how the additional construction costs would be offset by reduced operating costs of the new facilities.

Another option would be to determine which of the proposed facilities on the department's current plan should not be constructed. Facilities remaining on the plan include Wilsonville, Lakeview, Madras, Junction City, White City and expansions to existing facilities.

Upon the completion of the Two Rivers prison in November 1999, the department will have a surplus of 1,378 beds. Because of the high costs associated with building prison space, the department should strive to maximize its use of these surplus beds before opening additional facilities. One option the department should explore is the feasibility of operating co-gender facilities. Currently, the prison system has 421 beds for female inmates. The department is also converting 180 male beds at the Eastern

Oregon Correctional Institution to approximately 155 female beds. The conversion, to be completed by the end of 1998, will bring the system capacity for females to 576 beds. Over the next ten-year period, the current forecast predicts the number of female inmates to reach 811. The department therefore needs to identify space for 235 female inmates within its system over the next ten years. In the new facilities, inmate services are decentralized so that inmates will eat, sleep, exercise, and receive most other services within the 96-person housing units. This design would allow the department to house male and female inmates or inmates from competing gang affiliations in different units within the same prison, without interacting or seeing one another. The department could take advantage of this design feature to help maximize its use of existing space.

The Department Plans to Construct Beds at Security Levels Higher Than the Forecasted Need

Constructing beds at higher security levels than the forecasted need will cost $34 million more than the optimal mix.

Because of the significant cost difference between minimum, medium, and maximum security level beds, the department should try to more closely match the forecasted security level need. Oregon corrections officials reported construction costs for medium security beds at $75,000 per bed. Costs for minimum security beds were reported at $42,000 per bed, a $33,000 difference. Maximum security bed costs were even higher, at $112,000 per bed.[3] While constructing higher security level beds will provide the department more operational flexibility — lower security inmates can be placed in higher security facilities, while higher security inmates cannot be placed in lower security facilities — this construction comes at a great cost.

At the completion of the Two Rivers prison in November 1999, the department will face a projected shortage of 1,060 minimum security beds, but will have a surplus of 2,438 maximum and medium security beds. This will likely result in the need for the department to house lower-risk inmates in more expensive higher security beds. These higher security beds cost $34 million more than the optimal mix of beds that would more closely match the security levels of the forecasted population. According to the

[3] Based on information published by the Criminal Justice Institute in the Corrections Yearbook, 1997. Data was compiled from a survey questionnaire mailed to state and federal correctional agencies in the United States and Correctional Service of Canada, to probation and parole agencies in the United States and the Canadian National Parole Board, and to jail systems in the United States housing over 200 prisoners.

department, at the time it began constructing this facility, the available forecasts identified a need for more medium security beds. The forecasts have since changed. The next facility the department plans to construct is primarily a medium security prison using the same basic segregated unit design as described at the top of page seven. The intended use of this facility is to house female inmates and to serve as a co-gender intake center. Because the department has a current surplus of medium security beds, it should evaluate whether it is feasible to take advantage of the new prison design features to maximize existing medium security space prior to constructing additional medium security beds.

Recommendations

We recommend that the department, in concert with the governor, the Legislative Assembly, and other stakeholders, determine whether all of the planned and/or existing facilities are necessary to meet the forecasted need. Any facilities found to be unjustified should not be constructed. Plans should also be reviewed to determine whether there is an appropriate mix of minimum, medium, and maximum security beds. The department should strive to maximize the space available within its current system before opening any additional new facilities. One option the department should explore is the flexibility in its current system for operating co-gender facilities. Finally, we recommend that the department develop internal procedures to ensure that revisions to its long-range prison construction plan more closely match the prison population forecast.

Chapter 2: The Department Should Conduct the Analysis Necessary to Ensure that It Is Building at Least Cost

Analyzing costs on a lifecycle basis can justify higher construction cost choices.

According to Oregon law (ORS 279.023), public agencies must "make every effort to construct public improvements at the least cost to the public agency." To demonstrate "least cost," the department will need to show that either (1) facilities are being built at the least possible cost, or (2) higher costs are justified on a long-term basis. Higher cost construction choices may be justified because they reduce long-term operating costs or extend the useful life of facilities. Analyzing costs on a lifecycle basis can demonstrate, for example, that higher capital construction costs are more than offset by reduced staffing and operating costs in subsequent years. A lifecycle cost analysis estimates ongoing costs over a period of time and takes into consideration not only the initial construction cost of a project, but also the anticipated operating, maintenance, and future capital costs over the expected life of the building. If the department is not constructing new prisons at the least possible cost, then conducting a lifecycle cost analysis can help show whether higher up-front construction cost choices are justified on a long-term basis.

To determine whether the department is complying with the "least cost" provision, we asked the department for information or analysis that would show that the department is constructing at the lowest possible cost or that additional costs were warranted on a long-term basis. The department was unable to produce any evidence that such an analysis has been done. In addition, we were unable to identify any records, data, or other analysis that would show the extent to which high, up-front investment would be offset by a reduction in future operating costs.

Oregon's Construction Costs Are Higher Than Average

Oregon's prison construction costs were significantly higher than construction costs of other states.

We conducted our own analysis of Oregon's prison construction costs relative to costs in other states. According to the Criminal Justice Institute's 1997 Corrections Yearbook, fourteen states reported complete construction cost data for recently opened prisons in 1996. We verified the reported construction cost data with appropriate officials in each of the fourteen states and found, after adjusting for local economic conditions, that Oregon's prison construction costs were significantly higher than the average costs for these states. On a per-bed basis, Oregon's average construction cost was $77,649 compared to an average of $45,977 in the other states.[4] The 1997 Corrections Yearbook also lists states' construction cost per bed by security level. Oregon's reported per bed cost for maximum, medium, and minimum security facilities were $112,000, $75,000, and $42,000, respectively, while the averages of all states were $80,562, $50,376, and $31,184.[5]

Department officials reported to us that Oregon's construction costs may be higher than other states primarily because Oregon's prisons are being built with 100 year life expectancies and with space for prison industries. To meet the constitutional mandate to put all inmates to work, the department has constructed new prisons with empty warehouse space for future industries programs. The empty warehouse space accounts for 11 to 14 percent of the total square footage. Had these facilities been constructed without the additional industries space, Oregon's per-bed cost would still be higher than the national average at approximately $67,000 per bed.[6] Further, we also found that the department's decision to construct prisons with 100-year life spans does not have a significant correlation to

[4] Oregon's costs based on 3,980 beds constructed at the Snake River and Two Rivers correctional facilities and an adjusted total construction cost of $309,042,109. All costs were adjusted for regional differences in the costs of labor, materials, and equipment based on area modification indexes published in the 1997 *National Construction Estimator*. Methodology for this analysis was based on work performed by the United States General Accounting Office. See *Prison Costs: Opportunities Exist to Lower the Cost of Building Federal Prisons* (GAO/GGD-92-3) and *State and Federal Prisons: Factors That Affect Construction and Operations Costs* (GAO/GGD-92-73). Further, the reasonableness of using the *National Construction Estimator* to account for regional and state-to-state economic valuation was confirmed by the Oregon State Economist.

[5] These cost figures were not modified for local economic conditions due to data limitations.

[6] Prison industries space accounts for 11 percent of the gross square feet at the Snake River Correctional Institution and 14 percent of the gross square feet at the Two Rivers Correctional Institution. To be conservative, we are assuming that industries space costs the same as the remaining space. Therefore, removing these percentages from the total adjusted cost of construction reduces Oregon's construction cost to $269,655,914.

the cost of construction. To further test this assertion, we surveyed officials in twenty-one states. The results of our survey confirmed the results of the Criminal Justice Institute's survey — that Oregon's construction costs were substantially higher than average. Further, our survey showed that some states with lower costs also built facilities with long life expectancies and with space for prison industries. Figure 4 provides examples of facilities constructed in other states with a lower cost than Oregon's, after adjusting for regional economic differences.

Figure 4: Prison Construction in Other States

State	Cost Per Bed	Features
Florida	$18,971	1,496 medium and maximum security beds; 100 year life span; space for prison industries
Missouri	$38,054	1,975 medium security beds; 50 year life span; space for prison industries
South Carolina	$38,333	1,500 medium and maximum security beds; 30+ year life span; space for prison industries
Tennessee	$37,467	1,536 medium security beds; 75+ year life span

Policy decisions have a substantial impact on the cost of new prison construction.

There are many decisions made during the planning process that have a direct impact on the cost of construction. For example, the department's decision to build its new prisons as single, integrated structures has substantial cost implications. According to the U.S. General Accounting Office (GAO), this type of prison design is the most expensive to build.[7] Alternatively, the design of a prison in a campus style with separate buildings was found by the GAO to be the least expensive to build and operate. Further, the GAO also found that the amount of space per inmate accounted for most of the differences in prison construction costs per bed. When comparing the amount of space provided per inmate with the lower cost states in Figure 4, we found that Oregon is providing an average of 377 gross square feet per inmate, while Florida, Missouri, South Carolina, and Tennessee are providing 189, 221, 253, and 189 gross square feet per inmate, respectively.

[7] U.S. General Accounting Office: State and Federal Prisons: Factors That Affect Construction and Operations Costs (GAO/GGD-92-73)

We also asked other states about the types of buildings constructed and specific cost control strategies they used to ensure economical construction. We do not intend these states to be direct comparisons to Oregon, but only examples of different policy choices that resulted in lower construction costs. For example, the state of Florida constructed a campus-style prison. To further control costs, this state used inmate labor to achieve a cost savings of 45 percent of construction costs and took advantage of economies of scale in purchasing. Another state, South Carolina, used a prototype design to construct a prison which also was not an integrated structure. Inmates move from housing units to other buildings for activities such as dining. To further reduce construction costs, this state used a fast track construction approach to reduce construction time, thereby saving costs. Stun fences, roving patrols, and exterior cameras also lowered costs in South Carolina by reducing the need for external guard posts.

In response to our audit findings, the department contracted with the project management firm responsible for the prisons currently under construction to determine why Oregon's prison construction costs are higher than the average costs in other states. We commend the department for initiating this analysis and hope the information obtained will enable it to identify opportunities to achieve its goals at the least possible cost.

The Department Missed Opportunities for its Current Projects to Come in Under Budget

We also found that the department missed opportunities for its current construction projects (Snake River and Two Rivers correctional facilities) to come in under budget. According to construction officials at each site, any cost savings generated from the project, such as savings from the use of inmate labor and savings from the actual cost of work being lower than anticipated, were used by the department for additions to the project.

The department used more than $20 million in project savings and contingency funds for additions to two prisons.

For example, at the Snake River project, construction officials estimated that the project could have been completed for $138 million, which was $6 million less than the initial project maximum price of $144 million. The department used these savings for additions, such as $200,000 for a firing range, $35,000 for acoustic sound panels, and $43,774 for rubberized flooring in the gymnasium weight rooms, rather than constructing the project at the least possible cost. In addition, the department used more than $9.5 million in contingency funds for further additions to the

Snake River project beyond the scope of work established by the project's initial maximum price.

For the Two Rivers project, construction officials expect approximately $4.4 million in project savings. The department plans to use these savings, along with $2 million in contingency funds, to add additional features to the project, such as a regional laundry and transportation facility. While these additions may have merit and may ultimately reduce future operating costs, they were not part of the work planned under the project's initial maximum price.

Recommendations

We recommend that the department prepare additional analysis showing how future construction plans are in compliance with ORS 279.023. Such an analysis should review lifecycle costs for planned facilities and show how the department's plans achieve the statutory "least cost" mandate. The department should provide this information for legislative review at the time of any future construction budget requests. Additionally, the department should conduct a similar analysis for its current construction projects and provide this information to policy makers on a timely basis for review. This will allow policy makers to more fully understand whether current construction projects were conducted with the "least cost" mandate in mind. Finally, the Legislative Assembly should require the department to justify expenditure of cost savings and contingency funds for activities outside the planned scope of work.

Objectives, Scope and Methodology

This audit is the third in a series of audits of the Department of Corrections' prison construction program. The objectives of our audit were to:

(1) determine the extent to which the department periodically evaluates and revises its long-term prison construction plan to reflect revised prison population forecasts; and

(2) determine whether or not the department's prison design and budget process facilitates an effective balance between the need to construct quality buildings and the need to control construction and long-term operating costs.

To accomplish these objectives, we interviewed personnel from the department as well as other independent professionals and state officials knowledgeable in these fields. We interviewed officials from more than 20 states to discuss their prisons and consulted with private sector, local, and federal officials. We visited prison facilities in Oregon, observing both facility operations and construction planning. We reviewed applicable laws, rules, policies and procedures, and records related to the department's construction planning and design and budgeting processes. We researched relevant standards for effective practices described in professional literature and practices in other states. All tables and charts in this report were compiled from publicly available data. We sought agreement with the department to assure the accuracy of population and construction data.

We conducted our audit in accordance with generally accepted government auditing standards. We limited the scope of our review to the topic areas specified in this section.

Report Distribution

This report is a public record and is intended for the information of the Oregon Department of Corrections, the governor of the state of Oregon, the Oregon Legislative Assembly, and all other interested parties.

Commendation

The courtesies and cooperation extended by the officials and staff of the Oregon Department of Corrections were commendable and much appreciated.

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Appendix A

Appendix A: Chronology of Major Events

November 1994	The voters pass Ballot Measure 11. This measure mandates minimum sentences for certain crimes against persons.
1995 Legislative Session	The Legislative Assembly funds a 2,348 bed expansion of the Snake River Correctional Institution in Ontario.
April 1995	Ballot Measure 11 goes into effect.
July 19, 1995	Oregon Revised Statute 421.621 goes into effect establishing the Corrections Facilities Siting Authority. The siting authority has the responsibility to make decisions on siting corrections facilities, subject to the governor's approval.
July 27, 1995	The governor's office issues Executive Order 95-06. This order requires the Department of Administrative Services (DAS) to issue Oregon prison population forecasts twice yearly. This order also requires the Department of Corrections to use these forecasts when preparing its long-range plans.
October 1995	The DAS Office of Economic Analysis issues a prison population forecast of 18,168 inmates by July 2005.
February 20, 1996	Consultants, hired by the Department of Corrections, finished a long-range prison construction plan. The plan includes the construction of four new 1,536-bed men's medium security prisons with 100 bed minimum security attachments, one new 1,350 bed women's prison and co-gender intake center, seven new 400 bed minimum security prisons, and expansions at several existing institutions. This plan would bring the total number of beds available in the corrections system to 20,501.
April 1996	The DAS Office of Economic Analysis issues a revised prison population forecast, increasing the forecast to 19,592 inmates by July 2005. Later that month, the office adjusted this forecast to 19,246.

May 23, 1996	The Department of Corrections presents to the Emergency Board its long-range prison construction plan. This plan calls for the addition of five new 1,536 bed medium security facilities with 100 bed minimum security attachments, one new 1,335 bed women's prison and co-gender intake center, two new 400 bed minimum security facilities, and expansions at several existing facilities. The plan also closes some current bed space, bringing the total beds available in the corrections system to 19,694 by 2005.
June 21, 1996	The Department of Corrections requests that the Emergency Board approve funding for evaluation of 24 sites and acquisition of six 200-acre and two 35-acre sites.
October 1996	The DAS Office of Economic Analysis issues a revised prison population forecast, decreasing its estimate by 1,494 inmates. The office estimates 17,752 inmates by July 2006.
October 15, 1996	The Department of Corrections revises its long-range prison construction plan. The plan removes one medium security prison and makes other miscellaneous adjustments, bringing the total number of beds available in the corrections system to 18,060 by 2005.
December 11, 1996	The governor approves four sites recommended by the siting authority. Madras and Umatilla were approved for new men's medium security prisons, and Lakeview and Oakridge were approved for minimum security work camps.
January 10, 1997	The Emergency Board approves funding for a 1,632 bed men's medium security facility in Umatilla.
February 1997	The Department of Corrections revises its long-range prison construction plan. The plan makes miscellaneous adjustments, bringing the total number of beds available in the corrections system to 18,054 by 2005.
April 1997	The DAS Office of Economic Analysis issues a revised prison population forecast, decreasing its estimate by 2,584 inmates. The office estimates 15,168 inmates by January 2007.

Appendix A: Chronology of Major Events

April 4, 1997	The Department of Corrections revises its long-range prison construction plan. The plan changes a medium security prison to a minimum security work camp and makes other miscellaneous adjustments, bringing the total number of beds available in the corrections system to 16,502 by 2007.
May 15, 1997	The governor accepts the recommendation of the siting authority of the Dammasch site in Wilsonville for the women's correctional facility and co-gender intake center.
June 9, 1997	The governor accepts the recommendation of the siting authority of Junction City and Medford for men's medium/minimum security prisons.
October 1997	The DAS Office of Economic Analysis issues a revised prison population forecast, decreasing its estimate by 822 inmates. The office estimates 14,346 inmates by July 2007.
October 9, 1997	The Department of Corrections revises its long-range prison construction plan. The plan removes one medium security prison and makes other miscellaneous adjustments, bringing the total number of beds available in the corrections system to 14,516 by 2007.
January 30, 1998	The Emergency Board approves funding for a 1,112 bed women's prison and co-gender intake center in Wilsonville.
April 1998	The DAS Office of Economic Analysis issues a revised prison population forecast, decreasing its estimate by 188 inmates. The office estimates 14,158 inmates by January 2008.
May 1998	The Department of Corrections revises its long-range prison construction plan. The new plan eliminates a minimum security work camp, adds back two medium security prisons, and makes miscellaneous adjustments bringing the total number of beds available in the corrections system to 17,814, with 14,646 beds scheduled to be completed by November 2004. The completion dates for two of the remaining medium security prisons are listed as "to be determined."

AGENCY'S RESPONSE TO THE AUDIT REPORT

Oregon

November 24, 1998

Mr. John Lattimer, Director
Audits Division
Secretary of State
Public Service Building, Suite 500
Salem, Oregon 97310

DEPARTMENT OF CORRECTIONS

OFFICE OF THE DIRECTOR

Dear Mr. Lattimer,

This is the Department of Corrections response to the audit recently completed entitled "DEPARTMENT OF CORRECTIONS - Prison Construction Program – Long-Range Planning and Budgeting. In summary, the Department disagrees with the conclusions drawn by the auditors and finds the lack of context presented to be extremely disturbing. Considerable effort was made by the Department to explain the impact of a rapidly growing inmate population and voter mandates, including Ballot Measures 11 and 17, (which establish mandatory minimum sentences and mandate inmates work or be in workforce development activities for 40 hours per week.) These issues are briefly mentioned; however the impact on Department operations, and significant impact on the design for new construction projects is not adequately addressed in the audit. In addition, the audit suggests the Department has no planning process which acknowledges prison forecast needs, and insinuates unilateral decision-making without knowledge and input from the Governor and Legislature. Nothing could be further from reality. Specific issues will be addressed in the discussion to follow. 1

The audit objectives outlined on page 15 are stated as follows:

1) determine the extent to which the department periodically evaluates and revises its long-term prison construction plan to reflect revised prison population forecasts; and
(2) determine whether or not the department's prison design and budget process facilitates an effective balance between the need to construct quality buildings and the need to control construction and long-term operating costs.

Department response:

With respect to the first objective, the Chronology of Major Events, detailed on pages 21 through 23, does identify dates and generic descriptions of changes to the long-range construction plan; however, a description of the Department's whole planning and revision process was not included in the report. That information provides the context essential to a reader of the audit and is described below.

John A. Kitzhaber
Governor

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The Department's original long-range construction plan was developed in May 1996. . . An update was then done every six months

CONSTRUCTION PLANNING PROCESS:
Prior to the spring of 1996 the Department had no formal planning process to determine when new institution capacity would be necessary, nor the type (i.e. women's or men's beds, and custody level). That left the Department in a reactive mode, where new construction lagged bed need and temporary housing solutions were necessary to accommodate the rising prison population. The problem intensified with the 1994 passage of Ballot Measure 11, which established mandatory minimum sentences for 16 crimes, with no reduction in sentence length for any reason. This caused significant growth in the number of necessary prison beds. The Department's original long-range construction plan was developed in May 1996, specifically addressing the April 1996 prison population forecast, including gender and custody splits. An update was then done every six months to acknowledge changes in the prison population forecast. The update reflects the forecast gender and custody split information – and the construction plan is revised to match the identified need. The changes are reported to and discussed with the Governor's Office, Department of Administrative Services, Legislature, or Emergency Board.

2

PRISON DESIGN AND BUDGET PROCESS
With respect to the second objective, the Department utilized a twelve person design team to examine the available construction, program, and technology options for the men's prototype facilities and the Women's Prison / Intake Center. This planning process included input from over 300 corrections, engineering, and construction professionals. After more than a year of research and development, the team was confident that the designs met the following criteria: 1). ensure safety and security; 2). create work for inmates; 3). reduce operational costs; 4). emphasize energy efficient operations and minimize negative impact on the environment; 5). incorporate the use of technology where ever it is cost effective; 6). minimize large inmate line movements and group activities; 7). maximize the use of multi-purpose space with an emphasis on a close functional adjacency between the housing units and inmate activity areas.

These elements were incorporated into the prototype medium security men's complex. After review by the Executive Branch, the Emergency Board reviewed the design and

underlying principles during the January 1997 meeting. The Board ultimately authorized the expenditure necessary for construction of the facility currently being built in Umatilla, called the Two Rivers Correctional Institution.

The next portion of this response very briefly discusses the bold statements set out in the audit's Executive Summary. Detailed responses to these highlights follow in the chapter responses.

Audit comment: The department plans to build more prison beds than forecasted need for the next ten years.

Department response: *The audit notes the current construction plan will result in surplus prison beds through 2008, ranging from a low of 426 beds to 1,935. Three issues are reflected here. The first reflects the policy decision adopted by the Governor and Legislative Branch in each version of the plan that Oregon inmates are appropriately housed in Oregon. Given that policy, the Department does indeed plan to have housing available when the forecasted need exists. Second, the referenced large "surplus" of 1,935 occurs upon the planned completion of the next medium security male complex. Construction of large facilities is only cost-effective to complete at one time, rather than in phases, which does produce constructed capacity temporarily exceeding the daily population need within the system. That is addressed through the Department's population management plans, where staff is not hired and those portions of the facility not yet necessary for inmate population are not operated. Finally, the referenced "surplus" includes all special purpose housing, such as the Intensive Management Units (IMU), disciplinary segregation, etc.* 3 *These beds can not be managed as general population beds, as they are for very specific purposes and have rules and procedures which govern their use. Just the IMU beds alone will total approximately 400. It should also be noted that just the month before the noted 1,935 surplus, the surplus for men is only 360 beds. Even that difference is less than desirable to manage an estimated male population, as of that date, of almost 12,000.*

Audit comment: The department plans to construct beds at security levels higher than the forecasted need.

Department response: *As previously outlined, a plan update is done every six months to acknowledge changes in the prison population forecast. The update reflects the forecast gender and custody split information – and the construction plan is revised to match the identified need. The reference to more medium and maximum security beds in the system at completion of TRCI and a shortfall of minimum beds results from a change in forecasted need between the time of approval of that facility and current forecasts. However, once construction of a facility is begun, it is neither feasible, nor cost-effective to stop construction and begin construction of a lower security facility. The way to adjust for the change is to build the appropriate security level institution when it is determined necessary by the overall system capacity need. This is what DOC has proposed with the approval of the Governor and Emergency Board. One other note, the following audit statement infers that the Department intentionally built higher security institutions than necessary - "While having excess maximum and medium security beds provides flexibility in housing inmates, this comes at a significant price." Actual history does not in any way support that inference, which was repeatedly pointed out to the audit team.*

4

Construction of large facilities is only cost-effective to complete at one time, rather than in phases

Audit comment: Oregon's prison construction costs are higher than average.

Construction of both SRCI and TRCI have been in response to a critical bed need.

Department response: *Drivers which impact the cost of Oregon's prisons include: programs; schedule / siting; Oregon Building Codes; life cycle cost analysis / value engineering. For example, the Oregon constitutional mandate for inmate work requires development of an extensive prison industry program. The design for new institutions acknowledge this and allow movement from housing units to industry buildings in any type of weather, and at any time of day. This is accomplished through use of secure corridors to connect buildings which does increase costs when compared to an open campus style prison construction. Aggressiveness of a construction schedule also impacts costs. Recent Oregon construction of both SRCI and TRCI have been in response to a critical bed need. This influenced not only the construction process but construction methods as well. Differences in building codes can result in major differences in cost. For example, pre-engineered metal buildings are allowed in some states, but prohibited in Oregon. Finally, the Department has utilized life*

Differences in building codes can result in major differences in cost.

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cycle analysis and value engineering for ultimate selection of building systems. Referencing just energy conservation measures for the TRCI facility, the Department ultimately invested $1.1 million that will return an estimated $250,000 per year in energy savings.

Audit comment: The department used over $20 million in savings and contingency funds for project additions.

Department response: To accommodate the fast track construction necessitated by the growing prison population, the CM/GC process was utilized. This process, unlike other methods, allows for scope changes at any time during the initial design process up to the end of construction. This is necessary as schematics are not final when construction begins. What the audit refers to as additions beyond the planned scope of work are in most instances details established in the later stages of design, elements originally reduced to stay within a target budget, or items later determined to be cost effective. The specific SRCI examples are explained as follows:

- Tiled floors and finished gym surfaces are standard throughout the Department to enhance cleanliness and reduce injuries.
- Soundproofing enhances security and programming.
- The firing range was in the original design for SRCI, although additional funds were later required to support necessary revisions made to the design.
- The industries building was reduced in size from original discussions to ensure DOC would stay within a target budget. When bids came in under estimates, funds were assured to allow for expansion to the larger capacity.
- The transport facility is the cost effective example. Again using available funds from the lower bids, construction of this additional space was possible which will allow the Department to move from rented space.

The next comments provide the necessary historical perspective, followed by detailed responses to the recommendations contained in chapters 1 and 2.

The 1995 Legislature provided funding for the Department to contract with consultants for development of a long-range construction plan, which became the basis for the

Department's Long-Range Construction Plan. In addition, ORS 184.351 was adopted which reads in part as follows:

(1) The Oregon Department of Administrative Services shall issue state corrections population forecasts including, but not limited to, expected populations of prisons and jails and community corrections caseloads, to be used by:

(a)The Department of Corrections in preparing budget requests; ...

(3) The Oregon Department of Administrative Services shall issue state corrections population forecasts on April 1 and October 1 of each year.

The Department's original Long-Range Construction Plan reflected the April 1996 population projection, including recognition of the anticipated growth of offenders by gender and custody level. In total, the projection identified the need for over 19,000 beds by June of 2005. The plan called for completion of the Snake River Correctional Institution expansion ahead of schedule, the addition of eight new prisons or prison complexes, and the expansion of four existing institutions. The Departments' plan was approved by the Emergency Board. In addition, funding was approved for site identification, evaluation, acquisition for the eight new sites, plus design costs for sites 1 and 2. The Emergency Board also requested the Department return to the September 1996 meeting to further validate the need to purchase sites 7 and 8 at the same time as the other sites, versus waiting until a later date. The Department began the siting process in July. As requested, the Department reported to the Emergency Board in September and received approval to proceed with the siting of a seventh site. The prison population forecast issued for October 1996 did indicate a slowing in the growth of the prison population and the Department's update to its Long-Range Construction Plan verified it could eliminate one of the original five medium security men's complexes. Four sites were recommended by the Siting Authority and approved by the Governor in December 1996, with the remaining three approved in May and June 1997.

As the Department revised its Long-Range Construction Plan to reflect each six month update to the prison population forecast, the changing mix of gender and custody level was accommodated, as well as the overall number of anticipated

It is not a question of whether or not the sites will be necessary, but when.

inmates. The April 1996 forecast, which established the basis for the Department's Plan, reflected the passage of Ballot Measure 11. The forecast assumed that sentencing practice would not change as a result of the measure. The long sentences meant not only a projected need for significantly greater capacity, but also in part determined the security level of the necessary new facilities because length of time is one factor considered. Longer terms may equate to higher custody. Therefore, the forecast and the original plan reflected the need for several large new medium security male facilities. As time progressed, the forecast was modified to reflect the actual adaptations of the criminal justice system, which showed changes in charging practice, and modified sentence lengths etc., which ultimately changed the anticipated mix of security level for the added facilities. However, construction of the first medium security male institution (TRCI) was already underway (based upon the need reflected in earlier forecasts). Once construction of a facility is begun, it is neither feasible, nor cost-effective to stop construction and begin construction of a lower security facility. The way to adjust for the change is to build the appropriate security level institution when it is determined necessary by the overall system capacity need. Adjustments have been made to the Long-Range Construction Plan to accomplish exactly that. For example, expansion of DOC minimum security institutions has been advanced and the medium facilities delayed. Also, necessary construction within the 10-year forecast window only carries a completion date. The remaining facilities will be scheduled as the forecast need is identified. However, with exception of the Oakridge site, which was dropped due to environmental reasons, no other sites will be eliminated. The properties will be purchased and infrastructure planning begun. It is not a question of whether or not the sites will be necessary, but when. Each plan revision has been shared with and accepted by the Executive and Legislative Branch.

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Chapter 1 Recommendations:

1. We recommend that the department, in concert with the governor, the Legislative Assembly, and other stakeholders, determine whether all of the planned and/or existing facilities are necessary to meet the forecasted need. Any facilities found to be unjustified should not be constructed.

Response: This recommendation and earlier statements in the body of the audit suggest the Department intends to move ahead on its own motion and construct unnecessary facilities without benefit of conversation with anyone. As the reader is now fully aware, the Department has a planning process which calls for an update to its Long-Range Construction Plan to reflect the prison population forecast issued every six months by the Department of Administrative Services, Office of Economic Analysis, acknowledging gender and custody level needs. Facilities have been advanced and others delayed to reflect the forecast changes over time. These changes have not only been discussed with the Governor's Office, the Department of Administrative Services, and the Legislature or Emergency Board, but also with the impacted local jurisdictions. Approvals are obtained for each update and as required by law, reflected in the Department's budget requests. Given that the Governor must first advance budget items for the Department, which must then receive approval from the Legislature or Emergency Board for spending, it is not possible for the Department to proceed on its own.

2. Plans should also be reviewed to determine whether there is an appropriate mix of minimum, medium, and maximum security units.

   Response: The audit chastises the Department for building more medium and maximum security beds than identified in current forecasts, which identify a greater need for minimum beds: suggests the Department did that intentionally to provide operational flexibility – lower security inmates can be placed in higher security facilities, while higher security inmates cannot be placed in lower security facilities: and the Department wasted $34 million in the process. Further it suggests DOC utilize "surplus" medium capacity prior to construction of any additional medium security beds. As noted earlier forecasts have changed over the last two years, and adjustments have been made to reflect system reaction to the impact of Ballot Measure 11. This means slower growth in overall numbers of beds and more minimum beds than originally indicated. At the time the first medium male complex was approved (TRCI) the forecast showed it would be out of both minimum and medium beds, even with the construction of 1,536 medium beds.

As to the wasted $34 million – given that these medium beds will be necessary within a few years, inflation on this more expensive type of construction would outweigh any perceived advantage of stopping construction of a facility and restart at a later date (phased construction). Finally, the next facility to be constructed is the Women's Prison / Intake Center. This facility was designated as site one due to the critical need not only for women's beds, but also in recognition that the current intake center must by statute be turned over to Clackamas County.

3. The department should strive to maximize the space available within its current system before opening any additional new facilities. One option the department should explore the flexibility in its current system for operating co-gender facilities.

The Department can and does maximize existing space

Response: The Department can and does maximize existing space including operation of co-gender facilities, but this is not preferred. For example, the Long-Range Plan calls for conversion of the Columbia River Correctional Institution to an all male facility. In addition, currently a separate building at the Eastern Oregon Correctional Institution is being converted to house women, only because of the critical need for housing, and unsatisfactory experiences in housing this population out-of-state. This is a temporary solution only until the new Women's Prison / Intake Center can be built. In addition, the intake process must be moved. It is unfair to Clackamas County to assume DOC will continue to occupy the facility, when the original turn over date was expected to be November 1998. Also, the capacity of that facility is too small to meet DOC's need to house the intake population for assessment purposes for up to 45 days.

4. Finally, we recommend that the department develop internal procedures to ensure that revisions to its long-range prison construction plan more closely match the prison population forecast.

Response: As explained, the Department does have an internal process which calls for an update to the Long-Range Construction Plan every six months based upon the new prison population forecast. That update reflects

the appropriate gender and custody splits, maintains limited capacity in the system for proper management, and ensures capacity is available, as necessary, to house Oregon inmates within the State of Oregon.

Chapter 2

The Department's response will address several of the comments made in chapter 2 prior to addressing the specific recommendations listed at the end of the chapter. The chapter begins by quoting ORS 297.023, which does in part state "It is the policy of the State of Oregon that public agencies shall make every effort to construct public improvements at the least cost to the public agency." The audit goes on to state that "To demonstrate "least cost" the department will need to show that either (1) facilities are being built at the least possible cost, or (2) higher costs are justified on a long-term basis." Neither of these references appear in ORS 297.023 and they ignore the fact that programmatic and operational needs of the state do impact the cost of construction. Therefore, even though an institution can be built for less cost in other jurisdictions, it may not be satisfactory within Oregon. The specific state examples identified in the audit will be discussed. In addition, based upon the scope of work identified for the project, the Department is assured that it is paying "least costs" because all work is competitively bid as mandated under the requirements of ORS chapter 279.

Audit comment: Oregon's prison construction costs were significantly higher than construction costs of other states.

Department response: As noted previously, drivers which impact the cost of Oregon's prisons include: programs; schedule / siting; Oregon Building Codes; life cycle cost / value engineering. Policies such as the determination to house medium security inmates in double occupancy cells rather than in dormitories, and constitutional requirements to put inmates to work have significant cost implications. The latter for example, led the Department to design the new prisons to allow inmate movement from housing units to industries space in any type of weather, or time of day. This would not be possible under a campus style design. Construction for the SRCI expansion phase and TRCI occurred when inmate population forecasts identified a

Life cycle cost analysis and value engineering efforts . . . when amortized over a 30 year period produces $17.3 million in savings.

critical need for beds. To meet an aggressive schedule, construction options were explored which limited the possibility of delay due to shortage of labor or winter weather conditions. The decision to use precast concrete cells 8 *provides an example. These were fabricated at off-site plants throughout the winter months, reducing reliance on on-site labor.*

The "Prison Construction Cost Comparison" recently completed for Oregon by CRSS Constructors, Inc. also speaks to differences in building codes. Identified 9 *differences between states may relate to local climate, seismic issues, and alternate approaches to life, health, safety concerns. The pre-engineered metal buildings allowed in some states do cost less; however, they are prohibited in Oregon for inmate housing. Finally, life cycle cost analysis* 10 *and value engineering efforts are utilized by the Department. The Department, in concert with the CM/GC, architects and engineers, and the Department of Energy identified conservation measures requiring an investment of $1.1 million which will return $250,000 in per year savings. When amortized over a 30 year period this produces $17.3 million in savings. Also, the value engineering effort done during the design development phase produced project options which ultimately saved $1.4 million.*

Audit comment: Policy decisions have a substantial impact on the cost of new prison construction.

Department response: The Department agrees with this statement; however, one issue needs to be clarified. The example given on page 11 states, "The department's decision to build its new prisons as single, integrated structures has substantial cost implications." This statement does not make the reader aware that the decision was made in concert with policy makers from the Executive and Legislative Branch. Budget presentations, which were approved by both bodies, included not only the type of construction and layout of the facilities, but discussion of program elements as well.

A reference is also made on page 12 to the Department's contract with a project management firm to determine why Oregon's prison construction costs are higher than the average costs in other states. The firm did follow up with those jurisdictions compared to Oregon in the audit. Their

The comparison with other states building costs highlighted in the audit was not an apples to apples comparison

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findings are attached. The reader will note the differences in type of construction, area per inmate, stage of construction project, etc., effect the cost of construction. The comparison also adjusts for the variance in cost of construction using the City Cost Indexes from Means Building Construction Cost Data. In conclusion, the comparison with other states building costs highlighted in the audit was not an apples to apples comparison of the cost to construct like facilities. For that direct comparison, please reference table 8 in the attachment.

Chapter 2 Recommendations:

1. We recommend the department prepare additional analysis showing how future construction plans are in compliance with ORS 279.023. Such an analysis should review life-cycle costs for planned facilities and show how the department's plans achieve the statutory "least cost" mandate. The department should provide this information for legislative review at the time of any future construction budget requests. Additionally, the department should conduct a similar analysis for its current construction projects and provide this information to policy makers on a timely basis for review. This will allow policy makers to more fully understand whether current construction projects were conducted with the "least cost" mandate in mind.

   Response: As previously noted, programmatic and operational needs of the state do impact the cost of construction. Therefore, even though an institution can be built for less cost in other jurisdictions, it may not be satisfactory within Oregon. The Department is happy to review the programs, mandates, building code, and all other issues which led to the policy choices previously approved by the Governor and Legislature with respect to the Department's building program. Review of these elements is appropriate each time the Department requests authority and funding for construction of a new facility. The mandate for "least cost" is then addressed through the competitive bid process. For each construction element, bids are requested and the Department is obligated to select the low bid, as long as the bidder is responsible and responsive. In addition, the Department implements value engineering through all phases of the project to ensure receipt of the best

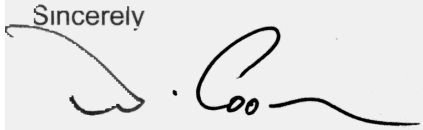
product for the dollar spent.

2. Finally, the Legislative Assembly should require the department to justify expenditure of cost savings and contingency funds for activities outside the planned scope of work.

Response: The fast-track construction process used by the Department for both the SRCI expansion and TRCI construction, due to forecasted bed need, led to a budget containing both a Guaranteed Maximum Price (GMP) and allowances and contingencies outside the GMP for unknown but necessary details. The GMP was established and construction begun before design and development was complete. As construction proceeds, the design becomes more detailed and reality can be addressed. For example, what was originally designed may not be operationally possible or cost effective. The use of the owner's contingency fund or the use of unspent money in the GMP to support the details and to provide an allowance for unknowns allows the Department to address these issues. This is a necessary part of the process and not an outcome to be avoided. The Department does agree that the Governor and Legislature should be advised of any significant change in scope of the project, particularly if a change in policy is the driving factor.

Conclusion:
The Oregon Department of Corrections supports and fully appreciates the necessity of auditing these significant and important prison construction projects. In so doing, we also believe that interested parties can only be fully informed if the audit clearly conveys all of the conditions underlying the policy decisions and actions taken by the Department, in concert with the Governor and Legislature.

Sincerely



David S. Cook
Director

cc: Steve Marks
Bill Wyatt
Jon Yunker

Review of ODOC Requested Facilities

The Oregon Department of Corrections asked us to include five new facilities in our cost comparison study. **Four of the facilities are in the Southern region and the fifth is in the Midwest.**

We were not able to collect all of the detail from these facilities that we had hoped for. However, through telephone conversations with project representatives, we were able to collect detailed information which permits an "apples to apple" comparison of these five facilities with SRCI and TRCI.

Comparison of Facility Data
Table 7

	TRCI	SRCI	Florida	Ohio*	Missouri*	South Carolina	Tennessee*
Cost	$129,000,000	$149,108,000	$28,300,000	$35,280,000	$73,638,662	$50,000,000	$50,747,748
# Inmate	1,632	2,352	1,496	1,855	1,975	1,500	1,536
Gross SF	654,930	801,856	283,400	408,446	436,924	380,000	290,000
Cost/Inmate	$79,044	$63,396	$18,917	$19,019	$37,285	$33,333	$33,039
SF/Inmate	401	341	189	220	221	253	189
Cost/SF	$196.97	$185.95	$99.86	$86.38	$168.54	$131.58	$174.99

* Costs have been reduced by the amount of design

Description of Institutions

Columbia Correctional Institute Annex, Florida

We spoke with Steve Watson, the project supervisor. He was not comfortable sending drawings. He stated that the facility design was very controversial and preferred to keep tight control on the drawings. The institution will be all masonry construction built entirely by inmates. Only the site work is contracted for. All design is done in-

house. **The Florida Department of Corrections states that inmate labor saves 45% of the cost.** We did not discuss how inmate labor is accounted. 19% of the inmates will be housed in dormitories. TRCI houses 6% in dormitories. The facility is not air conditioned.

The Florida facility is difficult to compare to the Oregon facilities. **The area per inmate is less than the national average for just housing. This would either suggest that the housing space is below the ACA standard or there is very little support and program space.** The construction by inmates from in-house documents is also not typical in the industry and very difficult to quantify.

Richland Correctional Institution, Mansfield, Ohio

We spoke with Dave Blodget of the Ohio Department of Corrections. **This facility is made primarily of pre-engineered buildings. All space is dormitory. This is a low cost institution for housing low risk inmates.** Pre-engineered building are fairly inexpensive to construct but are less secure and have a limited life span.

This facility is also well below the average area per inmate. This is probably due to the dormitory housing. Fire resistive code requirements in Oregon prevent locking of pre-engineered buildings when occupied. Some institutions in other states leave the doors to PE buildings unlocked but alarm them. Officers are alerted if inmates leave confinement.

Dave Blodget stated that this is the last of the low risk institutions to be built in Ohio. They are currently building a close security institution in Toledo, Ohio. This institute more closely resembles the Oregon institutions in level of security and inmate support. The cost per inmate of the Toledo facility is $72,685.

Northeast Correctional Center, Missouri

We spoke with Jim Grothoff, Capital Improvements administrator. Missouri was uncomfortable sending all of the drawings. The housing is constructed of tunnel form cast-in-place concrete. This is similar to pre-cast modules except placed on site. Support buildings are pre-engineered with insulated tilt-up exterior walls. This is less expensive than pre-cast but is of shorter life span. Perimeter security uses lethal fencing.

This facility is closer in construction materials and housing approach than Florida and Ohio but is again much smaller in area per inmate.

Blackville Correctional Institution, South Carolina

We spoke with William Harmon, Director of Construction. They are in the early programming phase of this project. They will be issuing a request for proposal for design/build services some time in October. They would not send the RFP draft because it is very early in development. No design has occurred.

The intent is to provide modular concrete cells with metal roofs. Support buildings will be pre-engineered metal buildings. The facility will not be air conditioned. Although the facility cost can be dictated to the design/builder, inmate area and building systems can vary widely during the design. **The design/builder can either meet the directed price but have freedom in the design requirements or be restricted in the design requirements and have more freedom in price.** The lack of schematic type documents would suggest price governs.

Lauderdale County Correctional Complex, Tennessee

We spoke with Ted Davidson, Project Construction Manager. ODOC formally requested drawings from Tennessee but they were not sent. The institution is 100% double bunked cells. It is actually an addition to an existing facility. All buildings are tilt-up insulated sandwich panels with standing seam roofs. Security through the roof is maintained by concrete lids on the cells and drywall ceilings in inmate accessible areas. The housing is fully air conditioned.

This facility is a prototype. **This is the 8th time that they have built it in the last 10 years. Mr. Davidson said that they have been able to reduce cost through the many iterations and improvements of the design.** He said the Contractors are bidding a known quantity and are comfortable given very competitive prices. Similar to the other Institutions reviewed in this section, this institution has very small area per inmate. This may partially be due to the fact that this institution is an addition to an existing institution.

Comparison

We looked at two known factors that can be quantified and have significant impact on the cost of the facility, area per inmate and location.

These institutions all have very small area per inmate. Obviously, area translates into construction cost. Using the cost per square foot of the individual institutions, we revised the cost per inmate to reflect the relative cost of building the same area per inmate as TRCI.

The other factor, which we can adjust for, is the cost of constructior variance from different regions in the nation. Using the City Cost Indexes from Means Building Construction Cost Data, we revised the cost per inmate to reflect the relative cost of building all of these institutions in Oregon. We used the average index for the state where each of these facilities is located.

Cost Per Inmate Adjustment for Space and Location
Table 8

	TRCI	SRCI	Florida	Ohio	Missouri	South Carolina	Tennessee
Cost/Inmate	$79,044	$63,396	$18,917	$19,019	$37,285	$33,333	$33,039
SF/Inmate multiplier*	1.00	1.18	2.12	1.82	1.81	1.58	2.12
Location multiplier**	1.00	1.00	1.22	1.10	1.12	1.40	1.31
Cost/Inmate adjusted for area and location	$79,044	$74,807	48,927	$38,076	$75,584	$73,733	$91,756

* SF/Inmate from TRCI divided by SF/Inmate from Individual State
** Oregon Location Cost Index divided by Individual State Cost Index. Cost index from 1998 Means City Cost Index.

With the exception of Florida and Ohio, when adjusted for area and location, these institutions fall in the general range of TRCI and SRCI for cost per inmate.

Florida

The cost variance is probably reflective of the inmate labor. **If inmate labor reduces cost by 45%, than without this savings, the institutior would cost $88,958 when adjusted for area and location.**

Ohio

This is the only facility that is exclusively pre-engineered dormitories. **The new Ohio Department of Corrections facility being built in Toledo is $73,548/inmate after adjustment for area and location.**

Oregon Audits Division's Footnotes to the Response

1. The department states, "…the audit suggests that the Department has no planning process which acknowledges prison forecast needs, and insinuates unilateral decision-making without knowledge and input from the Governor and Legislature."

AUDITS DIVISION'S RESPONSE:

The Audits Division reviewed every update to the department's long-range prison construction plan and included a listing of those updates, as well as decisions approved by the governor and the Legislative Assembly, in Appendix A of our report. We did not conclude that the department has no planning process. Our conclusion is that, because of the high cost associated with building prisons, the department should attempt to more closely match its plan with the forecasted number and security level of inmates.

2. The department states that its "original long-range construction plan was developed in May 1996, specifically addressing the April 1996 prison population forecast, including gender and custody splits. An update was then done every six months to acknowledge changes in the prison population forecast. The update reflects the forecast gender and custody split information – and the construction plan is revised to match the identified need."

AUDITS DIVISION'S RESPONSE:

The Audits Division recognizes the department made modifications to the long-range construction plan; however, we conclude that the department should attempt to more closely match its plan with the forecasted number and security level of inmates. As stated on page v of the Executive Summary, "The department made some modifications to its prison construction plan to reflect population reductions, however, it could make further reductions to achieve significant costs savings." A discussion of the difference between the planned and forecasted number of inmates can be found starting on page 5. On page v of the Executive Summary, we state, "because of the significant cost differences between minimum, medium, and maximum security beds, the department should strive to more closely match the forecasted security need." A discussion of the difference between the planned and forecasted inmate security levels can be found starting on page 7.

3. The department states, "…the referenced "surplus" includes all special purpose housing, such as the Intensive Management Units (IMU), disciplinary segregation, etc."

AUDITS DIVISION'S RESPONSE:

During the course of our audit work, we asked the department how many beds are needed for inmate and capacity management purposes. We reported the department's response, 200 to 300 beds, on the top of page 6, and eliminated those beds from our calculations. Even after eliminating those beds, a surplus still exists. The department has managed its prisons in the past without such a surplus. With regard to special purpose housing, we included these beds and inmates that occupy these beds in our calculation.

4. The department states, "the reference to more medium and maximum security beds in the system at completion of TRCI and a shortfall of minimum beds results from a change in forecasted need between the time of approval of that facility and current forecasts. However, once construction of a facility is begun, it is neither feasible, nor cost-effective to stop construction and begin construction of a lower security facility."

AUDITS DIVISION'S RESPONSE:

The Audits Division agrees with the department that it is neither feasible nor cost-effective to stop construction of a facility once it has begun. We also agree that the forecasts have changed. Instead of focusing on the past and how the department got there, we focus on where the department will be at the completion of the Two Rivers facility and the policy choices it makes for the future. As stated on page 7, "at the completion of the Two Rivers prison in November 1999, the department will face a projected shortage of 1,060 minimum security beds, but will have a surplus of 2,438 maximum and medium security beds." On page 8 we state, "because the department has a current surplus of medium security beds, it should evaluate whether it is feasible to take advantage of the new prison design features to maximize existing medium security space prior to constructing additional medium security beds." We conclude that this evaluation is necessary to ensure that the department is meeting its forecasted need as cost-effectively as possible.

5. In response to the audit finding that Oregon's prison construction costs are higher than the national average, the department states that "differences in building codes can result in major differences in cost."

AUDITS DIVISION'S RESPONSE:

When comparing Oregon's prison construction costs to construction costs in other states, we recognized there are regional differences in the costs of material, labor, and equipment. To account for these differences, we applied area modification indexes published in the National Construction Estimator. These factors adjust for all construction cost variables including labor, equipment and material costs, labor productivity, climate, job conditions and markup, building codes and site work. The Estimator allows us to directly compare costs in Oregon to costs in other locations.

6. The department states it "has utilized life cycle analysis and value engineering for ultimate selection of building systems."

AUDITS DIVISION'S RESPONSE:

We commend the department for conducting life cycle cost analysis on its energy systems. However, the department did not conduct a comprehensive life cycle cost analysis on each prison as a whole. We recognize that the department was on a fast track schedule to construct its first two facilities; however, we recommend the department prepare additional life cycle cost analysis for its future construction projects.

7. The department states, "it is not a question of whether or not the sites will be necessary, but when."

AUDITS DIVISION'S RESPONSE:

There are a number of factors that can affect inmate population, such as changes in incarceration policies and practices, changes in inmate behavior due to crime prevention programs, changes in demographics, etc. Because of these factors and their significant impact on inmate space needs, we recommend that the department only build prisons when warranted by population forecasts.

8. The department states, “to meet an aggressive schedule, construction options were explored which limited the possibility of delay due to shortage of labor or winter weather conditions.”

AUDITS DIVISION’S RESPONSE:

The Audits Division agrees that the department was on a fast-track building schedule for its first two prisons. Because of the decrease in the population forecast, the department now has more time to construct its facilities. We recommend that the department use this time to conduct additional analysis and reevaluate the remainder of its building plan to make sure that it is building what it needs as the least possible cost.

9. The department states, “the ‘Prison Construction Cost Comparison’ recently completed for Oregon by CRSS Constructors, Inc. also speaks to differences in building codes.”

AUDITS DIVISION’S RESPONSE:

As stated in response #5, our analysis took all construction cost variables into account, including building code differences.

10. The department states, “…life cycle cost analysis and value engineering efforts are utilized by the Department.”

AUDITS DIVISION’S RESPONSE:

See response #6.

11. The department states, “…the comparison with other states building costs highlighted in the audit was not an apples to apples comparison of the cost to construct like facilities. For that direct comparison, please reference table 8 in the attachment.”

AUDITS DIVISION’S RESPONSE:

While we have concerns with some of the assumptions made by the department’s consultant, the consultant came to the same conclusion we did — Oregon’s construction costs per inmate were significantly higher than other states. The consultant also validated one of the points we make on page 11 of our report, that the amount of space per inmate accounts for most of the differences in prison construction costs.

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