

Secretary of
State
**AUDIT
REPORT**

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**Department of Corrections:
Prison Construction —
Infrastructure Planning and
Development**

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Summary

PURPOSE

The primary purpose of this audit was to identify and recommend ways for the Department of Corrections (department) to improve its processes for planning and developing infrastructure needed to serve new prisons.

BACKGROUND

The department is in the early stages of a 10-year, \$1 billion construction program. It plans to expand four existing facilities, one medium and three minimum security, and to build five prisons and two work camps.

RESULTS IN BRIEF

The department can improve its infrastructure planning and development practices. As of December 31, 1997, the department had not completed infrastructure development for any of the prisons it is building or planning to build, including one facility that was more than 85 percent completed.

RECENT IMPROVEMENTS

A recently enacted law and a department reorganization should improve infrastructure planning and development for prisons.

RECOMMENDATIONS

- Develop a process for infrastructure planning and development that completes planning and acquisition agreements in the early stages of a project.
- Incorporate infrastructure development into the construction schedule to ensure that infrastructure is complete before the project is finished.
- Provide the knowledge and skills needed to manage infrastructure planning and development.

AGENCY RESPONSE

In general, the Department agrees to many of the recommendations listed in the audit and has already taken actions to ensure that the necessary planning is accomplished and infrastructure is in place for new or expanded prisons prior to occupancy. Many of the criticisms expressed reference the Snake River Correctional Institution expansion project. The immediate need to expand that institution to accommodate the growing offender population did not allow for a lengthy planning process. Since that time, the Department has completed a Long-Range Construction Plan (updated to reflect new Prison Population Forecasts), which will allow for long range infrastructure planning in those areas recently sited for new prison construction.

INTRODUCTION

Infrastructure is defined as the basic facilities, services, and installations needed for the functioning of a community, such as systems for water and sewer, storm drainage, electrical and natural gas transmission, and transportation. Local governments provide many of these services in a community; public utilities are another provider. To accommodate major new construction, a community often needs to extend infrastructure systems and networks. Infrastructure planning and development are critical parts of the prison construction process. Development of infrastructure, particularly water and sewer, is complex and requires more time than other parts of a construction project. Careful planning and analysis are needed to minimize infrastructure costs, which can be

significant, and ensure timely prison openings. Qualified staff and good management systems are also needed.

The department has a practice of obtaining water, sewer, and other public services from local governments. Local governments are obligated by law to provide the infrastructure needed for these services, and the department is obligated to finance necessary expansion.

BACKGROUND

Construction Program

The department is in the early stages of a major 10-year construction program begun in 1995. The projects planned, estimated to cost more than \$1 billion for this program, will increase the department's prison capacity by approximately 11,500 beds by the year 2005. Projects currently planned reflect reductions stated in the April

1997 prison population forecast. Planned projects and projects in progress include:

- *Adding 2,350 beds at the Snake River Correctional Institution, Ontario (Snake River – Phase 2).* Estimated cost: \$175 million. Construction started in late 1995 and is expected to be completed by August 1998. The facility should be fully occupied by December 31, 1999.
- *Building seven new correctional facilities (8,944 beds).* The department's plans include five medium security prisons and two minimum security work camps.
 - *Two Rivers Correctional Institution, Umatilla.* Estimated cost: \$150 million. Construction started in May 1997. Expected completion: January 2000. Umatilla is designed to house 1,636 men.
 - *Wilsonville.* Estimated cost: \$151 million. The department had tentative plans to start construction in spring of 1998 and complete construction in March 2000. The governor's recent decision to consider an alternative site for the Wilsonville prison will delay this schedule. Wilsonville is designed to serve as a prison for 1,170 women and an intake center for 430 men and women.
 - *Five new facilities.* Estimated cost: \$516 million. The department plans to build three more medium security prisons and two more minimum security work camps by 2005.
- *Expanding three minimum security facilities. (250 beds).* Estimated cost: \$15 million. Projects include Powder River Correctional Facility, South Fork Forest Camp, and Shutter Creek Correctional Institution. It plans to complete these expansions by August 2001.

Infrastructure Costs

The department estimates that infrastructure costs for its new prisons will be as much as 10 percent or \$100 million of the estimated \$1 billion total construction cost.

AUDIT RESULTS IMPROVING INFRASTRUCTURE PLANNING AND DEVELOPMENT FOR NEW PRISONS

Snake River Correctional Institution Phase 2 is nearly complete. Construction started at Two Rivers Correctional Institution in April 1997 and will begin in Wilsonville in May 1998; however, the department has not completed infrastructure planning and development.

- The department and the city of Ontario tentatively agreed to a new contract on sewer infrastructure, which included Snake River Phase 2 in June 1997 and signed a final agreement in October 1997. In September 1997, Phase 2 was in its 25th month of construction and was 85 percent complete as of December 31, 1997. The department and the city still did not have an agreement on water infrastructure.
- As of December 31, 1997, the department had not reached agreement with the city of Umatilla for water

and sewer infrastructure for the Two Rivers facility. Construction started in May 1997. On December 31, 1997, the project was in its eighth month of construction and was 6 percent complete.

- The Wilsonville project was originally scheduled to begin in May 1998. Discussions with the local jurisdictions regarding infrastructure needs began in July 1997. The department had not reached an agreement as of December 31, 1997.

Need for Infrastructure Planning

Prison infrastructure planning and development requires a significant amount of lead time, particularly for water and sewer. First, a plan identifying infrastructure needs must be prepared. After that, the department and the infrastructure provider must agree on the types of facilities and the increases in infrastructure capacity required. The department and the provider also need to agree on the financing and the construction timing. Sometimes, a local government cannot provide needed facilities and services; in which case, the department must design and build its own on-site facilities.

LEAD TIME

Construction professionals in the federal government, other states, and private sector firms were interviewed to determine the ideal infrastructure planning and development lead time. Some interviewees stated that infrastructure planning and procurement agreements need to be completed before construction starts. Others stated that infrastructure plans and procurement agreements should be completed before finalizing site selection. Another stated that plans and agreements should be completed before detailed design begins. While the exact timing of infrastructure planning and development varied slightly, all agreed that it should be completed in the early stages of a project.

SCHEDULING AND MONITORING

These professionals also stressed a need for management to ensure that the infrastructure project(s) is on track in terms of cost and time. Most interviewees use project management tools including scheduling, progress monitoring, and cost monitoring. Interviewees said that analyzing capacity needs and costs of various alternatives is important. They also emphasized the importance of developing a schedule of tasks, including those necessary to reach agreement with the local government on the needed facilities and the infrastructure construction schedule.

SKILLS

Furthermore, professionals stated that a combination of negotiating skills and technical skills are required for infrastructure planning and development.

- **Negotiation skills.** Negotiating and "people" skills are required to conduct discussions and establish the terms of complex agreements. Some interviewees cited a

need for a knowledge of the structure and politics of local governments and a working knowledge of public utilities, utility rates, and rate structures. Interviewees also mentioned contracting skills and past experience with infrastructure negotiations and agreements.

- **Technical skills.** The importance of technical skills and experience was also stressed. Interviewees cited engineering training and experience, particularly civil engineering, as an attribute desirable for developing or reviewing detailed designs of infrastructure systems, and for developing and analyzing infrastructure capacity data. Interviewees said that environmental training and experience are other attributes important for understanding complex environmental issues.

Differences were noted in the ways organizations obtain the skills needed. Some organizations interviewed employ a single utilities specialist with a combination of skills. Others use a team approach, with each member contributing a requisite skill.

Effects of Infrastructure Delays

Ineffective infrastructure planning and development can increase construction costs and delay the opening of new prisons.

Increased costs. Delays in planning and developing local sewer service additions have increased costs for the Snake River Correctional Institution phase 2. The department's facilities administrator indicated that negotiations with the city of Ontario for phase 2 began in July 1995. In March 1997 discussions reached an impasse, which led the department to develop plans for building an on-site sewage treatment plant at an estimated cost of \$7 million to \$13 million. This option would have resulted in the abandonment of a previous \$6.7 million investment in sewer lines, pump stations, and improvements to Ontario's sewage treatment facilities.

The department abandoned the on-site option when, in May 1997, the city tentatively agreed to provide sewer services. The department, however, incurred costs exceeding \$800,000 for the on-site option. The department is making efforts to recover \$400,000 of these costs.

Delayed opening of a new prison. Late infrastructure planning and development increases the risk of a delay in opening a new prison. Such a delay would require the department to rent space in out-of-state prisons or make additional space available in existing in-state prisons.

Out-of-state placement. Diversion of prisoners out of state would incur placement costs. The department currently incurs costs of \$66 per day for men and \$70 per day for women to rent medium-security beds in an out-of-state prison.

Generally, out-of-state prisons will accept only prisoners who are lower security risks or easier to manage. As the department places lower security risks out of state, the percentage of higher risk or special management prisoners

in the Oregon prison system increases, thus raising costs to pay for the tighter security and special management.

Out-of-state prisons also may not provide work or other programs required in Oregon prisons by Measure 17..

In-state placement. The Snake River and Two Rivers prisons will hold primarily medium-security prisoners. If one of the new prisons does not open as planned, the department could send new prisoners to the Oregon State Penitentiary or the Oregon State Correctional Institution.

Both institutions, however, have prisoner populations near the department's designated maximum capacity. On September 1, 1997, the Oregon State Penitentiary had a population of 1,954 prisoners compared with the 1,964 the department cites as the facility's maximum. Population has risen as high as 2,130. On September 1, 1997, the Oregon State Correctional Institution had a population of 944 prisoners, compared with the 860 the department considers the maximum. Population has risen as high as 978 inmates.

While beds have been added to accommodate additional inmates, the designated maximum populations are well above the populations for which the prisons were designed: 1,269 at the Oregon State Penitentiary and 532 at the Oregon State Correctional Institution.

Increases in capacity beyond ideal population affects the programs and support services offered. For instance, food service, health service, and prisoner work facilities occupy a fixed amount of space and have a fixed capacity.

Populations exceeding normal levels accelerate wear and tear. If there are too many inmates, the availability of certain programs and services may be limited. Increases in population may also increase security and support staff costs.

Causes of Infrastructure Delays

The large prisons Oregon is building will have a significant impact on local water and sewer systems. As a consequence, local governments will need to upgrade and add to water and sewer plants to provide capacity.

Rural communities selected as prison sites may lack resources to improve their water and sewer systems, or those systems may be out of compliance with environmental laws and regulations. Rural communities also may lack staff or expertise to plan upgrades or system expansions for new prisons or to plan systems improvements required by environmental regulators.

In larger communities, rapid growth is diminishing the capacity left in water and sewer systems for prisons and other large developments.

As a consequence, the department and local governments (in both rural and urban communities) may require substantial time to agree on solutions, develop plans, and build facilities.

At the start of the current construction cycle, the department had no statutes, procedures, or guidelines on the appropriate timeline or process for completing

infrastructure planning, negotiations, and development. Also, the department did not emphasize infrastructure planning and development in the department's facility planning and construction job requirements and management processes. Furthermore, the department did not build infrastructure planning and development tasks into the schedule used by construction managers.

RECENT LEGISLATURE AND DEPARTMENT ACTIONS FOR IMPROVEMENT

Reorganization. The department announced a reorganization of its Facilities Division in July 1997, creating three separate sections (new construction, facilities services, and community development). Each section is headed by a manager who reports directly to the department's assistant director for business and finance.

Also, for each prison project, the department created a separate team including a facilities specialist, a community liaison representative, and an operations manager. The project teams report directly to the assistant director for business and finance and the department's top management.

The reorganization should provide more staff with the requisite skills to work with local governments on infrastructure. It should also increase communication between construction project technical staff and community relations staff as they work with local governments.

Senate Bill 6. Senate Bill 6, enacted in July 1997, permits state agencies to issue certificates of participation to pay for infrastructure. The infrastructure may be owned and operated by the state or by another public body providing such services. If the infrastructure is owned by another public entity, that entity must facilitate construction or operation of a state-owned and -operated corrections facility. Senate Bill 6 defines infrastructure as including, but not limited to, sewer and water systems and road improvements.

The bill obligates the department to seek services from other public bodies (i.e. local governments or districts). Those entities are required by the law to provide rates, terms, and conditions which are just, fair, and reasonable.

The bill also creates a dispute resolution process that must be used when the department and the public service provider disagree on rates, terms, and conditions. The bill directs the department to develop its own infrastructure only when significant savings can be achieved.

RECOMMENDATIONS FOR IMPROVEMENTS

To improve infrastructure planning and development, we **recommend** that the department:

- Develop an infrastructure process that will result in completion of planning and acquisition agreements in the early stages of a project.

Agency Response: *The Department of Administrative Services (DAS) requires basic infrastructure agreements to be in place prior to the sale of Certificates of Participation (which is the current funding source for the construction projects). Specifically, DAS requires that a formal agreement be executed between the host community which owns and operates the infrastructure facility and the Department of Corrections which provides for the following:*

- ◆ *agreement as to the scope of the expansion of the infrastructure facility;*
- ◆ *the budget limits available to pay the costs of the infrastructure within the context of the entire prison project;*
- ◆ *the service provider's unconditional commitment to fully cooperate with the state in the process of implementing the infrastructure improvements;* and
- ◆ *the service provider's unconditional commitment to provide infrastructure services to the facility throughout its useful life at fair service charge rates comparable to those rates charged other users charged by the system.*

Audits Division Clarification: *The DAS requirement is set forth in a February 9, 1998, letter from DAS to the Oregon Department of Corrections. The letter requires the Department to provide DAS with such agreements before certificates of participation are sold to finance infrastructure costs for the Two Rivers prison complex in Umatilla and all project costs, including infrastructure, for the Intake and Women's prison complex in Wilsonville.*

- Incorporate infrastructure development into the construction schedule to help ensure completion of infrastructure before the project completion date.
- Agency Response:** *In April of 1998, a detailed procedures manual for new prison construction projects, will be implemented outlining reporting, scheduling, design, construction, and administrative requirements for all projects. This manual will include the process for infrastructure planning and development.*
- Provide the knowledge and skills needed to manage infrastructure planning and development (including contract management, fiscal management, and negotiations).

Agency Response: *As noted in the audit report, the Department has restructured and improved the management and oversight for construction projects. A team of three with expertise in construction, operations, and community relations is assigned for each project. This configuration ensures the blend of expertise necessary for not only successful infrastructure planning, but also the construction of a facility that is operationally sound and cost-effective.*

OTHER MATTERS
MANAGING WATER AND SEWER COSTS

The department spent approximately \$1.5 million at all its correctional institutions in the fiscal year ending June 30, 1997, for water and sewer services. The amount is expected to rise significantly by 2005, when the prison building program is complete.

The department does not have written water and sewer agreements for some of its correctional institutions. Institution superintendents are responsible for monitoring water and sewer utility rates and usage.

To ensure that the best rates are obtained and that costs are measured, tracked, and managed to keep them at a minimum, a strong monitoring process and formal agreements should be in place.

We recommend that the department negotiate formal agreements for water and sewer services at each of its correctional institutions. We also recommend that the department review the process for monitoring water and sewer usage rates and total costs. Information from monitoring should be used to identify and evaluate conservation proposals, to discuss rates and infrastructure improvements with local governments, and to assist development of plans for new prisons.

***Agency Response:** The Department does not disagree with these recommendations and will*

request our internal audit section to review the issue and respond as appropriate.

SCOPE AND METHODOLOGY

To identify and recommend ways for the department to improve its infrastructure planning and development processes, we researched and considered the practices of other states and the federal government, as well as those recommended by other construction management professionals.

We interviewed department management and staff to help us understand the department's infrastructure planning and development process for new prison complexes. We also obtained basic information on the department's infrastructure planning practices and the status of prison construction in progress. We also interviewed officials in other states and with the federal government and private sector construction professionals to obtain information about infrastructure planning and development practices.

We conducted our review during the period March 1997 through September 1997.

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

This report is a public record and is intended for the information of the management of the Department of Corrections, the governor of the state of Oregon, the Oregon Legislative Assembly, and all other interested parties. This report is intended to promote the best possible management of public resources. Copies may be obtained by mail at Oregon Audits Division, Public Service Building, Salem, Oregon 97310, by phone at 503-986-2255 and 800-336-8218 (hotline), or internet at Audits.Hotline@state.or.us and <http://www.sos.state.or.us/audits/audithp.htm>.

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

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