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King County Department of Adult and Juvenile Detention

Integrated Security Project: Implementation Plan Report

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INTEGRATED SECURITY PROJECT
Implementation Plan Report

Executive Summary

The Integrated Security Project (ISP) is a capital improvement project for the King County Correctional Facility (KCCF) located in Seattle. This major initiative will modernize the security electronic systems of the jail, upgrade the elevators, and make improvements to the jail clinic, infirmary, and Intake/Transfer/Release area. As a requirement for the release of capital funds for this project, the Metropolitan King County Council directed, among other things, that an independent review be conducted of the scope, schedule and budget for the ISP. In particular, the County Council wanted assurance that proceeding on the ISP would not compromise findings and recommendations from a pending Operational Master Plan that would take a more comprehensive look at how DAJD conducts its business. This report is in response to that request.

King County hired an outside consultant, Christopher Murray & Associates, to conduct an independent review of the ISP project. Technical review was provided by Mr. Sandy Zirulnik of On-Line Consulting Services, a subconsultant to Christopher Murray & Associates.

Highlights

There are two key findings by the security consultant who provided the independent review of the ISP design: First, the existing security systems at the KCCF are in very fragile condition and in danger of failure. These systems should be replaced as soon as possible. And second, with minor modifications, the proposed security design will support every conceivable mode of operation of the facility, thereby providing great flexibility for future operations.

The first of these findings resulted in the County Council supporting the County Executive's declaration of emergency for this project.

The importance of the security consultant's second finding – that with minor modification the security design could flexibly support multiple ways of operating the jail – was that the county could proceed with confidence that conclusions and recommendations of the Operational Master Plan would not be compromised by proceeding on the Integrated Security Project.

In order to achieve the desired flexibility, and to proceed on an emergency schedule, the following major changes were recommended to the ISP scope of work:

- Modification to the clinic and infirmary should be removed from the initial construction contract and be added back after re-programming and re-design.
- Certain elements should be added or modified in order to increase operational flexibility.

These changes were implemented in fall 2003 and winter 2004.

In addition to the scope and schedule of the ISP, the County Council desired an independent review of project costs.

There are three primary cost elements in the project: construction costs relating to new security and communications equipment in the KCCF; construction costs relating to Jail Health Services; and implementation costs relating to construction security, housing inmates temporarily displaced by construction, and providing continuity in health services throughout the project.

The focus of this ISP Implementation Plan report is on implementation costs. To assist in the analysis of costs, the King County Auditor's Office developed an ISP Cost Model, that was subsequently modified by the OMP consultant. This model can flexibly estimate the magnitude and timing of ISP implementation costs based on various staffing and schedule assumptions.

As a result of careful review of how security is to be provided during construction and how and where inmates are to be moved when the contractor takes over a floor, significant savings were achieved in the cost of implementing the ISP. The original estimate of these costs prepared in 2002 was just over $7 million. Following major changes in the strategy and assumptions for project implementation that number has been reduced to approximately $4.6 million. These savings – totaling about $2.4 million – will more than offset the additional construction costs resulting from recommended changes to maximize the flexibility of the new systems being installed through the ISP.[1]

It is important to note that these savings are based on the March 17, 2004 project schedule developed by Turner Construction Company. The final schedule will be incorporated in the contract prior to the start of construction. To the extent that the schedule changes, implementation costs may be more or less than that estimated here. Experiences during construction may also affect the project schedule. A 10 percent contingency is built into estimated implementation costs to help respond to unanticipated changes.

Other Findings

An important issue relating to how and where inmates displaced by construction are housed is how to use housing capacity at the Regional Justice Center (RJC). Based upon review of approximately 50 reasonably comparable facilities around the country, the consultant team concluded that a decision by the Department of Adult and Juvenile Detention (DAJD) to increase double celling at the RJC from 165 percent of single cell capacity to 180 percent is fairly aggressive but within the range of good correctional practice. This review also concluded that the department's policy to add another housing unit officer when the unit is doubled is a reasonable and defensible practice.

The cost of housing displaced inmates is also influenced by how many additional correctional officers are needed to support higher population levels at the RJC and to provide relief to additional housing unit officers. Based upon post reviews conducted by the OMP team, the consultant has concluded that DAJD's current practice to add one Relief (Activity) Officer for every three double bunked units at the RJC is a reasonable policy but one that might benefit from more detailed study.

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[1] In commenting on the final draft of this report the Auditor's Office noted that "in August 2002, an Executive-sponsored consultant's analysis of the proposed ISP revealed that the original assumption of $7 million for implementation costs had been underestimated by approximately $2.6 million owing to a technical error in calculating correctional officer staffing needs during inmate relocations. Thus, the overall savings to date to the corrected costs of the original implementation staffing plan is in the range of $5 million."

Implementation costs are also sensitive to the total number of inmates housed at the RJC. This is especially true for Jail Health Services (JHS), which will require additional staff if and when the RJC population remains over 1,100 for an appreciable length of time. Impacts on JHS costs are significantly higher if RJC populations exceed 1,300 on a regular basis.

While capacity goes up and down as floors in the KCCF are vacated for construction, the number of inmates needing secure confinement goes up or down on its own independent schedule. The combination of reduced capacity and possibly increased demand will also affect ISP implementation costs. This brings us to the inmate population projection for DAJD.

There was a very large decrease in inmate population in King County in 2002. However, half of the 800 person drop experienced during that time evaporated during the first seven months of 2003. The May 2003 inmate population projection forecasts continued growth over the next few years with relatively stable populations in years thereafter. The interaction of inmate population growth with the temporary loss of jail capacity during parts of ISP will require that the entire West Wing be re-occupied for much of the ISP. If the West Wing is not at least partially opened, it is projected that the number of inmates needing secure confinement will exceed system capacity more than half of the time that construction causes displacement of inmates. A partial opening of the West Wing would result in routinely double celling eight or more housing units at the RJC and significantly increase the cost associated with providing health care for inmates.

Additional background information, supporting analysis, and details may be found in the body of the report.

INTEGRATED SECURITY PROJECT
Implementation Plan

Project Overview

Background

The Integrated Security Project (ISP) is a capital improvement project for the Department of Adult and Juvenile Detention's main jail, the King County Correctional Facility (KCCF). This major initiative will modernize the security electronic systems of the jail, upgrade the elevators, and make improvements to the jail clinic, infirmary, and Intake/Transfer/Release (ITR) area.

Prior to release of funds for construction and implementation of the ISP, the King County Council directed that an Operational Master Plan (OMP) be initiated for the Department of Adult and Juvenile Detention (DAJD) and that an independent review be conducted of the scope, schedule and budget for the ISP. Sensitive to reports of the deteriorating condition of security systems in the jail, the Council included proviso language allowing for consideration and approval of the ISP prior to completion of the Operational Master Plan, provided that it could be demonstrated that such a sequence of events would not compromise the operational planning process.

In response to the Council proviso, an OMP Advisory Group was formed, co-chaired by the Director of the Office of Management and Budget and the King County Auditor. Committee membership included representatives from both the Executive and Council staff. Among its early activities, the Advisory Group retained Christopher Murray & Associates to develop the Operational Master Plan and to review the ISP.

Following examination of the existing electronic security systems and review of the drawings and specifications for the ISP, Sandy Zirulnik, principal for On Line Electric and subconsultant to Christopher Murray & Associates concluded that,

> *"With some minor design changes, [the proposed security design] will support every conceivable mode of operation of the facility, allowing the County to implement future changes in staffing, jail operations, and jail population without major changes to the security electronic systems."*[2]

This finding, coupled with Mr. Zirulnik's emphatic conclusion that critical systems are in very fragile condition, lead the County Executive to declare the Integrated Security Project an emergency in July 2003. Following briefings, the County Council concurred with the emergency declaration and released sufficient funds to begin construction and to cover the implementation costs for the first six months of the project.

Recommended Changes to the ISP

In order to go forward with the ISP project on an emergency schedule while maintaining maximum flexibility for the future operation of the KCCF, two changes were recommended to the scope of work:

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[2] *Study of Proposed Security Electronic Systems Replacement*, Sandy Zirulnik, July 2003

- Modification to the clinic and infirmary should be removed from the initial construction contract and be added back after re-programming and re-design.
- Certain elements should be added or modified in order to increase operational flexibility.

These changes were implemented in the fall and winter of 2003/2004.

Sequence of Tasks and Project Schedule

There are six major stages in the ISP: 1) miscellaneous preparation work and construction of a new central control room, 2) factory authorized testing of hardware and software, 3) vertical riser work, 4) elevator work, 5) installation, testing and conversion to new electronic monitoring and control systems on each floor, and 6) jail health services work in the clinic and infirmary.

The critical path for the project schedule goes through construction of the new central control room and factory authorized testing of hardware and software. Central control must be ready to take over operation of elevators, perimeter doors, and other devices monitored and/or controlled by central control before these new systems can become operational. Shop drawing, fabrication, and factory testing of customized software and critical hardware must also occur early in the project schedule.

The vertical riser[3] is the backbone of the new electronic systems. The vertical riser connects the central control room (and the medical area with regard to Electronic Medical Records) with all floors within the building. The riser must be completed and the first wires pulled before any part of the new systems can become operational. Expansion capacity is planned for the vertical riser system to accommodate future growth – including initiatives that may come out of the Operational Master Plan.

The KCCF has ten elevators. Except for the one elevator that serves all floors in the building, all elevators are in banks of at least two. For example, there is a pair of elevators that provides outside visitor access to the non-contact visiting booths on each inmate occupied floor in the tower. The strategy is to work on one elevator in a bank at a time, leaving the other(s) to keep operations uninterrupted. Elevator work will start early and continue throughout most of the project. The single elevator that serves all floors will be done last.

Installation of new monitoring and control systems will take place one floor at a time, starting with the top floor and working down. All inmates will be moved off the floor while the contractor installs and tests the new systems and devices. After testing, officer training, and shake-down of a floor, it will be re-occupied and the next floor down will be vacated. There will also be significant work in the Intake/Transfer/Release (ITR) area. If approved by the Executive and County Council, the entire ITR area will be remodeled. This will include reorganization of circulation and result in removal of a 24/7 correctional officer post and some corrections technician time. If this larger project takes place, it is not expected to affect the schedule for project completion.

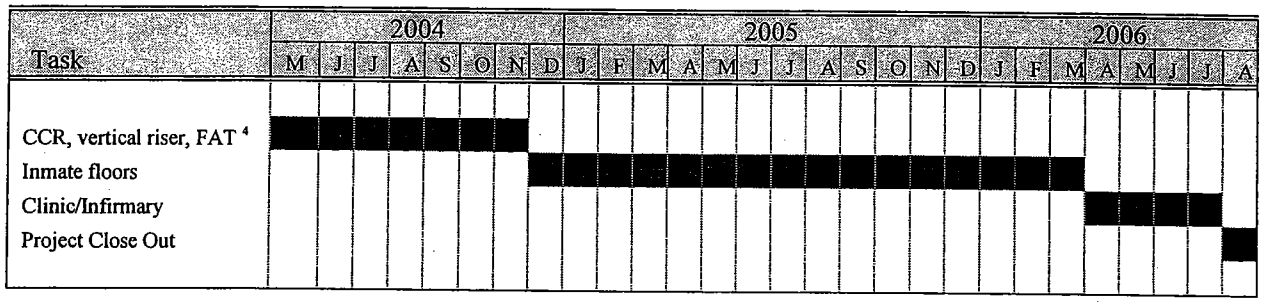
Re-programming and redesign of improvements to Jail Health Services facilities and functions has progressed to the point that JHS changes involving the top floors of the tower have been

[3] A vertical riser is an electrical conduit running vertically between floors through a building.

completed so as not to affect the overall ISP project schedule. As of the writing of this report, the exact scope of work in the clinic and infirmary had not been finalized. Approximately four months construction time has been included at the end of the project schedule to complete JHS work in the clinic and infirmary.

The original schedule for the ISP (prepared in August 2002) assumed that it would take 28.5 months from start of construction to project completion. Following the initial ISP review by Sandy Zirulnik, and the subsequent declaration of emergency by the County Executive, a new project schedule was developed under the guidance of the Facilities and Management Division. This schedule reduced the total time in construction to 22 to 23 months (not counting work in the clinic and infirmary). The first schedule produced in September 2003 by the construction manager, Turner Construction Company, anticipated an even shorter schedule of a little over 20 months. The details of changes needed to maximize ISP related operational flexibility in the KCCF caused both a delay in project start time and in project duration. A decision to factory test all critical components and software used in the new communication and control systems prior to installation further lengthened the project schedule. As of the date this report was written, total project duration was estimated at 27 months. An abbreviated project schedule is shown in the following chart. Appendix A includes additional detail about the project schedule.

ISP Project Schedule



ISP Implementation Staffing

Additional staff will be needed and additional operating costs will be incurred for both the Department of Adult and Juvenile Detention and Jail Health Services as a result of the ISP. For DAJD there are costs associated with providing additional security due to construction activities within the jail and for relocating and housing inmates who must be moved off floors where construction is taking place. For Jail Health Services there are, at minimum, costs associated with the disruption of activities while the contractor is working on improvements to the clinic and infirmary. There are also may be additional costs to Jail Health Services as population levels increase at the Regional Justice Center as a result of population pressures and ISP related inmate relocations.

DAJD Staffing for Construction Security

The following business rules are used for providing security during construction:

- Work on elevators serving inmate occupied floors - two officers
- Vacated floors under construction - two officer

[4] CCR = Central Control Room; FAT = Factory Authorized Testing

- Initial field investigation and vertical riser work - two officers
- Work in inmate occupied areas - two officers (This includes work in the ITR and a few other parts of the tower.)
- Loading dock - one officer three days a week.

In addition, there will be a sergeant and DAJD project manager assigned for the duration of the project.

The question of how many officers are needed for escort and security during construction was the subject of lengthy discussion and analysis. At one point the proposal was to have a single officer assigned to the contractor while working on the 11th floor and then, based on experience gained, determine if an officer was needed for other unoccupied inmate floors.

As details of the project became better known to the construction manager, it was reported by the Facilities Management Division that Turner Construction Company requested that there be two officers assigned to the contractor on each floor. Issues relating to safety and productivity were cited as the reason for this request. Both the Auditor's Office and the OMP consultant asked to see written documentation of this request. Documentation had not been provided by the time this report was completed.

Upon closer review of the issue of officer escorts on construction floors it became apparent that two officers would be needed while work was taking place on floors seven and eight under any circumstances. This is because floors seven and eight provide inmate access to the jail clinic and to the sky bridge connecting the jail to the courthouse. Inmates will have to use the inmate elevators in the center of the building and move through these floors to get to those destinations. In other words, during the entire time while work is proceeding on these floors there will be inmates walking through the construction zone. Because of this, there will be temporary walls and doors erected on floors seven and eight to keep inmates and the contractor work crew from mixing.

The Office of the King County Auditor has requested that independent testing and evaluation of the escort policy be conducted during completion of the 11th floor and DAJD has concurred with that approach. The Auditor has also requested that the effect of having escorted movement for inmates going to court (through floor 8) and clinic (floor 7) should also be explored. Implementation costs will go down slightly if it is decided that fewer officers are required for construction security on inmate housing floors.

DAJD Staffing for Inmate Relocation and Housing

Because of a declining inmate population, the West Wing of the KCCF was closed in 2002 and remains closed as of the date of this report. This portion of the building has capacity for 435 minimum custody inmates. With regard to the ISP, a vacant West Wing provides a near-by place to relocate inmates during portions of the ISP project.

While the West Wing is a convenient location for housing inmates displaced during construction, it is not always the least expensive. Because of its configuration the West Wing is relatively staff intensive. Consequently, it is particularly expensive (on a per inmate basis) if it is significantly

less than full. At certain times (see "Inmate Relocation Strategy," below) it may be more cost advantageous to double bunk at the RJC than to use a part of the West Wing.

The cost of housing ISP displaced inmates depends on several factors: 1) the amount of double celling at the Regional Justice Center, the overall population level in the department's secure confinement facilities, and how intensively the West Wing of the KCCF is used.

Historically, DAJD double bunked up to 65 percent of the cells in the 64-cell living units at the RJC. DAJD revisited this policy in the fall of 2003 and now doubles up to 80 percent of the cells. This change means that up to 115 inmates may occupy a doubled bunked unit at the RJC. A second officer is added to a housing unit when this occurs.

Double Celling at the RJC

One of the issues listed in the scope of work for the Operational Master Plan was to identify appropriate criteria for double celling at the RJC. This is an issue that has both ISP and long term implications. There are three issues relating to double celling at the RJC: 1) how many cells in a typical unit should be doubled, 2) what is the appropriate staffing when a unit is doubled, and 3) under what circumstances do you double?

DAJD's current policy is to double bunk living units at the RJC up to 180 percent of their single-cell capacity and to add an additional officer in doubled units on the first and second shift. In addition, DAJD adds one relief officer for every three housing units that are doubled. This officer is used to provide relief for the additional officers in doubled units and to perform other duties related to the increased number of inmates in the facility.

In an analysis of 50 direct supervision jails around the country that are roughly comparable to the RJC, the OMP team concluded that DAJD's policy to double bunk to 180 percent of single cell capacity is fairly aggressive but within the range of good correctional practice and that the department's policy to add another housing unit officer when the unit is doubled is a reasonable and defensible practice.

The issue of adding staff beyond the additional housing unit officers at the RJC when units are double celled was the subject of lengthy discussion and considerable analysis. The OMP team believes that most of this analysis was based on an incorrect understanding of the problem to be solved. Initially, all analyses addressed the question of how to provide relief for additional officers assigned to double celled housing units. A more complete understanding of the problem is: "what are the impacts on the RJC when the inmate population exceeds single cell capacity?" One of those impacts is that relief must be provided for the additional housing unit officers. But additional inmates also increase workload in a number of other ways. A long list of those impacts is included in Appendix A.

DAJD has represented that when the RJC is at 100 percent of single cell capacity that sergeants and officers from ITR are sometimes used to provide escort and other services that can't be provided by the four "relief" officers on duty during the first and second shift. In other words, their position is that, when the RJC is full, the facility is somewhat under-staffed. Consequently, they argue, it is appropriate to add an additional relief officer when as few as one unit is double

celled. Detailed analysis, such as the time and motion study suggested above, would be needed to develop the information to empirically evaluate actual workloads.

Providing detailed independent analysis of this issue is beyond the scope of the OMP but additional analysis is recommended in the Operational Master Plan. Such analysis might verify or qualify DAJD's position and/or come up with some other way to solve the broader problem of how to deal with more inmates at the RJC than can be held in single cells.

In the meantime, other work, principally structured post reviews conducted by the consultant team on all shifts at DAJD's two jails, resulted in the conclusion by the consultant that the Relief/Activity Officer posts are generally busy posts.[5] Therefore, the OMP team believes that current DAJD policy regarding staffing at the RJC when units are double celled is reasonable and that those assumptions should be used in estimating the cost of ISP implementation. Further review, as recommended by the OMP, might identify somewhat more efficient means of providing relief and performing other duties associated with double celled housing units.

Detailed discussion and analysis relating to these issues is included as Appendix A, "Double celling at the RJC."

ISP Related Jail Health Services Staffing

There is one inevitable, and two possible, ISP related impacts on Jail Health Services. The unavoidable impact occurs when the contractor is working on the existing clinic and infirmary or disrupting health care operations in other parts of the building. Possible impacts occur when (and if) the population at the RJC exceeds certain levels.

For minimum impacts, JHS has identified three functions that will require additional staff. First, it is expected that a half-time Program Analyst IV will be needed to act as a project manager for JHS throughout the ISP project, including planning time prior to actual construction. Second, it is proposed that an Administrative Specialist II be hired to assist with coordination seven days a week during the time that inmates are displaced. Third, there will be a need for an additional Psych Nurse seven days a week during the time when construction disrupts the mental health unit in the jail. All of these positions would be hired as Term Limited Temporary employees or from a temp agency.

There will be times during the ISP when both the West Wing and doubled units at the RJC will be needed to accommodate relocated inmates and projected population growth. (See "Population Projection," below.) The impact on Jail Health Services depends on the total population at the RJC at the time inmates are moved.

The RJC has a well-laid out and physically efficient health clinic and small infirmary that is currently staffed to handle a generally healthy inmate population. (Inmates with more serious medical needs and those requiring infirmary care are transferred to the KCCF.) However, as the population at the RJC increases, demands on the health care system increase. At some point the current capacity of the RJC to deliver health care becomes inadequate. At some even higher

[5] Two members of the OMP team spent about 18 hours reviewing all types of posts on all shifts at both the KCCF and the RJC. Reviews consisted of a structured interview, observation, and dialog. Multiple relief and activity officer posts were reviewed on all shifts.

inmate population, it becomes necessary to have essentially a full-service health care clinic and infirmary at the RJC. To complicate matters still further, if there is a large number of inmates moving from one facility to the other because of court assignment, the logistics of moving medical records (in the absence of an electronic medical records system) creates an unexpectedly large workload. Table shows the projected number of additional Jail Health Services positions temporarily needed because of the ISP.

Table 3: Additional ISP Related JHS Positions

Quantity / Position		Days/ Week	FTEs	Applies to Option: All	RJC > 1,100	RJC > 1,300
0.5	Program Analyst IV(TLT[6]	5	0.5	X	X	X
1	Administrative Specialist II (TLT)	7	1.4	X	X	X
1	Psych RN (temp agency)	7	1.4	X	X	X
1	RN (TLT)	7	1.4		X	X
1	LPN (TLT)	7	1.4		X	X
1	Administrative Specialist II (TLT)	7	1.4			X
1	Health Assessment RN (TLT)	5	1.0			X
0.5	Dental Triage RN (temp agency)	5	0.5			X
1	Contract Psychiatrist	1	0.2			X
1	Contract Psychiatrist	1	0.2			X
1	Psychiatric Evaluation Specialist (TLT)	5	1.0			X
0.5	Pharmacist (TLT)	5	0.5			X
0.5	Pharmacy Tech (TLT)	5	0.5			X

As Table clearly shows, from a Jail Health Services cost standpoint, the lower the population at the RJC the better.

Projected Staffing Levels and Implementation Costs

The ISP Cost Model

The King County Auditor's Office developed an ISP Cost Model to estimate costs associated with construction security, inmate relocation, and impacts on Jail Health Services caused by the ISP. The model integrates schedule and manpower assumptions with labor costs and includes a variety of "switches" – such as the housing location for displaced inmates or the use of a four day hours versus five day workweek - to evaluate the effect of different implementation assumptions. While the basic structure of the model remains the same as developed by the Auditor, the OMP consultant periodically updated the project schedule, task list, and manpower assumptions based on the evolving understanding of the project. Additional switches were added by the consultant, as well as a mechanism to roll-up man-weeks and costs into a quarterly format and inflate them to future year costs. The roll-up of man-weeks and costs is shown on page 17 below.

There are three primary components in the model: additional manpower and costs related to providing security during construction, costs associated with housing inmates displaced by ISP construction, and Jail Health Service costs.

[6] TLT = Term Limited Temporary employee.

The task, schedule, and correctional officer manpower assumptions for providing security during construction are documented in Appendix A to this report. Jail Health Service manpower requirements are show above in Table 3.

Inmate Relocation Strategy

Construction work on inmate occupied floors will start at the top of the building (floor 11) and work its way down. The basic strategy is that the eighth floor will become the floor through which inmates are rotated as their floor is turned over to the construction crew. This means that inmates on the eighth floor will be relocated first. Because there are only so many high security cells, multiple moves will be necessary for the highest custody inmates. Floor 11 houses the inmates requiring the highest level of security. There are up to 96 inmates on this floor in single-occupancy cells. The next most secure cells are those on floor 10 where administrative segregation is located. As part of the first sequence of moves, the inmates from 10 North and 10 East will be relocated to 8 North and 8 East while the inmates on floor 11 move to floor 10. This move therefore displaces up to 192 inmates (96 in 8 North and 96 in 8 East). Subsequent moves will displace all inmates on the eighth floor – which, including 8 South, can be up to 338 inmates. Each floor will be reoccupied when work is completed, thereby freeing up another floor for construction.

As inmates are relocated, the officers assigned to that floor (or an equivalent number) will be relocated with them. In almost all cases, the locations to which inmates can be moved require more staff than are freed up by vacating the floor for construction.

The projected order of inmate moves during the ISP is partly influenced by the requirement that maximum custody inmates must always be housed in high security cells and that there are a limited number of places in which this can occur. Table 4 summarizes the anticipated sequence of inmate relocations and the maximum number of inmates displaced.

Table 4: Sequence of Inmate Relocations

Move	Activity	Capacity Lost	Construction Activity on
1	Maximum custody inmates on floor 11 move to high security cells on 10 North and 10 East.	144	Floor 11
2	Maximum custody inmates return to floor 11. Up to 160 inmates from 10 South move to other dormitory housing.	304	Floor 10
3	Inmates return to floor 10. Floor 9 vacated.	352	Floor 9
4	Inmates return to floor 9. Floor 8 vacated.	352	Floor 8
5	Inmates return to floor 8. Floor 7 vacated.	256	Floor 7
6	Inmates return to 7 North and East; Infirmary inmates move to 7 South (or other vacated tower dormitory).	160	6, 5
7	Infirmary inmates return to remodeled infirmary.	0	3

The strategy for relocating inmates during the ISP is essentially the same as the day-to-day decision of where to put the next inmate who is booked into the system. Space permitting, an inmate should be placed in the facility closest to the court with jurisdiction in the most economical housing available that meets that persons' classification level and other special needs. Where this becomes more than a routine decision is when facility crowding or high vacancy rates requires that a vacant unit be opened, or that a unit change from single cells to

double cells or double to single, or that a unit be closed. The relatively large-scale moves that will take place during the ISP will require such decisions.

Since correctional supervision costs overwhelm all other costs of incarceration, the most economical housing is the housing with the highest inmate to officer ratio. Table 5 shows the inmate to officer ratio for the various housing configurations available to DAJD. For situations where some officers support more than one housing unit (KCCF floor control and Activity Officers, RJC Relief Officers), these support officers are prorated to each unit based on the number of inmates housed. In Table 5, West Wing capacity is re-distributed according to OMP recommendations so that no inmates are housed on floor 1. Staffing of floor 1 is changed from DAJD's current policy of 2/2/2 to 2/2/0.

Table 5: Inmates per Officer for Various DAJD Housing Configurations
(Includes officers on all shifts and proration of officers who support housing operations)

Housing Configuration	Max Inmates	Officers per Day	Inmates per Officer
KCCF			
Tower – all general pop	886	43.8	20.2
Tower – south dorms	410	18.3	22.4
Tower – gen pop cells	476	25.5	18.7
West Wing 4 (only)	227	15	15.1
West Wing 2/3 (only)	208	12	17.3
West Wing total	435	23	18.9
RJC			
Single Celled – gen pop	704	36.9	19.1
Double Celled (3 units)	345	18	19.2

What Table 5 demonstrates is that as inmates are moved out of the KCCF floor 8, the most efficient place for relocation is at the RJC. However, if the West Wing can be used to its full capacity, there is little difference between using the West Wing and double celling units at the RJC.

Population Projection

Table 5 shows a logical strategy for making decisions about opening or expanding housing as ISP driven inmate relocations take place. Table 4 shows how much system capacity is lost due to each movement of inmates. Where inmates are moved depends on the number of inmates in secure confinement at the time of the move. This brings us to the inmate population projection for DAJD.

From January 2002 through January 2003 there was a precipitous drop in inmate population in King County. Over this twelve month period, the end of the month population in DAJD adult confinement went down by more than 800, from nearly 2,900 to a little less than 2,100 inmates. This drop was overwhelmingly due to a decline in the misdemeanant population. As a result of this trend, and mounting fiscal pressures for county government, the North Rehabilitation Facility was permanently closed and the West Wing of the KCCF was vacated.

There are several important factors which are thought to be primarily responsible for this 28 percent decline in inmate population. First, decisions by municipalities in King County to send many misdemeanants for which they have financial responsibility to other jurisdictions (like Yakima County) where the cost of incarceration is much lower, and other efficiencies in municipalities' incarceration patterns, have greatly reduced the city misdemeanant population. Due to interlocal agreements negotiated with county municipalities this trend for city responsibility misdemeanants will not reverse. Indeed, contract language requires the average daily population of city responsibility misdemeanants to decrease on a scheduled basis until 2005 after which it may not exceed a maximum of 220 inmates through December 2012. In 2013 King County will no longer take any city responsibility misdemeanants. The second factor contributing to the 28 percent decline in inmate population is the work of the Criminal Justice Council and the Adult Justice Operational Master Plan to reduce the number of people entering jail.

This significant drop in inmate population ended in January 2003. Since then the population has increased each month - primarily as a result of increases in the felony and state hold population - and the average daily population of adult inmates in July 2003 was 2,503.[7] In other words, half of the decline experienced in 2002 evaporated during the first seven months of 2003.

In 2003 the Department of Adult and Juvenile Detention hired an outside consultant, Mr. Jack O'Connell from Smyrna, Delaware, to develop a new adult inmate population forecast for the department. The assumptions for the forecast were set by consensus by a large group of stakeholders representing every part of the adult justice system in King County at work sessions facilitated by Mr. O'Connell. The resulting forecast published in May 2003 projects modest growth through 2006 with a relatively flat trend thereafter.

In the following analysis, the May 2003 forecast of average daily population (ADP) plus one standard deviation is used as a basis for projecting outcomes based on various housing scenarios. Total system population should be less than the ADP plus one standard deviation about two-thirds of the time.

A population model was constructed for this analysis. The model disaggregates the May 2003 forecast by custody level and then compares it with system capacity by security level during ISP construction. Among other things, the model includes switches to open part or all of the West Wing, to include or exclude the predicted effect of the Andress related cases (see OMP Chapter 5, "Long Range Needs), to increase or decrease the May 2003 forecast by a specified percentage, and to use the ADP or ADP plus one or two standard deviations. This analysis assumes that there will be no impact from the Andress related cases and that populations will be equal to 100 percent of the May 2003 forecast plus one standard deviation.[8]

The first conclusion is that if the West Wing remains closed, the number of inmates who should be in secure confinement will exceed system capacity for all but a few months during the time inmates are displaced. This means that, even if 11 units are the RJC were double bunked, there

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[7] For comparability the confinement numbers in the preceding discussion refer to adults in both secure confinement and community corrections. Since the beginning of 2002 there have been about 180 adults in community corrections at any one time.

[8] This analysis excludes both capacity and predicted demand for inmates in intake and the infirmary.

still would not be enough secure confinement capacity most of the time. When the population does not exceed system capacity, the model predicts that the RJC population will exceed either the 1,200 or 1,300 thresholds for all but one month during ISP relocations. This scenario is illustrated in Table 6.

If this document is printed in color, months during which system capacity is exceeded are outlined in red in Table 6. Months when the RJC population is greater than 1,300 are in **bold red**. Months when the RJC population is between 1,200 and 1,299 are in **bold blue**. Months when the population is between 1,100 and 1,199 are in **bold**.

Table 6: West Wing Closed

Month & Year	Secure Capacity	Secure Demand	Difference	RJC Pop	RJC Units Doubled
Nov-04	2053	2410	-357	**1208**	8
Dec-04	1960	2401	-441	**1292**	9
Jan-05	1960	2578	-618	1469	13
Feb-05	1960	2294	-334	**1185**	7
Mar-05	1960	2449	-489	1340	10
Apr-05	1780	2333	-553	1404	11
May-05	1780	2426	-646	1497	13
Jun-05	1780	2414	-634	1485	13
Jul-05	1738	2363	-625	1476	13
Aug-05	1738	2336	-598	1449	12
Sep-05	1738	2261	-523	1374	11
Oct-05	1734	2441	-707	**1558**	14
Nov-05	1734	2313	-579	1430	12
Dec-05	1734	2321	-587	1438	12
Jan-06	1851	2514	-663	1514	14
Feb-06	1851	2223	-372	**1223**	8
Mar-06	1851	2457	-606	1457	12
Apr-06	2053	2519	-466	1317	10
May-06	2053	2478	-425	**1276**	9
Jun-06	2053	2504	-451	1302	9
Jul-06	2053	2647	-594	1445	12
Aug-06	2053	2388	-335	**1186**	7
Sep-06	2053	2425	-372	**1223**	8

With the population needing secure confinement exceeding system capacity for so many months, it is obvious that leaving the West Wing closed is not a viable solution.

The second conclusion from the model is that, if only part of the West Wing is open, RJC populations will exceed the 1,200 threshold more than half the time during ISP moves. When the RJC population exceeded 1,200, eight or more units would be double bunked. This scenario is illustrated in Table 7.

As with Table 6, if this document is printed in color, months when the RJC population is greater than 1,300 are in **bold red**. Months when the RJC population is between 1,200 and 1,299 are in **bold blue**. Months when the population is between 1,100 and 1,199 are in **bold**.

Table 7: West Wing 4 Opened

Month & Year	Secure Capacity	Secure Demand	Difference	RJC Pop	RJC Units Doubled
Nov-04	2053	2410	-357	**1208**	8
Dec-04	2167	2401	-234	1085	5
Jan-05	2167	2578	-411	**1262**	9
Feb-05	2167	2294	-127	978	3
Mar-05	2167	2449	-282	**1133**	6
Apr-05	1987	2333	-346	**1197**	7
May-05	1987	2426	-439	**1290**	9
Jun-05	1987	2414	-427	**1278**	9
Jul-05	1945	2363	-418	**1269**	9
Aug-05	1945	2336	-391	**1242**	8
Sep-05	1945	2261	-316	**1167**	7
Oct-05	1941	2441	-500	**1351**	10
Nov-05	1941	2313	-372	**1223**	8
Dec-05	1941	2321	-380	**1231**	8
Jan-06	2058	2514	-456	**1307**	9
Feb-06	2058	2223	-165	1016	4
Mar-06	2058	2457	-399	**1250**	8
Apr-06	2260	2519	-259	**1110**	6
May-06	2260	2478	-218	1069	5
Jun-06	2260	2504	-244	1095	5
Jul-06	2260	2647	-387	**1238**	8
Aug-06	2260	2388	-128	979	3
Sep-06	2260	2425	-165	1016	4

As shown in Table 7, if only the fourth floor of the West Wing is opened, there is predicted to be three months when the population is between 1,100 and 1,199, 10 months when the population is between 1,200 and 1,299, and two months when the population exceeds 1,300.

If the entire West Wing is opened, the model predicts that the RJC population will exceed 1,100 during only one month. Except for that one month, there would never be more than five RJC units double bunked. This scenario is illustrated in Table 8.

As with Tables 6 and 7, if this document is printed in color, months when the RJC population is greater than 1,300 are in **bold red**. Months when the RJC population is between 1,200 and 1,299 are in **bold blue**. Months when the population is between 1,100 and 1,199 are in **bold**.

Table 8: West Wing 100% Open

Month & Year	Secure Capacity	Secure Demand	Difference	RJC Pop	RJC Units Doubled
Nov-04	2053	2410	-357	**1208**	8
Dec-04	2382	2401	-19	870	1
Jan-05	2382	2578	-196	1047	4
Feb-05	2382	2294	88	763	0
Mar-05	2382	2449	-67	918	2
Apr-05	2202	2333	-131	982	3
May-05	2202	2426	-224	1075	5
Jun-05	2202	2414	-212	1063	5
Jul-05	2160	2363	-203	1054	4
Aug-05	2160	2336	-176	1027	4
Sep-05	2160	2261	-101	952	2
Oct-05	2156	2441	-285	**1136**	6
Nov-05	2156	2313	-157	1008	4
Dec-05	2156	2321	-165	1016	4
Jan-06	2273	2514	-241	1092	5
Feb-06	2273	2223	50	801	0
Mar-06	2273	2457	-184	1035	4
Apr-06	2475	2519	-44	895	1
May-06	2475	2478	-3	854	1
Jun-06	2475	2504	-29	880	1
Jul-06	2475	2647	-172	1023	4
Aug-06	2475	2388	87	764	0
Sep-06	2475	2425	50	801	0

The conclusion of this analysis is the West Wing should be opened in its entirety for most of the ISP. The projected cost, cash flow, and number of person-weeks per quarter are based on the assumption that the West Wing is used for housing inmates displaced by the ISP.

Projected Staffing, Cost and Cash Flow

Based on the project schedule and manpower assumptions shown in Appendix A, the estimated cost for ISP implementation is approximately $4,593,000. This is about $2,400,000 less than the original estimate of implementation costs.

The estimated cash flow for implementation costs is shown in Table 10.

It is important to note that these savings are based on the March 17, 2004 project schedule developed by Turner Construction Company. The final schedule will be incorporated in the contract prior to the start of construction. To the extent that the schedule changes, implementation costs may be more or less than that estimated here. Experiences during construction may also affect the project schedule. A 10 percent contingency is built into estimated implementation costs to help respond to unanticipated changes.

Table 9: Estimated Person Weeks Required for ISP Implementation

Cost Element	04-Q2	04-Q3	04-Q4	05-Q1	05-Q2	05-Q3	05-Q4	06-Q1	06-Q2	06-Q3	Total
Construction Security	10.9	169.4	61.2	101.8	137.6	120.7	61.0	50.0	54.2	30.9	797
Inmate Relocation	0.0	0.0	15.7	101.9	185.9	192.9	192.9	192.9	178.9	94.0	1,155
DAJD Project Mgr	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	6.0	123
Subtotal	23.9	182.4	89.8	216.6	336.4	326.5	266.8	255.8	246.1	130.9	2,075
Jail Health	2.5	6.5	11.3	24.7	24.7	40.1	42.9	42.9	42.9	23.1	262
Total	26.4	188.9	101.1	241.3	361.1	366.6	309.7	298.7	289.0	154.0	2,337

Table 10: Estimated Cash Flow of ISP Implementation Costs

Cost Element	04-Q2	04-Q3	04-Q4	05-Q1	05-Q2	05-Q3	05-Q4	06-Q1	06-Q2	06-Q3	Total
DAJD Cost	$ 48,436	$ 347,650	$ 177,024	$ 427,994	$ 581,617	$ 641,228	$ 525,877	$ 521,317	$ 232,818	$ 79,540	$ 3,583,500
Clinic / Infirmary Costs	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 269,009	$ 188,306	$ 457,315
JHS Costs	$ 5,288	$ 13,748	$ 20,679	$ 32,398	$ 32,398	$ 79,761	$ 88,372	$ 91,465	$ 98,501	$ 49,251	$ 511,862
Total	$ 53,723	$ 361,398	$ 197,703	$ 460,392	$ 614,016	$ 720,989	$ 614,249	$ 612,783	$ 600,328	$ 317,097	$ 4,552,677
							2003 expense with 10% contingency ->				$ 40,456
									Total ->		$ 4,593,134

Conclusion

The ISP will take about 27 months to complete. Implementation costs will be incurred for construction security, inmate relocation, and Jail Health Services. The magnitude of those costs is sensitive to the project schedule and to the overall population level in secure confinement during the months when KCCF capacity is reduced by construction activities.

The recent inmate population projection suggests that it will be necessary to use the West Wing during most of the months that inmates are relocated due to ISP construction. If the West Wing were to remain closed, the combination of additional inmates and reduced capacity would result in more inmates needing secure confinement than existing facilities can hold.

Based on the current project schedule, staffing assumptions, and projected inmate population during the ISP, total implementation costs are estimated at approximately $4.6 million. This includes a 10 percent contingency. The current estimate is approximately $2.4 million less than the original estimate of ISP implementation costs. Actual cost savings will depend on the final project schedule and the duration of construction.

APPENDIX A: Double Bunking at the RJC

In the fall of 2003, DAJD revised its policy about double celling typical housing units at the RJC to increase the proportion of cells that are doubled from 65 percent to 80 percent. When a typical 64-cell unit has only one inmate per cell, the unit is operated by a single correctional officer and the inmates are locked in their cells when the officer leaves the unit for regularly scheduled breaks. There is remote electronic monitoring but no relief provided during these breaks. Two officers are provided when cells in a unit are double bunked. During such times, when one officer goes on his or her 15-minute break, the other remains in the unit and a relief officer replaces the officer on break.[9] At meal breaks, the practice has been to lock back all of the inmates except those involved in setting up for inmate meals or those who have a visitor. One officer remains in the unit while the other goes on break. When the first officer returns, the other officer goes on break. Half the inmates are let out at a time for their meal.

Because of the additional relief required for the 15-minute breaks, and the extra workload generated by having more inmates in the facility, DAJD's policy is to add one activity officer for every three housing units doubled.

Since there is no one right answer to how much doubling should take place and what the staffing level should be in doubled units we instead asked the question, are these reasonable policies?

The Department of Justice, National Institute of Corrections publishes a document called the *2001 Directory of Direct Supervision Jails*.[10] The Regional Justice Center, as a direct supervision jail, is included in this directory along with nearly 300 other facilities representing every state in the union. The directory contains information including a brief description of the facility, its capacity, the maximum number of inmates supervised by a single officer, and the largest direct supervision housing unit in the facility. DAJD had previously gathered additional information on 65 of these facilities. We used the DAJD data and other information from the NIC directory to compare the RJC to similar facilities around the county.

The NIC directory includes both small jails and very large jails, jails that house all kinds of inmates and jails that house only certain kinds of inmates (e.g. only misdemeanants, or only sentenced inmates). For comparability we restricted our comparison to jails that house both unsentenced and sentenced inmates of all classification levels. Jails with a capacity of less than 250 or more than 2,500 were excluded from the analysis. The following scatterplots show the maximum number of inmates supervised by one officer and the largest direct supervision housing unit for 50 facilities from around the country that meet these criteria.

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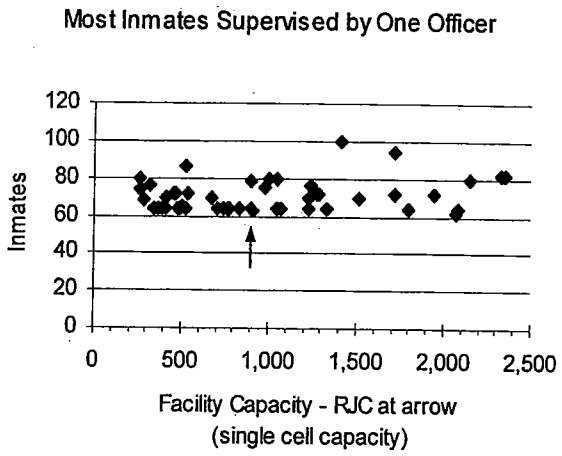
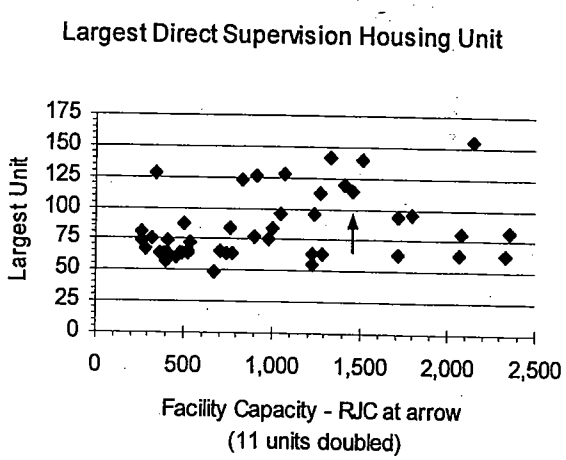
[9] Per collective bargaining agreement, each officer is entitled to one 15-minute break approximately two hours into the shift and one 15-minute break approximately six hours into the shift. A half-hour meal break is provided near the middle of the shift.

[10] The term "direct supervision" refers to correctional supervision of inmate housing where one or more correctional officers works inside the housing in direct contact with inmates. This is in contrast with more traditional supervision where officers are located outside the housing unit, often in enclosed high-security control rooms.





As the chart on the left shows, the RJC, with a maximum of 64 inmates supervised by a single officer, is not unusual. While below the mean of 71 inmates for one officer, the ratio of 64 to 1 was found in 20 of the 50 jails sampled. Indeed, nearly half of the jails had a ratio of 65 inmates or less to one officer. A clear implication of this review is that DAJD's policy of adding a second officer when a unit is double bunked to 180 percent of single cell capacity is within the mainstream of correctional practice around the country. At 180 percent of single cell capacity there are 115 inmates in a typical housing unit at the RJC. As the left-hand chart shows, there is not a single facility in this sample that would not add a second officer in a direct supervision housing unit this large.

The same facilities are shown in the chart on the right, this time with the RJC at its maximum capacity with 11 housing units double bunked. While not at the extreme end of housing unit size, the 115 bed housing units at a double-bunked RJC are more than one standard deviation above the mean (83) of the 50 facilities reviewed.

We conclude from this review that the policy to double bunk to 180 percent of single cell capacity is fairly aggressive but within the range of good correctional practice and that the department's policy to add another housing unit officer when the unit is doubled is a reasonable and defensible practice.

DAJD's policy of adding one additional activity officer for every three doubled housing units was the subject of lengthy discussion and analysis. Initially it was believed that officers in double celled units were relieved for both 15-minute and meal breaks. Various alternatives for providing relief were proposed and explored. These included several options for using overtime relief and for locking back half the inmates while unit officers took sequential meal breaks with no relief. When it was discovered that officers in double celled units were only being relieved for 15-minute breaks and not for meals, it became clear that the Relief Officers must be doing something in addition to simply providing relief for officers taking breaks.

Upon further exploration two things became apparent. First, relief for 15-minute breaks takes longer than 15-minutes; and second, there are many duties other than relief that are performed by Relief Officers. Relief for 15-minutes breaks takes longer than 15-minutes for several reasons. First, the relief officer must move between units. While the time it takes to move between units depends upon how far apart they are, walking time is longer in a jail than elsewhere because

there is a delay leaving and entering each unit waiting for sally port doors to be opened and closed. A second reason why it may take longer than 15-minutes is that, for more efficient operation of the facility, an officer may perform some needed task on the way to and/or from break. For example, if an inmate needs to be escorted to the clinic, the officer will provide the escort while heading for break. The time needed to perform the additional duty extends the time the officer is off-unit and therefore extends the time the relief officer must remain in the unit. A code will also extend the total time during which relief for breaks is provided. If the relief officer is not actively providing relief, he or she is a first responder to the code. If the relief officer is providing relief, the officer on break is a first responder to the code. Either way the total amount of time to provide 15-minute breaks is extended.

Table 2 shows the approximate schedule for a Relief Officer who is designated to provide relief for the additional officers in three double celled units. In this example the average time required to provide 15 minutes of relief for one officer is assumed to be 20 minutes. Some days it might be shorter; some days it might be longer. (Note that the added Relief Officer provides relief only for the additional three housing unit officers. Relief for the first officer in each unit is already provided by the Relief Officers assigned to the facility when it is single celled.)

Table A1: Approximate Schedule for a Relief Officer when Three Units at the RJC are Doubled

Start of Shift	6:30		
	6:30	6:45	
	6:45	7:00	1.5 hours
	7:00	7:15	for other duties
	7:15	7:30	by Relief Officer
	7:30	7:45	
	7:45	8:00	
Unit 1 – CO 2	8:00	8:20	15-Minute Breaks
Unit 2 – CO 2	8:20	8:40	with 5 minute lag
Unit 3 – CO 2	8:40	9:00	between breaks
Relief Officer break	9:00	9:15	
	9:15	9:45	
	9:45	10:00	1.75 hours
	10:00	10:15	for other duties
	10:15	10:30	by Relief Officer
	10:30	10:45	
	10:45	11:00	
Relief Officer meal	11:00	11:30	
	11:30	11:15	.75 hour
	11:15	12:00	for other duties
	12:00	12:15	by Relief Officer
Unit 1 – CO 2	12:15	12:35	
Unit 2 – CO 2	12:35	12:55	
Unit 3 – CO 2	12:55	13:15	
Relief Officer break	13:15	13:30	
	13:30	13:45	
	13:45	14:00	1 hour
	14:00	14:15	for other duties
	14:15	14:30	by Relief Officer
End of Shift		14:30	

Table A1 shows that the additional relief officer is providing relief for about two hours a shift and is on his or her own break for another hour. That leaves about five hours per shift for the Relief Officer to perform other duties.

Other duties performed by Relief Officers were identified by the consultant team through post reviews at both facilities on all shifts and by information provided by DAJD. The following is a list of Relief Officer duties at the RJC.

Duties Performed by Relief Officers at the RJC

- Cover 15 minute breaks for housing unit officers in 14 housing units (two times per day)
- Cover 15 minute breaks for housing unit officers in double celled units (two times per day)
- Cover 15 minute breaks for central control and housing control officers (two times per day)
- Cover 30 minute meal breaks for central control, housing control, and close custody/special population housing units (D, M, N)
- Assists officer in housing units with formal counts (twice per shift)
- Assists officer in housing units with hourly security checks
- Provide inmate escorts for:
  - Clinic - Hours are 0750-1500
  - DOC hearings M-F, begin in AM and run until completed – sometimes into 2nd shift.
  - Face-to-face attorney visits (requires strip search after visit)
  - Detective interviews as needed
  - Line-ups as scheduled
  - DNA testing M-F, number varies daily
  - Fingerprints as requested
  - Video court - begins at 0930 and concludes in early afternoon.
  - Transfers as assigned
  - Releases as requested
  - Housing unit transfers as assigned
  - 571 movements as assigned
  - Janitorial program as scheduled
  - School programs as scheduled
  - Religious services as scheduled
  - Kitchen worker escorts
  - Laundry worker escorts
  - Assist with Court Detail returns as needed
- Escort trades people as needed
- Assist with inmate meals, monitor hallway and pickup/delivery process
  - Food tray delivery
  - Food tray pick-up and clean-up
- Shakedowns
- Emergency response as needed
- Hospital emergency transports
- On-shift training
- Monitoring hallways
- Replacement when short staffed

As this list indicates, the term "Relief Officer" is something of a misnomer. At the KCCF, officers performing these functions are called Activity Officers.

When the RJC is single celled, there are four Relief Officers on duty on first and second shift, and two on third shift. When single celled, there are 16 officers who need relief for two 15-minute breaks per shift (14 housing unit officers plus the central control officer and the housing control officer). In addition, there are five officers who need relief for 30-minute meal breaks (central control, housing control, and officers in special population housing units D, M and N). Assuming that it takes an average of 20 minutes to cover each 15-minute break and 35 minutes to cover each half-hour meal break, there is a total of 8.25 hours of relief provided by the four Relief Officers on duty when the facility is single celled. This leaves 19.75 hours for the four Relief Officers to perform the other duties listed above. When the RJC is at 95 percent of single cell capacity, this means there is one hour of Relief Officer time to perform these other duties for every 43 inmates ($850/19.75 \approx 43$).

For every three double celled units that are filled to 95 percent capacity there are an additional 145 inmates at the RJC. As seen above, the Relief Officer added for each three units has about five hours during the shift when he or she is available to perform non-relief duties. Adding both the additional inmates and additional Relief Officer hours results in a somewhat more favorable ratio of inmates to Relief Officer hours as when the facility is entirely single celled ($(850 + 145) / (19.75 + 5) \approx 40$)

Based upon the post review conducted by the OMP team of posts on all shifts at both the KCCF and RJC, we found that the Relief/Activity Officer posts are generally busy posts. In the opinion of the OMP team, the current DAJD policy when RJC units are doubled is a reasonable policy but one that should be reviewed more closely by the department. The OMP team notes that if an additional relief Officer were added for every *four* doubled housing units, the ratio of inmates to Relief Officer hours would be approximately 42 : 1 – or essentially the same as is available when the facility is entirely single celled. Detailed time recording on each shift over multiple days is needed to draw definitive conclusions about this policy.

Obviously, the number of hours available for the Relief Officer to do things other than provide relief to double celled housing units is greater when one or two cells are doubled than when three are doubled. In independent work the Auditor's Office has demonstrated that, under DAJD's staffing policy, overall staffing efficiency declines as more than three units are double celled.[11] This analysis demonstrates that the argument of adding one officer for every three double celled housing units becomes less convincing as the number of double celled units increases. Whether or not this suggests that alternative strategies – such as the use of intermittent staff or overtime – make sense when only one or two units are doubled depends on the validity of DAJD's representation that the RJC is somewhat understaffed when it is running at 100 percent of single cell capacity. The question of continuing to add Relief Officers as more units are doubled is an issued that has arisen in the last days of the OMP project and therefore it has not been addressed.

Part of the evaluation of the validity of DAJD's claim that the RJC is short staffed when running at 100 percent of single cell capacity depends on correctional judgment. Because of the serious nature of the jail business, such determinations cannot be decided by quantitative means alone.

[11] May 19, 2004 memorandum to the OMP Advisory Group from Cheryle A. Broom, King County Auditor.

While, in the opinion of the OMP team, this is not the most material issue, additional review of staffing policy when the RJC is double celled is one of the items identified as meriting additional study in the Operational Master Plan.

APPENDIX B: Project Schedule and Construction Security Staffing Assumptions

TASK	Schedule		Duration		
	Begin	End	Days	Weeks	Officers
Field Discovery (Justice Systems)	8/11/03	9/26/03	46	6.57	2
Floor 6 & IT Room Renovation	3/21/05	7/5/05	106	5.14	2
Control Room Construction	5/18/04	8/31/04	105	5.00	2
CCR Wiring	7/26/04	9/1/04	37	5.29	2
CCR Prepare for Cutover / Cutover	12/22/04	3/17/05	85	12.14	2
Install Main Vertical Riser	6/1/04	7/26/04	55	7.86	2
Install Facility Wide Intercom	6/1/04	8/17/04	77	11.00	1
West Wing 1	6/1/04	8/10/04	70	10.00	2
West Wing 1, 2, 3 and 4	6/1/04	8/23/04	83	11.86	2
ITR Prep	3/21/05	4/7/05	17	2.43	1
ITR Construction	4/11/05	7/18/05	98	14.00	2
3rd Floor Records & Property	6/3/04	8/30/04	88	12.57	2
5th floor (old CCR)	6/30/05	9/6/05	68	9.71	2
5th floor core	8/31/04	9/16/04	16	2.29	2
2nd floor & front entry	7/12/05	10/18/05	98	14.00	2
Elevator #6 (inmate)	6/1/04	8/16/04	76	10.86	1
Elevator #2 (public)	8/17/04	10/25/04	69	9.86	0
Elevator #7 (West Wing)	8/17/04	10/25/04	69	9.86	1
Elevator #4 (inmate)	10/26/04	1/5/05	71	10.14	1
Elevator #9 (staff)	10/26/04	1/5/05	71	10.14	0
Elevator #3 (public)	1/6/05	3/16/05	69	9.86	0
Elevator #8 (West Wing)	1/6/05	3/16/05	69	9.86	1
Elevator #5 (inmate)	3/17/05	5/25/05	69	9.86	1
Elevator #10 (staff)	3/17/05	5/25/05	69	9.86	1
Elevator #10 - 3rd floor door cut	5/25/05	6/1/05	7	1.00	1
Elevator #1 (inmates & staff)	5/26/05	8/11/05	77	11.00	1
Move 11th floor inmates	12/13/04	12/13/04	0	-	0
11th floor remodel	12/14/04	4/4/05	111	15.86	2
11th floor shakedown	4/2/05	4/6/05	4	0.57	2
Move 10th floor inmates	4/6/05	4/6/05	0	-	0
10th floor remodel	4/7/05	7/11/05	95	13.57	2
10th floor shakedown	7/7/05	7/11/05	4	0.57	2
Move 9th floor inmates	7/11/05	7/11/05	0	-	0
9th floor remodel	7/12/05	10/10/05	90	12.86	2
9th floor shakedown	10/6/05	10/10/05	4	0.57	2
Move 8th floor inmates	10/10/05	10/10/05	0	-	0
8th floor remodel	10/13/05	1/12/06	91	13.00	2
KCCH	8/26/04	9/2/04	7	1.00	1
Skybridge (night work)	3/21/05	4/11/05	21	3.00	1
8th floor shakedown	1/8/06	1/12/06	4	0.57	2
Move 7th floor inmates	1/12/06	1/12/06	0	-	0
7th floor remodel	1/16/06	4/18/06	92	13.14	2
7th floor shakedown	4/14/06	4/18/06	4	0.57	2
Clinic & Infirmary remodel (floors 6 & 7)	4/19/06	8/14/06	117	16.71	2
Clinic & Infirmary shakedown	8/13/06	8/17/06	4	0.57	2
Close out	8/17/06	8/28/06	11	1.57	0
Loading dock officer - project duration	5/18/04	8/28/06	832	18.86	0.6

A bar chart schedule for these and inmate relocation activities can be printed from the ISP Cost Model.