

# Dept. of Adult Detention and Dept. of Youth Services Overtime

Report No. 92-9

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## INTRODUCTION AND BACKGROUND

The study of overtime use by the Department of Adult Detention (DAD) and the Department of Youth Services (DYS) was prompted by King County Council concern over increasing overtime expenditures despite increases in the number of Corrections and Juvenile Corrections Officers.

DAD: The Department of Adult Detention is responsible for the operation of the King County Corrections Facility. In 1991, DAD had operating costs of over \$33 million, had an average daily population (ADP) of 1744, and was budgeted for about 300 corrections officers (CO). A majority of DAD posts are mandated by the agreement reached in Hammer v. King County. Total overtime expenditures in 1991 were about \$1.5 million.

DYS: The Department of Youth Services is responsible for the operation of the King County juvenile detention facility. In 1991, DYS had operating costs of about \$12.1 million, had an ADP of 115, and was budgeted for about 70 juvenile corrections officers (JCO). Total overtime expenditures in 1991 were about \$710,000.

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## OBJECTIVE

The objective of the study was to review overtime usage and management, and scheduling methodologies. Specifically, the study attempts to answer the following questions:

- What was the extent of overtime usage and the overtime use trend over the last six years?
- Where (which sections) was the overtime budget spent?
- What were the reasons for the use of overtime?

The study reviewed potential reasons for overtime usage based on input from DAD and DYS, general management theory, and relevant publications. The review included analysis of staffing and overtime data and budget projections, availability of relevant and accurate information for

overtime control and management, and actual staffing levels. Audit staff reviewed available data from the period between 1986 and 1991, and from 1992 budget projections. DAD and DYS staff were interviewed during study fieldwork and analysis. A survey of other corrections facilities' overtime practices was performed for comparative purposes.

The study did not review or evaluate the operational justification for post assignments. However, most of the post assignments for DAD were defined by the agreement reached in the *Hammer v. King County* lawsuit. Staffing for DYS is based on DYS policy to maintain a 1:10 JCO to detainee ratio. The American Corrections Association (ACA) guidelines for juvenile detention facilities suggest a ratio of 1:8 during the day and 1:16 during sleeping hours.

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## SUMMARY STATEMENT OF FINDINGS

The general study conclusion was that overtime budgeting, control, accountability, and management could be improved. Recommendations made in the report which were addressed to both departments include: revision of data collection and reporting forms to improve accountability, establishment of expenditure controls through monthly overtime allotments, and consideration of alternate staffing and overtime estimating methodologies.

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## MAJOR FINDINGS AND RECOMMENDATIONS

Finding 1 - Reports and records could be improved to strengthen the accountability of overtime use.

Review of DAD records and reports showed that:

- (1) budget request and overtime use reports do not use the same categories, so they cannot be compared;
- (2) the DAD overtime use summary report specified "other" as the reason for overtime use (20% in 1990 and 16% in 1991);
- (3) the form used to report overtime use could include additional information to allow verification and improve accountability;
- (4) documentation to justify overtime use was weak.

The study recommended that:

- (1) the same categories be used in the budget request and in the overtime reports;
  - (2) the form used for reporting overtime use be revised; and
  - (3) the "other" category in the summary report be periodically evaluated.
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Finding 2 - Filling posts with overtime without evaluation of workload could result in unnecessary overtime.

Vacant posts are routinely filled with overtime without consideration for need based on workload. Although most posts are mandated by Hammer v. King County agreement, it is audit staff opinion that not filling posts which are not operationally needed would not seem to be in violation of the intent of the agreement.

The study recommended that:

- (1) DAD identify posts which may not need to be filled by overtime if workload is light;
- (2) develop procedures and standards for evaluating when an unscheduled absence in identified posts may not need to be filled;
- (3) standards for overtime use be incorporated in overtime justification and authorization; and,
- (4) continued overtime use to fill vacant post be monitored.

Finding 3 - The budget as a planning and management tool has been ineffective - budget overspent for the last 6 years.

DAD has exceeded its appropriated overtime budget every year for the last 6 years. The average actual overtime expenditure was about 3 times the adopted overtime budget.

The study recommended that:

- (1) monthly overtime allotments be established to try and control the rate of spending (although it may not reduce overtime, awareness of usage rate may improve overtime control), and
- (2) financial controls be strengthened by frequent and timely distribution of reports on the use and status of overtime allotments.

Finding 4 - Overtime in excess of projected needs increased operating costs in 1991.

Review of 1991 DAD records showed that overtime use exceeded the number of hours needed to fill vacancies. In 1991, 5,638 post-days of overtime were used. Overtime used to fill vacancies due primarily to unscheduled leave totaled 4,800 post-days. Thus, 838 post-days in excess of the projected staffing level were used, which translates to about \$167,600. The use of overtime in excess of projected need may be conceivably due to limited awareness of actual operational needs and the routine process of replacing COs on unscheduled leave with overtime. The Captain who is responsible for day-to-day CO schedules and assignments makes staffing decisions from an office using a computer terminal. Staffing decisions may have been made without sufficient information. It is audit staff opinion that Captains should focus on workforce management rather than perform the mechanical process of filling posts using a computer terminal.

The study recommended that DAD consider requesting a clerical person to perform the task of updating CO work schedules, assist in addressing reporting and recording weaknesses noted in a previous finding and provide clerical support in the development of the annual CO

work and leave schedule.

Finding 5 - CO sick leave use was higher than the county average; however, CO sick leave declined in 1991.

According to payroll records CO sick leave use for 1990 and 1991 were higher than the County average. CO sick leave use was 9.8 days and 8.12 in 1990 and 1991 respectively, while the County average was 8.08 and 6.81. Sick leave coverage accounted for 40% (1990) and 31% (1991) of overtime use. It should, however, be noted that sick leave for COs declined in 1991 due to a department effort to reduce it.

The study recommended that DAD manage and monitor sick leave use and continue its efforts to further reduce sick leave use.

Finding 6 - Average actual leave per day exceeded DAD vacation policy.

DAD's 11/7/6 policy indicates that no more than 11, 7, and 6 COs be on vacation on the 1st, 2nd and 3rd shifts, respectively. The 11/7/6 policy roughly reflects the average vacation available to COs by shift given their years of service to the County. Analysis found that for all shifts, vacation from May to December exceeded the standards, while vacation from January to April was below the standard.

The study recommended that DAD

- (1) review leave use and reason for exceeding the 11/7/6 policy;
- (2) schedule vacation evenly throughout the year; and
- (3) when making exceptions, DAD should insure that resources are available to cover for the impact of the exceptions.

Finding 7 - Method used to determine annual staffing could be improved.

The DAD staffing level is based on calculation of a relief factor. The relief factor is then multiplied by the number of posts to be covered to determine the staffing (FTE) needed. The problem with this methodology, although commonly used, is that it considers all posts to be covered the same way. It does not consider the number of days a post is covered (i.e., 5 or 7 days) or the fact that some posts do not require relief for lunch or breaks. Use of the methodology suggested by the National Institute of Corrections (NIC), which factors in the number of days posts are staffed and whether or not posts are relieved, indicated the need for a lower staffing level than the level resulting from the use of the relief factor model.

The study recommended that DAD consider using the NIC suggested methodology in estimating annual staffing needs.

Finding 8 - Method used to determine overtime budget needs could be refined.

DAD's projected overtime need is the difference between the hours needed to meet post staffing requirements and additional workload, and the presumed hours available given the staffing level. While the concept of this method appears to be reasonable, it is our opinion that it could be refined to consider not only the occurrence of unscheduled absence but also the trade-off between adding staff and paying overtime. This can be done by using a model which uses binomial probability to predict overtime needs given an unscheduled absence rate.

The study recommended that DAD consider the use of binomial probability to estimate overtime budget requirements.

Finding 9 - Reports and records could be improved to strengthen the accountability of overtime use.

Review of DYS records and reports showed that:

- (1) overtime budget requests and overtime use reports do not use the same categories, so they cannot be compared;
- (2) the current system used to monitor and control staff schedules, assignments and overtime use is reasonable, but tedious;
- (3) scheduling is centralized, and
- (4) although a replacement protocol has been established, the process is not documented.

The study recommended that:

- (1) the same categories be used in the budget request and in overtime reports;
- (2) options be evaluated to better utilize computer resources and minimize tedious manual review and report preparation; and
- (3) the form and schedule be modified to show the detainee-to-staff ratio by section (staffing is based on coverage ratio of 10:1).

Finding 10 - Filling posts with overtime without evaluation of workload could result in unnecessary overtime.

DYS routinely filled vacancies due to unscheduled leave with overtime without consideration for need based on workload. Although, most posts were filled given the replacement protocol, some vacant posts were routinely filled.

The study recommended that:

- (1) DYS revise its replacement scheduling procedures to include an evaluation of JCOs needed based on detainee to staffing ratio before scheduling replacement, and
- (2) DYS incorporate this evaluation on the replacement form it uses to record efforts to secure replacement JCOs.

Finding 11 - The budget as a planning and management tool has been ineffective - budget overspent for the last 6 years.

DYS has exceeded its appropriated overtime budget every year for the last 6 years. The average actual overtime expenditure was about 4 times the adopted overtime budget.

The study recommended that:

(1) monthly overtime allotments be established to try and control the rate of spending (although it may not reduce overtime, awareness of usage rate may improve overtime control) and,  
(2) financial controls be strengthened by frequent and timely distribution of reports on the use and status of overtime allotments.

Finding 12 - No data on overtime use.

Staff vacancies impact the use of overtime. The study, however, was not able to determine overtime use to fill staffing shortages due to lack of readily available data.

The study recommended that DYS develop a system to document and report daily (and by shift) budgeted and actual staffing use, including the number of JCOs called in to work overtime.

Finding 13 - JCO sick leave use was higher than the county average.

According to payroll records JCO sick leave use for 1990 and 1991 was higher than the County average. JCO sick leave use was 8.41 days and 8.87 in 1990 and 1991, while the County average was 8.08 and 6.81. Sick leave coverage accounted for almost 30% of overtime use. DYS speculated that the high sick leave use was due to the high population count in the facility.

The study recommended that DYS evaluate the cause of high sick leave usage. Evaluation should include correlation of sick leave use to high population count.

Finding 14 - Impact of vacation on overtime use cannot be determined due to lack of readily available data.

DYS vacation policy, dictated by its agreement with the union, is based on seniority preference. Overtime use to cover for vacation leave accounted for 10.74% of all overtime use; however, no detail was available for analysis.

The study recommended that DYS develop a system to document and report overtime use to cover for vacation leave.

Finding 15 - Staff scheduling system appears to be reasonable.

DYS uses a manual system to schedule and assign JCOs. Although tedious, it appears to be achieving its objective. However, it is audit staff opinion that the scheduling and monitoring process could be streamlined by improved utilization of computer resources.

The study recommended that DYS increase utilization of computer resources in staff

scheduling.

Finding 16 - Method used to determine annual staffing could be improved.

DYS staffing level is based on the calculation of a relief factor. (Audit staff review indicated that calculation of the coverage factor may underestimate FTEs needed because the methodology does not take into account DYS 5/4 schedule.) The relief factor is then multiplied by the number posts to be covered to determine the staffing (FTE) needed. The problem with this methodology, although commonly used, is that it considers all posts to be covered in the same way. It does not consider the number of days a post is covered or the fact that some posts do not require relief for lunch or breaks. Use of a methodology suggested by the National Institute of Corrections (NIC), which factors in the number of days posts are staffed and whether or not posts are relieved, indicated the need for a lower staffing level than the level resulting from the use of the relief factor model.

The study recommended that DYS consider using the NIC suggested methodology in estimating annual staffing needs.

Finding 17 - Method used to determine overtime budget needs could be refined.

DYS projected overtime need is based on the estimated need for coverage due to holidays, meetings, extended shifts, unforeseen delay in filling vacancies, etc. While the concept of this method appears to be reasonable, it is our opinion that it could be refined to consider not only the occurrence of unscheduled absence but also the trade-off between adding staff and paying overtime. This can be done by using a model which uses binomial probability to predict overtime needs given an unscheduled absence rate.

The study recommended that DYS consider the use of binomial probability to estimate overtime budget requirements.

Finding 18 - Availability of part-time JCOs to cover staff shortages may have minimized use of overtime.

Unlike DAD, DYS employs part-time JCOs. The part-time JCOs, according to DYS replacement protocol, are first selected to cover for staffing shortages before overtime is used. The use of part-time JCOs to cover for staffing needs may have resulted in reduced overtime. However, the study was not able to verify the impact of part-time JCOs on overtime use because of the lack of readily available and appropriate data.

The study recommended that DYS

- (1) continue the use of part-time JCOs and
- (2) develop and maintain a system to document and report on part-time JCO use to cover for shortages which would have been covered by overtime.

*Updated: 10/25/06*