

**OFFICE OF PUBLIC DEFENSE  
SPACE FORECAST METHODOLOGY**

Estimates of future office space requirements are based on staffing projections, King County space standards, and the requirements of the contract public defender agencies. The standards used in these projections are as follows:

Attorneys <sup>1</sup>	127 Ft <sup>2</sup>
Support Staff	99 Ft <sup>2</sup>
Clerical Staff <sup>2</sup>	221 Ft <sup>2</sup>
Interviewers	131 Ft <sup>2</sup>
Administrator (OPD)	200 Ft <sup>2</sup>
Clerical Staff	160 Ft <sup>2</sup>
Support Staff	100 Ft <sup>2</sup>

---

<sup>1</sup>Felony, misdemeanor, and supervising attorneys.

<sup>2</sup>Primarily secretaries who also function as receptionists for 4 attorneys each.

OFFICE OF PUBLIC DEFENSE

File: FMP-OPD2.WK3

Cases projected by regression (on population) through 1994  
and by fixed ratio thereafter.

Data updated for 1990 actuals.

	KC Population	% Pop Growth	OPD Misdemeanor Cases	% Growth Misd Cases	OPD Felony Cases	% Growth Felony Cases
1984	1,326,600		5,543		5,800	
1985	1,346,400	1.49%	6,693	20.75%	5,777	-0.40%
1986	1,361,700	1.14%	6,707	0.21%	6,686	15.73%
1987	1,384,600	1.68%	7,670	14.36%	7,414	10.89%
1988	1,413,900	2.12%	8,202	6.94%	8,168	10.17%
1989	1,446,000	2.27%	9,122	11.22%	9,453	15.73%
1990	1,460,996	1.04%	9,592	5.15%	9,322	-1.39%
1991	1,483,918	1.57%	10,247	6.83%	10,270	10.16%
1992	1,507,199	1.57%	10,902	6.39%	10,963	6.75%
1993	1,530,846	1.57%	11,567	6.10%	11,667	6.42%
1994	1,554,864	1.57%	12,242	5.84%	12,382	6.13%
1995	1,579,258	1.57%	12,434	1.57%	12,576	1.57%
1996	1,602,232	1.45%	12,615	1.45%	12,759	1.45%
1997	1,625,540	1.45%	12,799	1.45%	12,944	1.45%
1998	1,649,187	1.45%	12,985	1.45%	13,133	1.45%
1999	1,673,178	1.45%	13,174	1.45%	13,324	1.45%
2000	1,697,518	1.45%	13,365	1.45%	13,517	1.45%
2001	1,717,884	1.20%	13,526	1.20%	13,680	1.20%
2002	1,738,495	1.20%	13,688	1.20%	13,844	1.20%
2003	1,759,353	1.20%	13,852	1.20%	14,010	1.20%
2004	1,780,461	1.20%	14,019	1.20%	14,178	1.20%
2005	1,801,823	1.20%	14,187	1.20%	14,348	1.20%
2006	1,822,217	1.13%	14,347	1.13%	14,510	1.13%
2007	1,842,842	1.13%	14,510	1.13%	14,675	1.13%
2008	1,863,700	1.13%	14,674	1.13%	14,841	1.13%
2009	1,884,795	1.13%	14,840	1.13%	15,009	1.13%
2010	1,906,128	1.13%	15,008	1.13%	15,179	1.13%
1994 Cases/Pop Ratio ----->			0.0079		0.0080	
R Squared -----			0.98		0.97	
% Growth 1984-1990 ----->			73.05%		60.72%	
% Annual Growth ----->			9.57%		8.23%	
% Growth 1990-2000 ----->			39.34%		45.01%	
% Annual Growth ----->			3.37%		3.79%	
% Growth 2000-2010 ----->			12.29%		12.29%	
% Annual Growth ----->			1.17%		1.17%	

STAFFING PROJECTIONS/SPACE REQUIREMENTS 1990 TO 2010  
PUBLIC SAFETY

Public Safety's 1990 to 2010 projections are shown below. Projection of Public Safety's staffing can vary widely, depending on what assumptions are made about the future. For example, incorporations, contracting, public perception, etc. could dramatically affect the figures. The process is partly mathematical, but a crystal ball would be helpful.

For a list of underlying assumptions and potentially influential factors, please see Attachment A.

		YEAR:				
		1990	1995	2000	2005	2010
<u>LOCATION</u>						
Criminal Invest. Div. (Downtown)	No. of staff:	106	119	135	143	153
	Sq.Ft. of space:	14,310	16,065	18,225	19,305	20,655
Other Downtown Staff	No. of staff:	214	241	272	288	307
	Sq.Ft. of space:	28,890	32,535	36,720	38,880	41,445
	Fixed space:	30,000	31,530	33,138	34,829	36,606
Non-Downtown Staff	No. of staff:	456	513	580	615	655
	Sq.Ft. of space:	61,560	69,255	78,300	83,025	88,425
TOTAL STAFF:		776	873	987	1,046	1,115
TOTAL SQ.FT. OF SPACE:		134,760	149,385	166,383	176,039	187,131

These space estimates are very rough.

These figures assume a compound growth rate for staff of 2.4% per year between 1990 and the year 2000 and a rate of 1.2% per year thereafter. This corresponds to the projected growth rate for the population served by Public Safety. Please see Attachment A. Space estimates assume 135 square feet per staff member. A 30,000 square foot area was segregated from the downtown figures. It represents some of the space for Evidence and Supply, AFIS equipment, Emergency Operations, meeting rooms, etc. This "fixed space" was expanded at the rate of 1% per year.

Additional specialized space for seized vehicle storage, marine warehouse, etc. was not included.

**ASSUMPTIONS UNDERLYING PUBLIC SAFETY'S STAFFING PROJECTIONS:**

- The cities of Federal Way, SeaTac, North Bend and Beaux Arts will continue to contract with Public Safety.
- The overall population served by King County Police (unincorporated and contract cities) will grow at a compound rate of 2.4% per year from 1990 to 2000 and 1.2% per year thereafter. (These estimates are a combination of the 2.5% and 1.8% figures for unincorporated King County and the somewhat lower projections for the combined populations of the 4 contract cities. Please see 1990 Annual Growth Report for King County).
- Public Safety will maintain a staffing level of 12.4 officers per 10,000 population. (This was the average level maintained from 1980 to 1990. Please see Attachment B.)
- The percentage of Public Safety staff assigned to its major divisions will remain constant.

**FACTORS WHICH COULD INCREASE FUTURE STAFFING:**

- Adding contract cities.
- Expanding the Department's delivery of regional services (e.g., Major Crime Investigation, SWAT teams, etc.)
- Increasing population growth rate.
- Increasing staff per 10,000 population. (This occurred in the 1980 to 1990 period. Please see comparison between first and second half of the decade shown on Attachment B.)
- Increasing public demand, changing to community policing, changing laws, etc. More urban populations generally demand more services.

**FACTORS WHICH COULD DECREASE FUTURE STAFFING:**

- Losing contract cities of Federal Way, SeaTac, North Bend or Beaux Arts.
- Decreasing population growth rate.
- Annexations and incorporations.
- Decreasing staff per 10,000 population.

STAFFING COMPARED TO POPULATION 1980 - 1990  
PUBLIC SAFETY

<u>YEAR</u>	<u>POPULATION SERVED*</u>	<u>TOTAL DEPARTMENT STAFF (COMMISSIONED &amp; NON-COMMISSIONED)</u>	<u>STAFF PER 10,000 POPULATION</u>
1980	505,116	619	12.3
1981	540,554	636	11.8
1982	540,298	647	11.9
1983	540,746	644	11.9
1984	540,383	670	12.3
1985	551,692	691	12.5
1986	563,318	696	12.3
1987	576,780	702	12.2
1988	574,197	775	13.5
1989	593,064	771	13.0
1990	605,528	776	12.8
AVERAGE PER YEAR 1980 - 1990:			12.4 PER 10,000
(AVERAGE PER YEAR 1980 - 1985:			12.1 PER 10,000)
(AVERAGE PER YEAR 1985 - 1990:			12.7 PER 10,000)

Between 1980 and 1990 the yearly staff per 10,000 figures varied less than  $\pm 9\%$  from the mean average of 12.4 per 10,000 population.

Staffing had a .91 correlation (Pearson) with population during this 1980 - 1990 period. This indicates a strong positive relationship between the two variables. For comparison, positive correlation coefficients can range from 0 to 1 with 0 indicating no relationship and 1 indicating a perfect relationship.

\* Includes contract cities of Beaux Arts, North Bend, SeaTac and Federal Way.

Department of Public Safety  
Annexations and Incorporations

In recent years, the County has experienced a series of annexations and incorporations. The municipal services provided to these areas previously by the County are now being provided by the municipality or by the County under contract. As a municipal service, the Department of Public Safety (DPS) will be affected by future annexations and incorporations. However, the extent to which its service area will decrease depends on how many areas incorporate and whether these areas contract with DPS.

While there is a great likelihood of future annexations and incorporations, it is beyond the scope of this study to project which areas will incorporate and furthermore which will choose to provide their own law enforcement services. Consequently, for the purposes of this analysis, no incorporation impacts are factored into the workload for DPS. It is assumed that in the future any space not required by DPS would be used by other County agencies or by new or expanded municipal law and justice agencies.

FINGERPRINTING STAFF  
DEPARTMENT OF PUBLIC SAFETY

Each separate jail or booking facility will require expenditures as outlined below.

IDENTIFICATION SUPERVISORS

One supervisor per facility.  
Salary (excluding benefits) = \$39,408 (1990 figure).

IDENTIFICATION TECHNICIANS

Each facility needs one technician per 5,700 yearly bookings, or 5 technicians (whichever is greater).  
Salary (excluding benefits) = \$25,403 (1990 figure).

OPERATING EXPENSES

Grossly estimated at \$5,000 per year (1990 figure).

SPACE

Grossly estimated at 250 square feet.

-----  
ASSUMPTIONS:

- ° Public Safety will be responsible for providing 7 days/week 24 hours/day fingerprinting at each jail location. Continuous staffing of this nature requires a minimum of 5 ID technicians, regardless of workload.
- ° Salaries  
Used 1991 mid-range (\$25,403 for ID Techs and \$39,408 for ID supervisor).
- ° A 7-hour turnround is required on all prints. This will require prompt delivery of prints from the non-downtown jails to the downtown AFIS headquarters. It isn't currently clear how to efficiently accomplish this. Therefore, some resources may have to be added later.
- ° These estimates are very rough. Public Safety will be assuming jail fingerprinting responsibilities in the fall of 1991 and, therefore, does not have a body of historical data from which to project these figures.

AFIS (above 1990)

	Option G,H		Option E		Option A		Option B		Option C	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Phase I (Above 1990)										
Supervisor	49,654	0.00	0	0	1.00	49,654	0	0	1.00	49,654
Fingerprint Tech	32,008	3.00	96,023	96,023	4.80	153,637	3	96,023	4.80	153,637
O&M	5,000		15,000	15,000		29,000	0	15,000		29,000
<b>Total Phase I</b>		<b>3.00</b>	<b>111,023</b>	<b>111,023</b>	<b>5.80</b>	<b>232,291</b>	<b>3.00</b>	<b>111,023</b>	<b>5.80</b>	<b>232,291</b>
Phase II (Above 1990)										
Supervisor	49,654	0.00	0	49,654	2.00	99,308	1.00	49,654	3	148,962
Fingerprint Tech	32,008	3.00	96,023	192,047	9.60	307,275	7.80	249,661	14	460,912
O&M	5,000		15,000	35,000		58,000		44,000		87,000
<b>Total Phase II</b>		<b>3.00</b>	<b>111,023</b>	<b>276,701</b>	<b>11.60</b>	<b>464,583</b>	<b>8.80</b>	<b>343,315</b>	<b>17.40</b>	<b>696,874</b>

Explanation:

This revised estimate for AFIS staffing assumes that, although the number of bookings are the same for all options, additional staff at the suburban justice center may be necessary during slower booking periods. The estimate for this additional staff is three FTEs as shown above in options G and H. Options which include book and holds require five finger print technicians and one supervisor per book and hold facility.





**DEPARTMENT OF ADULT DETENTION**  
**Workload Methodology**

DAD commissioned a special study by Jack O'Connell, a nationally recognized consultant for the purpose of preparing a jail population forecast and a profile of prisoners which could be used to help make decisions associated with facility design, siting and jail related programs.

The methodology used for the forecast is the "components of change" forecasting methodology that takes into account the independent influence of the many variables that impact jail populations including: demographic patterns, crime patterns, booking rates, and length of stay patterns for six separate jail statuses. King County officials developed over two dozen assumptions associated with the different components of change, which were then factored into the forecast model.

A peaking factor of 1.030 was added to the "average" population forecast to give a more realistic representation of expected workload, bed need and program space. The peaking factor is the difference between the day of the week with the highest population versus the week's average population.

After tracking actual ADP's for six months, adjustments were made to a few specific assumptions to account for the variance between actual and forecasted levels, and the forecasted population was updated. This resulted in a decline of approximately 300 prisoners annually from the initial forecast.

DAD staff took the O'Connell forecast, factored in additional policy and capacity adjustments and then computed future population forecasts for security classifications and regional bookings in five year increments. (Table: "Jail Population Forecast Methodology 10/19/90". A technical chapter describing this process in detail is available from DAD). Examples of policy and capacity adjustments include: utilization of assumption driven incarceration rates, loss of municipal bed capacity, and several non-capital options that offset the need to build approximately 74 secure jail beds.

Following this exercise, planning staff calculated a "buildable capacity forecast" and identified the estimated number of beds required to address future prisoner populations for both phase I and phase II. This process is outlined below and is graphically displayed on the attached table titled, "Method for Deriving Required Additional Beds to Accommodate Future DAD Workloads."

### BUILDABLE BED FORECAST METHODOLOGY

The forecast jail population, by specific capital program, was converted to a required buildable capacity (beds) by applying the appropriate vacancy factor. The factors used in this analysis are within the accepted industry ranges for similar detention programs. For work release, long term NRF and the NRF-DWI program, a zero vacancy factor was applied to each specific operational situation. A 5% vacancy factor was applied as an average to all portions of the secure residential housing category.

The final step in the bed need process was to determine the additional required bed capacity. This was achieved by deducting the current capacity from the total bed need on a program-by-program basis. The results are shown on the attached table. These required bed additions form the basis for developing the various facility masterplan capital options discussed in Chapter 4 of this report.

### STAFFING METHODOLOGIES

Staffing was developed based on current approved methodologies in DAD's annual budget, audit reports, and a special study comparing staff to inmate ratios in Direct Supervision detention facilities.

If DAD's current methodologies differ from those used in planning it is largely due to proposed operational or design efficiencies that may be implemented in future facility. However, these differences would be the same in all new buildings and will not effect the comparative cost of operations in the various planning options nor the life cycle cost analysis.

Adjustments to staffing formulas & numbers should be expected in each of the three upcoming facility planning phases. For example to determine where fixed posts may be cannot be accurately predicted until after a Facility Program Plan and initial phases of Design Development have been completed.

Please note DAD has attempted to staff for worst case scenarios when planning for facility options involving inmate transport systems.

dadstaf  
1/91

METHUEN DERIVING REQUIRED ADDITIONAL BEDS TO ACCOMMODATE FUTURE DAD WORKLOADS  
29-Jan-91

JAIL POPULATION CATEGORY	YEAR		NOTES AND COMMENTS
	2000	2010	
<b>WORKLOAD FORECAST (ADP):</b>			
TOTAL JAIL POPULATION	2,690	3,020	Based on most recent O'Connell forecast update
LESS:			
NON-CAPITAL-EHD	50	50	based on earlier assumptions, yr 2000 ADP at 89, yr 2010 at 102, see below for details
WORK RELEASE	191	200	based on DAD forecast
NON-CAPITAL-WORK RELEASE	20	26	based on DAD forecast, all goes to EHD program
LONG TERM NRF	270	306	based on DAD forecast
DWI PROGRAM-NRF	8	9	based on DAD forecast
NON-CAPITAL-NRF	29	37	based on DAD forecast, 19 goes to EHD in yr 2000, 26 in yr 2010, rest to community work service
OTHER NON CAPITAL INTAKE	25	28	includes supervised release and pretrial release programs
	64	74	Based on DAD forecast-not part of secure residential housing
PLUS:			
MUNICIPAL ADP	0	70	assumed to occur by yr 2010, part of secured residential housing
TOTAL ADP FOR SECURE RESIDENTIAL HOUSING	2,033	2,360	
<b>BUILDABLE CAPACITY FORECAST: (Beds)</b>			
WORK RELEASE	191	200	Based on 0% vacancy assumption and the above population forecast
LONG TERM NRF	270	306	Based on 0% vacancy assumption and the above population forecast
DWI PROGRAM-NRF	19	21	Based on 0% vacancy assumption and 3 day per week operation
SECURE RESIDENTIAL HOUSING	2,140	2,484	Based on 5% vacancy assumption and the above population forecast
<b>ADDITIONAL REQUIRED BEDS:</b>			
WORK RELEASE	0	9	1991 capacity at 160 beds in cthse plus 31 contract beds
LONG TERM NRF	79	36	1991 capacity at 191 beds
DWI PROGRAM-NRF	0	0	1991 capacity at 25 beds
SECURE RESIDENTIAL HOUSING	893	344	1991 KCCF capacity at 1,247 beds
TOTAL REQUIRED ADDITIONAL BED CAPACITY*	972	389	Assumes no change to existing capacities in yr 2000 & yr 2010
plus REPLACEMENT BEDS AT KCCF	38	0	yr 2010 needs assume that the yr 2000 needs will be all built by 1995
<b>TOTAL REQUIRED BED ADDS</b>	<b>1,010</b>	<b>389</b>	required replacement at KCCF, all options, to house acute medical & psych population

\*The required beds to be built will vary by option and by phase depending on the changes at KCCF and other existing facilities, and the specific configuration of the options themselves.  
 EHD=Electronic Home Detention  
 NRF=North Rehabilitation Facility  
 ADP=Average Daily Population  
 DWI=Driving While Intoxicated  
 KCCF=King County Correctional Facility

FACILITIES MASTER PLAN

DAD STAFFING METHODOLOGIES

E4 = AVERAGE DAILY POPULATION = 1219

E5 = NUMBER OF ANNUAL BOOKINGS = 81,452

E6 = ADDITIONAL WORK RELEASE = 55 Inmates

<u>TYPE OF STAFF</u>	<u>DISCUSSION</u>	<u>ASSUMPTIONS</u>
<p>1. Housing Officers (single cell living units)</p> <p><u>E4</u> = <u>1219</u> 60      60</p>	<p>Threshold ratio: 1 Officer to 60 inmates. Number of inmates <u>may decrease</u> in higher security and classification levels. Number of inmates in living units are also limited by classifications allowed in common areas at the same time.</p>	<p>Direct Supervision-Compared to successful examples in other facilities - using appropriate type of physical plant.</p>
<p>2. Housing Officers (Dormitory style living units)</p> <p><u>E4</u> = <u>1219</u> 50      50</p>	<p>Threshold ratio: 1 Officer to 50 Inmates Number of inmates and dorns of this size and type are limited by standards and available cohesive groups of inmates.</p>	<p>Direct Supervision-Compared to successful examples in other facilities - using appropriate type of physical plant.</p>
<p>3. Housing Area Supervisors (either housing area type)</p> <p><u>E4</u> = <u>1219</u> 360    360</p>	<p>Minimum Supervisors to Housing Units 1 Supervisor to every 6 housing units. Three shifts - 7 days a week</p>	<p>Assumes housing units in close proximity &amp; one Supervisor not responsible for more than 300 inmates &amp; span of control</p>
<p>4. Mgt. (Uniform Staff)</p>	<p>Captains per shift/ per facility not based on any proportional calculations. Three shifts 7 days per week.</p>	<p>Assumes 1 Mgr. or Capt. per shift- 7 days Responsible for all shift activities in each facility.</p>
<p>5. Facility Cndr.</p>	<p>Highest level management for facility, reports to parent agency. Represents facility to Executive/Legislative branch. 1 Shift-5 days/wk</p>	<p>Assume for present at least 1 new position for each free standing operation/facility. Both operations &amp; programs should be addressed at this level of Admin. Staff.</p>

<u>TYPE OF STAFF</u>	<u>DISCUSSION</u>	<u>ASSUMPTIONS</u>
6. Central Control Officers	Depending on complexity of equipment and number of responsibilities of position this type of staff would be min. 1-2 positions - 3 shifts 7 days per week.	Assumes any permanent free standing facility needs perimeter & interior secure access controls & monitoring
7. Floor/Area Control Officers	Need for & number of positions will be determined during design planning stages. Normally 1 officer for each of these kinds of workstations.	Assumes that facility program plan will strive to avoid these posts by more effective use of design and then only to reduce the number of escort positions required.
8. Housing Escort Officers <u>E4 = 1219</u> 180 180	These officers move inmates within bldg. to visiting, recreation, medical, housing moves. 1 Escort officer to every three housing units. Escort also relieve housing officers.	Assume all inmate movement is escorted when out/off the housing floor/area. (ie: court, medical, release etc)
9. Court Escort <u>.218 x E4 x 20</u> 316	Number based on existing staffing levels with 21.8% of population moving for court on a daily basis.	Assume this staffing pattern if bldg. attached. Stipulated Court Agreement.
10. Vehicle Transport Officers	Vehicle transports - min. two officers per transport vehicle if more than two inmate is being transported & or if inmate is high security risk	Assumes appropriate and maximal size transport vehicles. Examples from other jurisdictions. Also assumes that arrivals time for prisoners can vary.
11. Booking Officers <u>E5/365/3/20</u>	1 Officer per 20 bookings/ per shift	Based on 20 -25 minutes per booking using existing processes to compare Possible to speed up process if facility design accommodated.
12. Jail Aides (booking) <u>E5/365/3/20</u>	1 Aide per 20 bookings/per shift Complete all property inventories, clothing etc.	Based on existing time to process and audits of work positions

<u>TYPE OF STAFF</u>	<u>DISCUSSION</u>	<u>ASSUMPTIONS</u>
13. Release Officers <u>E5/365/3/20</u>	1 Corrections Officer per 70 releases per shift	Assume (for present) staffing method for this function will not change.
14. Jail Aides (release) <u>E5/365/3/70</u>	1 Jail Aide per 40 releases per shift	Returns clothes/property & Prepares basic paperwork for releases. Based on audits.
15. Escort (booking/release) <u>E5/365/3/35</u>	1 Corrections Officer for every 15 bookings & 20 release per shift.	Moves inmates to/from cells/ holding for moves to housing, interviews, booking steps and release processing.
16. Intake Supervisor	1 Sgt. per shift	Based on the amount of activity and staff in area & on degree of special responsibility for the booking & release areas.
17. Maintenance/Supply Staff <u>E4/400</u>	Workload will alter the number of additional staff for this type of work and whether facility is independent from main operation	Assumes staff supervising inmate labors
18. Classification Staff <u>E4/400</u>	One classification staff per 3 housing units - approximates current staffing	Could also be based on staffing examples from other jurisdictions
19. Cooks	Based on current % of staff presently budget to cook meals for inmates & staff	Assumes that inmates labor will be used to augment staff
20. Cooks Helpers	" " "	" " "
21. Laundry (Jail Aides)	Based on current % of staff to workload	Assumes inmate labor will be used and function remains centralized
22. Commissary	Based on current % of Staff to workload	Assumes function will not remain in one location and deliveries scheduled differently than present
23. Mail (ops staff)	Based on current % of Staff to workload	Assumes function either centralized or uniform staff may assist with process (during graveyard shift)

<u>TYPE OF STAFF</u>	<u>DISCUSSION</u>	<u>ASSUMPTIONS</u>
24. Personnel	Based on current % staff to workload and average time to process new employees	Assumes current turnover rate
25. Records	Based on existing % staff to current workload	Assumes no reorganization, expansion or changes in function
26. Finance (payroll etc.)	Based on existing % of staff to current workload	Assumes workload driven & that staffing will be adjusted for significant changes in functions
27. Reception (Visiting/Bail)	1 reception worker per every 100 visitors per shift. 5 minutes per "window" customer.	420 minutes per shift for 7 hours of active time out of a 8 hour shift.
28. Reception (Telephone)	2 minutes per telephone call	" " "
29. Release on Recognizance	1 ROR interviewer per 40 bookings	Based on time required to complete interviews. 10-15 minutes per interview.
30. Psych. Evaluators	1 staff to every 10 cases each evaluator also screens inmates every shift from the general population for transfer to special housing or supervision.	Based on current workloads
31. Clerical Support	Based on current % staff to workload	Based on % of clerical staff currently assigned by program and administrative area.
32. Medical Staff	(See Jail Health Services sections)	Based on new formula developed for FMP process and to accommodate Accreditation process for jail



Page 5 FMP  
DAD Staffing Methods

<u>Type of Staff</u>	<u>Discussion</u>	<u>Assumptions</u>
Work Release Caseworkers	Ratio: 1 caseworker per 32 workrelease inmates	Based on existing staff formulas
Supervised Release	Ratio: 1 Staff per 1,846 Interviews	Based on existing staff formula
Supervised Release Caseworker	Ratio: 1 Caseworker per 35 clients	Based on existing formula
Electronic Home Detention	Ratio: 1 Caseworker/Screenener per 35 inmates	Based on existing formula

STAFMETH 1/91  
wk

**SUGGESTED SQUARE FOOT ESTIMATE GUIDELINES  
DEPARTMENT OF ADULT DETENTION**

<b>COMPONENT (sf per inmate)</b>	<b>DORM</b>	<b>CELLS</b>
INMATE SLEEPING AREA	50sf	70sf
DAYROOM (eating, daytime activities)	35sf	35sf
SECURITY SERV. (control, briefing etc)	30sf	30sf
PROGRAM SERV. (exercise, classes, library)	45sf	45sf
FOOD SERV. (kitchen, storage, dishwash)	20sf	20sf
MEDICAL SERVICES (exam, housing, pharmacy)	10sf	10sf
SUPPORT SERV. (laundry, commissary)	15sf	15sf
VISITATION (personal, attrny, contact/non)	10sf	10sf
ADMINISTRATION (staff, conf., storage, etc)	15sf	15sf
MECH/MAINT. (air, plumbing, elec., etc)	70sf	70sf
NON-ASSIGNABLE (halls, storage, elev, showers, janitorial, restrooms, waiting, lobby etc)	50sf	50sf
<b>TOTAL:</b>	<b>350sf</b>	<b>370sf</b>

**NOTES: AIA/ACCEPTED. SF RANGE 50SF - 450SF (PER INMATE)**

**COST PER SF RANGE: \$ 80 - \$ 190 (per SF)  
(portables) - (max. security)**

**Cost per sf varies greatly with high/low rise construction.**

**Specific component not cover by these methods were compared to approved King County Space Standards or with other published detention standards.**

**DEPARTMENT OF ADULT DETENTION  
JAIL POPULATION FORECAST  
and  
REGIONAL POPULATION ANALYSIS**

**for  
KING COUNTY LAW, SAFETY & JUSTICE AGENCIES  
FACILITY MASTER PLAN, JANUARY 1991**

**OVERVIEW**

As part of the facility master planning process, the Department of Adult Detention (DAD) developed detailed analysis of the jail population as part of DAD's future workload assessment and as part of the evaluation of the eight facility options under consideration. The analysis consisted of a series of studies conducted in 1989 and 1990 by both a jail population consultant commissioned by the department and DAD staff. The studies included:

- o an initial jail population forecast;
- o a forecast monitoring report;
- o an update of the forecast incorporating actual experience with jail population levels through 1990;
- o the collection of data on prisoner population characteristics;
- o generation of descriptive profiles of the jail population by security classification and other criteria;
- o regional crime, county population and jail population analyses; and
- o the development of population and booking estimates for the eight facility options.

The following sections of this chapter describe the methodology and assumptions used for each part of the analysis. The sections are:

- o Jail Population Forecast;
- o Security Classification and Special Housing Profile;
- o Regional Analysis: Population Estimates for Capital Alternatives.

## JAIL POPULATION FORECAST

### Forecast Methodology

The development of a jail population forecast occurred in multiple steps incorporating the work of a DAD commissioned consultant and DAD staff. Once a total forecast was completed, the figures were further modified to incorporate noncapital alternative program recommendations. Table 1 summarizes the steps leading to a final forecast.

The department commissioned a study, released in January 1990, by consultant Jack O'Connell to forecast the jail population to the year 2010. The report also included a profile of prisoners and a regional analysis of trends and expected growth in crime, jail population, and county population.

The initial forecast, as well as a subsequent update completed by the same consultant, used a "components of change" methodology which allows for the consideration of the independent influence of many variables that impact jail population, including demographic patterns, crime trends, booking rates, and length of stay for different subgroups of the jail population. The forecast consisted of separate forecasts for six separate jail status groups, which were then combined to provide a total forecast. The six groups were: presentence felons, sentenced felons, presentence misdemeanants, sentenced misdemeanants, state holds, and other holds.

Independent assumptions were made for admission rates for each of five demographic "at risk" age groups for each of six status groups for a total of 30 separate "components" (5 X 6) to the admission side of the forecast. An independent assumption was then made for the length of stay for each status group. The total jail population forecast was calculated by combining the separate length of stay assumptions with the projected number of admissions for each subgroup, and summing the results. This type of methodology provides a separate assessment of demographic influences and changing booking rates and length of stay for six different jail subpopulations.

To set the forecast assumptions, an eight member Assumption Setting Team was formed. The team included representatives of criminal justice system agencies whose independent actions and policies influence the size and composition of King County's jail population. After reviewing relevant historical data on crime, demographic trends, jail population admission rates and length of stay, the team then set the specific admission rate and length of stay assumptions used in the forecast.

The eight city, county, and state officials who participated on the Assumption Setting Team and the agencies they represented were:

Steve Schwalb, Department of Adult Detention (Chair);

Bob Laznik, King County Prosecutor's Office;

Captain Mike Nault, King County Department of Public Safety;

Dave Grayson, Seattle Police Department;

The Honorable Jerome Johnson, King County Superior Court;

The Honorable Peter Jarvis, King County District Court;

Bill Stough, Washington State Department of Corrections Division of Community Corrections;

Larry Brubaker, King County Council.

Applying the assumptions on admission rates and length of stay to demographic "at risk" groups produced end of month forecasted jail populations. A "peaking factor" was then applied to the total to produce a total forecasted end of month population. The "peaking factor" represented the peak population that would occur during any one week, and was based on calculations of weekly peaks for the sample periods included in the forecast analysis.

#### Data Sources

Several types of data were used in the forecast, including county population data, jail population data, and crime data. County demographic data were acquired from the Puget Sound Council of Governments (PSCOG) and the state Office of Financial Management (OFM). The PSCOG June 1988 population projections were used for the regional criminal justice regions created in the report for the regional analysis and for the total county. The proportional distributions for gender and age were derived from the state OFM documents and applied to the total population figures to create the "at risk" demographic groups used in the forecast. The "at risk" groups were: males 18 to 20 years old; males 20 to 30 years old; males 30 to 40 years old; males 40 years old and over; and females 20 to 40 years old.

Jail population data were derived from two sources. Monthly daily population data were provided from the department's working documents. More detailed population data were contained in quarterly sample data generated by the department and King County Systems Services specifically for the forecast. The sample data were taken from the computerized jail booking system and included age, offense, gender, status, etc.

These data provided a 26 point time series. The sample consisted of all persons in jail or booked into jail during the second week of January, April, July, and October of each year. This allowed for major holidays to be avoided so that the sample data would be "typical" of jail population characteristics. The sampling technique also ensured that all seasons of the year and all days of the week would be represented. This was necessary since jail population does demonstrate daily and seasonal variations.

While not directly used in the jail population forecast, the consultant's report also included a regional crime analysis and forecast. Reported crime data were used and obtained from the Seattle Police Department, the King County Department of Public Safety, and the Washington State Association of Sheriffs and Police Chiefs. These data were then sorted by the consultant into six major King County criminal justice regions and subregions with boundaries developed by the consultant.

#### Original Forecast Results

The forecast reflects the decision of the Assumption Setting Team to make specific policy assumptions for the six status groups for a three year period. After this period, the admission rates and length of stay assumptions were held constant, and demographic influences alone were responsible for further changes in the jail population forecast. The decision to limit the application of specific assumptions to a three year period reflected the team's view that it could not reasonably foresee criminal justice system trends on such a specific level beyond this time frame.

The forecast showed significant growth in jail population for the first three years, similar to the very high growth period of eighteen months immediately preceding the forecast (See Table 2). The jail population was forecasted to increase from 1913 to 2651 in 1991. The rate of growth then slowed until it reached a short term peak in the Spring of 1994 at 2755. The total jail population for the Facility Master Planning years of 2000 and 2010 was 2719 and 2882 respectively.

The forecast also included monthly bookings through 2010 (See Table 3). For the Facility Master Plan years of 2000 and 2010, the annual bookings were forecasted at 73,956 and 79,140 respectively.

The increases observed in this forecast were primarily due to three factors: 1) a sharp increase in presentence felon bookings; 2) increases in presentence misdemeanor bookings; and 3) the expected short-term continuation of the rapidly increasing number of bookings in both 1988 and 1989 related to illicit drug offenses.

## Policy Adjusted Forecast

While the Assumption Setting Team did not feel that they could set specific, detailed assumptions for longer than a three year period, the department was required to forecast future jail population levels to the year 2010. The consultant's work provided a purely demographic forecast for these latter years. However, historical experience with jail population indicates that population is very much affected by changing policies, laws, and procedures, which together have increased jail population far beyond what would be expected based on county population increases alone.

To incorporate the effect of changes in policy on jail population beyond the initial three years of the forecast, a policy adjustment was made to the original consultant forecast figures beginning in 1995. This adjustment was based on an analysis of overall King County incarceration rates (See Table 4). The use of historical and forecasted rates from 1985 through 2010 produced a trend of declining incarceration rates. This was not realistic in light of the department's actual experience with jail population, which shows incarceration rates increasing annually, nor did it reflect the Assumption Setting Team's general expectation that future policy changes would be likely to increase jail population in the future.

The incarceration rate analysis compared a constant incarceration rate based on the last year of the "assumption rich" forecast period, i.e. the period of time for which specific assumptions were applied to each "at risk" demographic group, with a linear incarceration rate. The linear incarceration rates were based on the trend in incarceration rates from 1985 through forecast year 1994.

This analysis was presented to the Jail Oversight Committee and the King County Council for their review. Although incarceration rates had been increasing historically, the department recommended the more conservative approach of applying the fixed incarceration rate as a forecast adjustment for the years 1995 on. This recommendation was adopted by the Jail Oversight Committee and the forecast was adjusted accordingly. Table 4 displays the annual adjusted forecast totals under "constant rate population." For the planning year of 2000, the total forecast increased from 2713 to 2988, and, in the year 2010, the forecast increased from 2882 to 3353.

The policy adjustments made to the population forecast required that there be a comparable adjustment to the booking forecast. The adjustment was made proportionately, thereby incorporating the original relationship between the number of admissions and the size of the jail population contained in the original O'Connell forecast.

## Forecast Monitoring and Update

The consultant's forecast was very close to actual experience for the first six months of the forecast period. However, by the end of 1989, the jail population began to show signs of being considerably lower than forecast. This continued into 1990, and by the spring, the discrepancy had grown, signalling a need to reexamine the forecast assumptions (See Graph 1).

The "components of change" methodology used in the forecast lends itself to this type of review. It allows for the tracking of the separate assumptions regarding admissions and length of stay for each of the jail subpopulations. This, in turn, contributes to an analysis of the specific reasons for the discrepancies, and which subpopulations are responsible.

The department then commissioned the same consultant, Jack O'Connell, to prepare a forecast monitoring report to explain the reasons for the lower than expected population levels. His report was completed in October 1990.

O'Connell concluded that the major cause of the lower than forecast jail population was a significant decrease in admissions in late 1989 that continued into mid-1990. Length of stay, on the other hand, tracked much closer to the forecast. Between October 1989 and January 1990, total jail admissions decreased by 420 per month -- from 4787 to 4367. By July, admissions increased to 4668, but this was 486 less than forecast.

More specifically, O'Connell identified the following as major reasons for the variance between the forecast and actual jail population levels in 1990:

- 1) Presentence felon bookings from the City of Seattle decreased by about 200 per month;
- 2) The decrease in Seattle presentence felon bookings resulted in about 50 fewer than expected sentenced felon bookings per month;
- 3) The decrease in Seattle presentence felon bookings resulted in about 40 fewer than expected sentenced felons awaiting transfer to state institutions per month;
- 4) A decrease in sentenced misdemeanor admissions occurred, which appeared to be unexpectedly unrelated to increases in presentence misdemeanor bookings.

Because of the discrepancies noted above, O'Connell concluded that any update of the jail population forecast would have to revisit these assumptions as well as incorporate the more recent actual jail population numbers.



## Revised Jail Population Forecast

The monitoring report provided a base of information for understanding why and how the forecast overestimated the jail population. Because of the importance of as accurate a forecast as possible to the Facility Master Plan, the department commissioned O'Connell to prepare an update to the forecast, incorporating the most recent population data. The quarterly sample data developed for the original forecast was supplemented with additional data through October 1990. Actual daily population and admission data through November 1990 were also made available to O'Connell.

Assumptions used to forecast all subgroups in the original forecast were reexamined, but particular attention was given to those subpopulations which had deviated the most from forecast levels. Since a major cause of the deviations in the forecast was related to the lower than expected Seattle presentence felon bookings, information from the monitoring report was shared with the Seattle Police Department. Their input, along with input from the King County Prosecutor's Office, was used to assist the consultant and DAD in revising assumptions related to felony bookings.

Assumptions used in the original forecast for sentenced misdemeanants were also revised downward based on the updated monitoring data provided by the consultant. The assumptions used for all subpopulations in the forecast were reviewed, and small adjustments were made in some cases to correspond to the more recent experience with the jail population.

A modification to the assumptions of the revised forecast was a more moderate expectation for increases in the presentence felon population. While increases are still expected in the forecast, they are more gradual, and they take into account the lowered levels experienced in 1990. The consultant concluded that the decrease was probably to a large extent temporary and situational, i.e. a response to some unique circumstances in 1990. He speculated that it may have been caused, at least in part, to resource restrictions for developing drug arrests, which were down in 1990, and that resources may have been stretched by the security and logistical problems of the Seattle Goodwill Games.

Table 5 shows the revised population forecast and Table 6 the revised bookings forecast. Once the assumptions were revised, all other calculations paralleled the original forecast. The assumptions were applied to the demographic groups for a new three year period, after which the rates are stabilized, with jail population driven by demographic changes only. The revised forecast used the same demographic data used in the original forecast. A forecast for each subpopulation is provided, and a total population which contains the "peaking factor" is included.

The divergence between the original forecast and the revised forecast is the largest in 1991 (See Graph 2). The revised population forecast is approximately 500 less than the original forecast -- 2398 versus 1943. This downward adjustment accounts for the new assumption for presentence felons, which had been expected to increase dramatically in the original forecast, and the rippling effect this new assumption has on the sentenced felon and state institutional transfers.

By 1994, the difference between the two forecasts narrows to approximately 200. For the key planning years, the total jail population forecast values were:

	<u>Revised</u>	<u>Original</u>
1995	2506	2664
2000	2534	2713
2005	2577	2760
2010	2679	2882

#### Revised Forecast Policy Adjustments

As in the original forecast, the revised forecast incorporates specific assumptions for admissions and length of stay for approximately a three year period. Demographics alone are responsible for forecast changes beyond this period.

Adjustments paralleling those made for the original forecast were made to the revised forecast to capture the expected continuing influence of policy changes on jail population levels once the "assumption rich" forecast period ended. A revised fixed incarceration rate was applied to the O'Connell population figures producing a moderate upward adjustment to the forecast beginning in 1996. Table 7 shows the revised policy adjustments and provides a comparison of the original and revised adjusted forecasts. The bookings estimates were adjusted also to be proportional to the population forecast in the same manner as for the original forecast.

With the adjustments, the projected population for the major planning target years are as follows:

	<u>With Policy Adjustments</u>	
	<u>Revised</u>	<u>Original</u>
1995	2506	2760
2000	2690	2988
2005	2855	3172
2010	3020	3353

### 2010 Adjustment for Municipal Bed Shortfall

An additional adjustment was made to the jail population forecast year 2010. In discussions with suburban city representatives, it was anticipated that a shortfall of municipal jail beds to handle the growing number of city prisoners expected over the next twenty years would occur. Construction of new beds by cities to accommodate the shortfall was not anticipated. Instead, cities anticipate contracting with King County. Since this type of an increase in population is not factored into the forecast, an additional population of 70 inmates was added to the 2010 forecast.

### Summary of Revised Adjusted Population Forecast

The revised jail population forecast numbers with the policy and municipal bed adjustments constitute the total jail population forecast. The only additional adjustment made to these numbers was for the DAD noncapital alternatives.

Table 8 summarizes forecasted jail populations, bookings, and length of stay for all forecast years through 2010. Subsequent phases of the analysis developed classification profiles and regional profiles. These splits are based on the total jail population and total bookings forecast.

## SECURITY CLASSIFICATION AND SPECIAL HOUSING PROFILE

### Need for Classification Profiles

While the jail population forecast indicates the total system population DAD is expected to accommodate in future years, it does not directly translate into a capital or non-capital requirement. Jail capacity includes a range of facilities and programs, from high security jail cells to community-based facilities and programs. To develop specific capital needs, it was necessary to project the expected jail population across the full range of security classifications so that projected deficits in each type of facility or program could be identified. This was done, and the results were then used to evaluate the capacity requirements and costs for each facility option.

### Framework for Developing Classification Profiles

In order to identify capital requirements for each type of facility, the jail population forecasts were divided according to the security designations for each facility type. Further subdivisions were also made.

The jail population was divided into three major categories and subcategories as indicated below:

1. Intake population - newly booked inmates still in the process of completing all steps of the intake process and not yet transferred to housing areas; they do not occupy a bed;
2. Secure 24-hour residential population - inmates who occupy a bed in a 24-hour secure jail facility; they are further subdivided by whether special or segregated housing is required;
  - (a) General population - inmates who have no need for specialized housing and can be housed anywhere within the secure jail consistent with their security level; and
  - (b) Special custody population - inmates who require special housing and separation from other categories of inmates; these are further divided into four groups:
    - o Medical - inmates with a medical housing status require infirmary care or housing apart from general population inmates in proximity to medical staff;
    - o Psychiatric - inmates with a psychiatric housing status require housing in the

- specialized psychiatric unit or in proximity to it and its staff;
- o Administrative Segregation - inmates who need to be isolated from other inmates, including protective custody and court-ordered separation;
  - o Disciplinary Segregation - inmates who need to be isolated either pending an administrative disciplinary hearing or following a hearing as a sanction for rule violations within the jail; essentially a form of administrative segregation, but broken out separately.
3. Community-based population - inmates who reside in a community based facility, such as the North Rehabilitation Facility or Work Release, or who participate in the Electronic Home Detention (EHD) program.
- (a) North Rehabilitation Facility (NRF) - a community-based low security facility in north Seattle providing treatment for alcohol and drug abuse and supervised work opportunities in the community; inmates must meet "community level" security criteria to be housed there; the current facility has two types of housing and programs: long-term beds for ongoing custody up to release and DWI beds for persons sentenced to a mandatory one-day sentence for DWI; the DWI program operates three days per week, and inmates report directly to the NRF facility.
  - (b) Work Release - a facility from which inmates are released to their place of employment during the work day and return to after work hours for the balance of the day or night.
  - (c) Electronic Home Detention - a program providing electronic surveillance of inmates who are required to remain in their homes, except for approved curfews to work or attend school.

In addition to the basic divisions noted above, each inmate who is booked into a secure facility and remains 72 hours is classified into security levels by classification staff. For this report, the security levels are grouped as follows:

Unclassified - the population in the jail which has not yet been classified into a security level;

Community/minimum - inmates who have been classified as minimum or community security; they are grouped together for this analysis since all but a few community security

inmates are at NRF, but may appear in a secure facility while waiting for transport to or returning from NRF; when in the secure facility, they are treated and housed with minimum security;

Medium security - inmates who require more security and supervision than minimum security, but do not have the high risk profile of close or maximum security;

Close/maximum security - inmates who pose a high risk within the facility and to public safety; maximum security is reserved for very high profile inmates requiring the highest level of security and supervision; there are typically few maximum security inmates, and since their housing requirements are essentially the same as for close security, they are grouped together in this analysis.

In the forecast by security classification, all general population inmates were grouped into one of the security categories listed above. For special custody inmates, the special status typically overrides the security level in determining a housing assignment. Therefore, the special status population is categorized by the special status only, although a security level is also assigned to this population when they are classified. In cases of multiple statuses, the category is selected in the following rank order: Psychiatric, Medical, Administrative Segregation, Disciplinary Segregation.

The security levels and special custody statuses are applied to the secure 24-hour residential population only, and not to Work Release, EHD, or NRF. This is because only the secure population is classified in this manner. NRF represents a single classification of community level security, and inmates must meet specific eligibility criteria. Work Release inmates similarly must meet eligibility standards specific to the program, as must EHD participants.

#### Classification Forecast Assumptions and Data Sources

The total forecasted population totals in five year increments were divided using the framework and classification categories described above. A series of assumptions was used, based on the analysis of historical classification data.

Daily population divided by the classification categories is available beginning in 1989 when the department's automated jail classification system was implemented. Summaries were generated showing monthly breakdowns through December 1990. Daily population data showing splits among the major facilities including Intake, Secure 24-hour residential, Work Release, Electronic Home Detention, and NRF have been maintained since the mid-1970's. Summaries showing monthly breakdowns were prepared beginning in 1986, the year the new King County

Correctional Facility (KCCF) was occupied (see DAD data appendices).

These data were analyzed for consistency and for trends that may be explained by changes in operations and programs, so that the most reasonable assumptions about future population splits could be developed for the forecast. The overall approach was to first apply assumptions regarding the split of the population among Intake, Secure 24-hour residential, and the community-based programs of Work Release, EHD, and NRF. Secondly, assumptions for dividing the secure 24-hour residential population among security classifications and special custody statuses was then applied. All assumptions were converted into a percentage of total population and applied to the total policy adjusted jail population forecast totals.

The specific assumptions used for each classification group is summarized below:

#### North Rehabilitation Facility

- o For men, a fixed percentage of total population based on the average percentage of total population from January 1988 through December 1990 was used. This was a period of time when capacity was not artificially restricted, and therefore, provides a good base for assessing the percentage of NRF eligible inmates. Also, operations were consistent over the period and match expectations for the future.
- o For women, capacity restrictions have been a factor affecting the number of women at NRF. The forecast uses a percentage of total population experienced during a period of temporary expanded capacity from May 1989 to January 1990, when women were allowed to use DWI beds on a Friday through Monday basis. This may be a conservative estimate.

#### Electronic Home Detention

- o With increased staffing for EHD in 1990, the program capacity was increased to 50. Increases in program participation in the future will depend both on increases in program staffing and funding and, more importantly, the availability of eligible participants. Increases in the EHD program in the future are contained in the noncapital alternatives chapter along with associated costs and are reflected in the final forecast population total. In this profile, the security classification forecast shows a fixed population of 50 for all forecast years.

### Work Release

- o The work release population has shown a decreasing percentage of total jail population since 1986, a trend which is consistent with decreases in the sentenced population generally. In addition, the EHD program has resulted in decreases in work release participation for both men and women. The combined percentage of EHD and work release shows a more constant pattern, especially so for women.
- o For women, the forecast uses a constant combined percentage for work release and EHD of .99%, the average from January to December 1990.
- o For men, a slightly decreasing percentage of total population for the combined Work Release and EHD total was used, corresponding to the trend in the sentenced population given in the original O'Connell forecast.

### Intake

- o The Intake population is based on the 1990 average percentage of total population. This reflects the most recent operational experience which is thought to be the best indicator of future practice.

### Secure 24-hour Residential

- o The total 24-hour secure residential population is the remainder once the community based and Intake populations are calculated.
- o Security levels and special custody estimates are based on the 1990 average monthly percentages for April to October 1990. This represents a "typical" period and incorporates any changes in the security profile of prisoners as a result of the expansion of the EHD program to 50 participants.

### Results of Security Classification Forecast

Table 9 and Table 10 display the breakdown of the total adjusted jail population forecast by security classification. Table 10 shows the percentage breakdown for each five year interval, and Table 9 shows the expected average jail population in each category.

The focus of the capital alternatives is the Intake plus Secure 24-hour residential population. These two groups would be housed in a full service detention center, with the Intake area sized to accommodate the expected Intake population (plus fluctuations around the average) and secure bed capacity in existing, plus new construction sized to accommodate the



expected 24-hour secure residential population (plus a vacancy factor to handle population fluctuations and classification separations).

The total adjusted Secure 24-hour population is forecasted to be 1903 in 1995; 2058 in 2000; 2192 in 2005; and 2387 in 2010. The total Secure population to be housed in a secure facility, including Intake, is 1963 in 1995; 2122 in 2000; 2260 in 2005; and 2461 in 2010.

The expected medical, psychiatric, and segregation populations are also given. These forecasted values are the base for estimating the needed size of these special units as well as the number of segregation cells needed.

### Impact of Noncapital Alternatives

The final adjusted jail population forecast incorporates the analysis of DAD noncapital alternatives (see Facilities Master Plan Section III Noncapital Program Alternatives). This analysis examined the potential for expanding the extensive network of existing noncapital programs, the potential for implementing new programs, and the impact of programs on jail population. The analysis includes a program plan and recommendations.

The calculations of expected jail population impacts for recommended programs were made relative to the security classification forecast. The classification categories from which the program participants would come were identified in addition to the total population impact of each program.

The analysis concluded that the expansion of two programs, personal recognizance release and supervised release, would result in a small reduction in the Secure 24-hour population. The combined expected population impact is 25 in the year 2000. The EHD program is expected to increase, with the increased population expected to come from what would otherwise be a portion of the NRF and Work Release populations. One new program is recommended, a small community work service program, which also diverts population from the NRF population.

Incorporating the noncapital alternatives into the security classification forecast is the final step in the forecast analysis. Table 11 shows the final adjusted population forecast by security classification in five year intervals. The impact of each recommended program was subtracted from each relevant classification group, and the additions to EHD and the new community work service program for each forecast year are shown.

**REGIONAL ANALYSIS:  
POPULATION ESTIMATES FOR CAPITAL ALTERNATIVES**

Need for Regional Analysis

To estimate DAD workload in terms of jail population, bookings, transport requirements, etc. for the eight capital options, a way of dividing the expected workload by geographic area of the county was needed. All but one option involved some sort of detention facility outside the City of Seattle, where the present King County Correctional Facility is located. As a result, some method of determining the source of existing and projected population and bookings and a method for projecting these estimates by geographic area was needed.

Framework for the Regional Analysis

DAD proposed a geographic division of the county corresponding to existing District Court jurisdictional boundaries to comprise five planning regions. This proposal was subsequently adopted by the members of the various Facility Master Plan planning committees and was used by all agencies involved in the planning effort. The use of District Court boundaries made it possible to identify a geographic source of jail bookings in the existing prisoner data base, and thereby, support a largely computerized data analysis effort.

Other methods, such as the use of census tracts or zip code areas would not have been feasible. Not only is this information not readily available in DAD's data base, but when based upon prisoner data, it would not have supported the objectives of the analysis. This is because the geographic basis for DAD workload is not where prisoners live, but where arrests are made.

Municipal law enforcement agencies are clearly located within District Court districts and some arrests by King County Police, which are county-wide in unincorporated King County, can be pinpointed geographically by the District Court adjudicating the case. The same is true for the Washington State Patrol. This framework allowed DAD to identify and develop a bookings data base which could be developed with careful programming and minimal manual effort, while still supporting the objective of identifying population and bookings workload for each capital option.

The relationship of planning regions to District Court districts is as follows:

<u>Planning Region</u>	<u>District Court Districts</u>
Seashore	Seattle; Shoreline
South	Southwest; Federal Way; Aukeen
Renton Area	Renton
Issaquah East	Issaquah
Northeast	Northeast; Bellevue

A map of the planning regions appears as Attachment G to Facility Master Plan Chapter 1.

Some jail bookings fall outside of the regional scheme. Some bookings originate from arrests made outside the county. Some bookings are "surrenders" or "walk-ins" of individuals, and are not under law enforcement escort. For example, many Work Release bookings are "surrenders" in which sentenced persons are given report dates by the court. The categories used for the DAD regional workload analysis included these latter two groups in addition to the five planning regions.

#### Data Sources

To develop regional population and booking estimates, a sample of jail bookings was developed which included extensive data items on each prisoner booked. The sample represented all bookings for a one week period in each quarter from January 1988 through July 1990. The second week of the quarter was used from Wednesday through Tuesday. This is the same sampling time frame used in the O'Connell forecast data base. All cases during each sample week were selected to ensure that variations due to time of day and day of the week would not influence the results.

The sample produced 11,280 cases. Release data were required for parts of the analysis, such as for calculations of length of stay and to identify methods of release. Data from 1990 (3130 cases) were excluded from these analyses, since many bookings had not yet been released. Including these bookings would have biased the results.

A large number of cases was needed to ensure that relatively small, but important groups to the analysis, would be adequately represented. For example, a very small percentage of bookings comes from the Issaquah area, so a large number of cases must be drawn to produce an adequate number. The same applies to women and some status groups.

Some of the data items examined were date and time of booking, date and time of release, arresting agency, originating agency, status, method of release, type of offense, court, planning region, district court region, felony/misdemeanor indicator, and ranking charge. Some data items related to prisoner charges

were collected for multiple charges. From these data, additional items were calculated and added to the data base, such as length of stay and bed days in the facility. Bed days are the number of nights spent in the facility indicating the number of days the inmate would have been counted in the official nightly bed count, which is the basis for all official jail population counts.

Planning region was determined by identifying the region from which the arrest was made, resulting in the prisoner being transported and booked into the jail. The method for assigning a case to a planning region was done in two steps. First, all assignments which could be automated were completed first. The remainder were reviewed and assigned manually. Questionable cases were reviewed manually to ensure the assignment was accurate.

The assignment process included the following. If arrested by a municipal law enforcement agency, the booking was assigned to the planning agency within which the municipality is located. King County Police and Washington State Patrol "direct bookings," i.e. those booked directly upon arrest and not via warrant, were assigned to a region based on the District Court code associated with the charge. Cases with Seattle District Court codes were reviewed manually to ensure that cases with venue changes were assigned correctly.

King County Police direct felony bookings for investigation were assigned to a planning region by matching the police incident number with the Department of Public Safety's Incident Tracking System, and assigning the booking to a planning region based on the location of the patrol district making the arrest. Cases with "surrender" arresting agency codes were assigned to the "surrender" category. Bookings by out of county law enforcement agencies were assigned to the "other" category. Cases which could not be assigned with any of these methods were reviewed manually, and the assignment was made by reading the arrest location field.

#### Data Summaries

Summaries of the sample data are contained in the data portion of the DAD appendices (See Question 11). There are five types of summaries:

1. Bookings by region and arresting agency by sample period;
2. Distribution of bed days and prisoner length of stay by region by year and by sex;
3. Length of stay by region by booking status and release method;
4. Court jurisdictions for charges booked by region by year;

5. Bookings by ranking (most serious) offense by region by year.

The data in these summaries provided the basis for estimating current workloads regionally and developing regional forecasts. They also provided information on regional differences in the characteristics of jail bookings.

Regional Forecast Methodology

To estimate the bookings and population for each capital option, the bookings and population were split according to the number and location of the facilities in each option. For each facility contained in an option, the planning regions which the proposed facility would serve were identified.

Book and hold facilities were assumed to hold new bookings for up to 72 hours, and inmates who stay longer than that would then be transported to a Justice Center for the remainder of their time in custody. Therefore, in options with book and hold facilities, the justice center(s) serve both a planning region from the point of booking and the book and hold facilities which must transport their population with stays greater than three days. A summary of the planning regions and Book & Holds which each facility serves for each option is given in Table 12.

The methodology involved first forecasting future bookings for each planning region, including "surrenders" and "others." This produced a percentage distribution of bookings for all seven groups for each forecast year. Forecasted lengths of stay were calculated based on the same relationship among the regions as existed in the 1990 sample data. The forecasted regional bookings multiplied by the forecasted lengths of stay produced the forecasted regional populations.

The final step was to fold the "surrender" and "other" bookings into the bookings and population figures for the five planning regions using assumptions specific to each option. The assumptions reflected where it was likely "surrenders" would be asked to report, and where the "other" bookings which are mostly from outside the county, would be directed. More detailed explanations of these calculations is given in the sections below.

All calculations for the regional forecast analysis used the total population and booking forecasts without noncapital alternative adjustments. The noncapital adjustments are very minor, and would not have had a significant impact on the regional analysis. These calculations will be made, however, and can be made available upon request.

### Forecasted Regional Bookings

The starting point was the 1990 sample percentage distribution of bookings, which was then weighted by a King County regional population growth factor, and then by a King County regional criminality factor. These two weights were included to factor in the expectation that future growth in King County is expected to be uneven among the five planning regions, and this differential growth should be reflected in future crime, arrests, and bookings.

The King County regional growth factor was the percentage growth in each region's population in five year intervals. Table 13 gives the regional King County population forecasts. They were based on the Puget Sound Council of Governments (PSCOG) 1988 population forecasts for King County. The regional projections were developed with the assistance of the King County Planning and Community Development Division, by matching PSCOG subareas as closely as possible to the planning regions. PSCOG subareas that straddled a planning region were divided according to the King County demographer's best estimates of how the population was spread within the subarea.

The King County regional criminality factor was based on the regional crime analysis contained in the original O'Connell forecast report. O'Connell developed a forecast of reported violent and property crime by region in five year intervals to the year 2010. The regions he used did not correspond exactly to the five planning regions, but were very close. This served the purpose of weighting the forecasted distribution of future bookings according to where crime is most likely to increase.

One further assumption was made that the percentage of bookings falling into the "surrender" and "other" categories would remain constant for all forecast years. The assumption for surrenders is based on the expectation that operational procedures relating to self-reporting to jail and work release will remain.

### Forecasted Regional Length of Stay

To calculate forecasted length of stay by region, including "surrenders" and "others," the two year average length of stay for 1988 and 1989 was calculated from the sample data. Using the forecasted regional bookings and the sample length of stay, the percentage distribution of regional prisoner days was calculated and then applied to the forecasted total population for each year. This preserves the length of stay relationship among the regions contained in the sample data, an important issue since the sample data show significant differences among the regions. For example, the two year average length of stay for "surrenders" was 16.87 days and for "others" was 18.15 days compared to a length of stay of 8.39 days for the Issaquah region and 10.52 for the Northeast region.

### Forecasted Regional Population

The forecasted regional bookings multiplied by the forecasted regional length of stay was used to calculate the regional jail population. A summary of forecasted regional bookings, length of stay, and population is given in Table 14.

### Forecasted Population by Option

To evaluate the facility options, the "surrender" and "other" groups were folded into the planning regions which serve each facility for both population and bookings. This involved taking the DAD forecast data for the seven planning groups (i.e. the five planning regions plus the "surrenders" and "others") and merging them into the five regions: Seashore, Northeast, Issaquah East, Renton Area, and South. Also, the populations of community based facilities and intake were identified and removed from the secure population forecast.

For the bookings, a series of assumptions was made to identify the bookings from each of the seven planning categories that would be booked directly into each facility, including NRF and Work Release, and then distributing the remaining "surrenders" and "others" among the five planning regions. NRF direct bookings were assumed to come both from "surrenders" and Seashore since this split is reflected in the sample data. Only a portion of Work Release admissions were assumed to be direct bookings, with the remainder as transfers from the secure jail.

"Surrenders" were distributed proportionately among the planning regions according to their share of the bookings exclusive of "surrenders" and "others." It was assumed that half of the "other" bookings could be directed to a justice center. For options involving suburban justice centers (B, E, G, and H), it was assumed that half of the "surrenders" would be directed to the suburban justice center(s), and that the remaining half would be distributed proportionately among the five planning regions.

The population estimates for the facility options, like the bookings estimates, involved identifying and separating the population in community based facilities and collapsing the seven planning categories into five. A certain portion of "surrenders" and "others" was assigned to community based facilities, and the remainder was folded into the five planning regions. The assumptions used parallel those made for bookings.

### Bookings and Population for Book and Holds

The Book and Hold facilities were drawn from the planning regions given in Table 12. The bookings estimates were based on the percentage of regional bookings in the sample data that were pretrial or probation/noncompliance violators at booking. It was assumed that other inmates in other statuses, such as those

booked to serve a sentence, would not be booked into, nor would they surrender to, a book and hold.

The population of each book and hold was calculated by applying the distribution of bed days by region from the sample data to the estimated number of pretrial bookings for each region. The distribution gives the percentage of bookings which contribute no bed days (released before a night head count), the number which stay one bed day, two bed days, three bed days, and more than three bed days. This is the basis for calculating the population of the book and holds and the number of inmates who would stay more than three days and would, therefore, be transferred to a justice center.

A calculation of the book and hold population in beds and in Intake was made by assuming a six-hour stay and applying that estimate to the bed day distribution. For example, assuming a six hour stay, at any one time, 25% of those who stay one bed day would be in Intake, etc. These calculations produced for each book and hold for each forecast year the total population, the population in Intake, the population in beds, the total bookings, the total transfers to a justice center, and the number of bookings that would be released prior to any headcount.

The bookings and population for the justice center(s) in Options A, B, and C were then adjusted based on the book and hold estimates. The total population and total bookings spread across all facilities in an option is thus the same for each forecast year.

#### Regional Facility Populations by Security Classification

The population estimates for each facility were then broken down by security classification following the same assumptions described in the "security classification" section of this report. An adjustment for the transfer of acute medical and psychiatric inmates was then applied to all suburban facilities. Finally, justice centers in Options A, B, and C with book and holds were adjusted for the intake and unclassified populations that would be housed in the book and hold instead of the justice center.

The adjustment for acute medical and psychiatric inmates was to account for inmates who would be transported after booking to the existing KCCF from suburban justice centers and book and holds. It was assumed in the development of operational scenarios for the facility options that acute medical and psychiatric care would be centralized in the existing Seattle correctional facility, remodelled and expanded to accommodate the expected growth in these special populations.



Book and hold populations were assumed to be unclassified or in Intake. The Options A, B, and C justice center populations of unclassified and intake inmates were adjusted accordingly.

The results of these calculations, the jail population by security classification by facility for each option, is given in the DAD capital sections of the Facility Master Plan.

TABLE 1

JAIL POPULATION FORECAST METHODOLOGY SUMMARY

**JAIL POPULATION**

O'CONNELL ORIGINAL FORECAST  
+ DAD POLICY ADJUSTMENT  
+ MUNICIPAL BED ADJUSTMENT (+70 IN 2010)  
= ORIGINAL TOTAL POPULATION FORECAST  
  
+ FORECAST REVISIONS (assumptions/data)  
= O'CONNELL REVISED FORECAST  
+ DAD POLICY ADJUSTMENT  
+ MUNICIPAL BED ADJUSTMENT (+70 IN 2010)  
= TOTAL JAIL POPULATION FORECAST  
  
+/- NONCAPITAL ALTERNATIVES IMPACTS  
= FINAL ADJUSTED JAIL POPULATION FORECAST

**JAIL BOOKINGS**

TOTAL JAIL POPULATION FORECAST  
x REVISED O'CONNELL RATIO OF BOOKINGS/POPULATION  
= TOTAL JAIL BOOKINGS FORECAST  
  
+/- NONCAPITAL ALTERNATIVES IMPACT  
= FINAL ADJUSTED JAIL BOOKINGS FORECAST

Table 2

KING COUNTY JAIL POPULATION FORECAST  
BY JAIL STATUS BY QUARTER  
July 1989 -- 2010

Quarter	Felons		Misdemeanors		State	Holds		Jail Status	Total
	PreSent	Sent	PreSent	Sent		Other	Total		
7/89	600	340	271	397	170	79	1857	1913	
10/89	686	349	276	402	175	69	1958	2017	
1/90	785	293	295	407	179	71	2030	2091	
4/90	789	370	287	412	184	73	2114	2177	
7/90	804	383	259	417	188	74	2124	2188	
10/90	832	311	298	421	193	76	2130	2194	
1/91	877	432	317	426	197	78	2328	2398	
4/91	881	508	309	431	202	79	2411	2483	
7/91	896	431	278	436	206	81	2328	2398	
10/91	924	455	320	440	211	83	2432	2505	
1/92	969	371	340	445	215	84	2425	2497	
4/92	973	506	331	449	220	86	2564	2641	
7/92	987	521	296	453	221	86	2565	2642	
10/92	992	485	335	453	222	87	2574	2651	
1/93	991	402	350	454	223	87	2508	2583	
4/93	991	486	335	454	224	88	2578	2656	
7/93	991	490	296	454	224	87	2543	2619	
10/93	991	394	335	454	224	87	2486	2560	
1/94	991	517	351	454	224	87	2624	2702	
4/94	992	582	336	455	223	87	2675	2755	
7/94	993	477	297	455	223	87	2533	2609	
10/94	994	484	336	456	223	87	2580	2657	
1/95	995	387	352	456	223	87	2499	2574	
4/95	997	517	337	457	223	87	2616	2695	
7/95	998	522	298	457	222	87	2585	2662	
10/95	1001	486	332	458	222	87	2587	2664	
Yr1996	1008	482	334	460	221	86	2591	2669	
1997	1009	481	334	459	218	85	2588	2665	
1998	1020	485	337	463	218	85	2610	2688	
1999	1029	488	340	467	219	85	2628	2707	
2000	1033	489	341	467	218	85	2634	2713	
2001	1038	491	341	467	218	85	2640	2719	
2002	1042	492	342	468	218	85	2645	2725	
2003	1046	493	342	468	217	85	2651	2731	
2004	1051	494	343	469	217	85	2657	2737	
2005	1060	498	345	472	219	85	2679	2760	
2006	1069	503	348	475	221	86	2701	2782	
2007	1078	507	350	478	223	87	2723	2805	
2008	1087	511	353	481	225	88	2746	2828	
2009	1096	516	356	485	227	89	2768	2851	
2010	1105	520	358	488	237	90	2798	2882	

Notes: Monthly data by Quarter is end of month counts.  
Annual data is end of June estimate.  
"Total" includes the Peaking Factor.

Source: Jack O'Connell, "King County Jail Population Forecast, 1989 - 2010," January 1990, p. 15.

FORECASTED KING COUNTY BOOKINGS  
BY JAIL STATUS 1988 — 2010

	FELON		MISDEMEANOR		HOLDS		TOTAL
	PreSent	Sent	PreSent	Sent	State	Other	
1988	884	272	1792	989	139	240	4316
	847	210	1789	792	137	232	4008
	973	265	2029	857	146	250	4521
	1076	302	2083	886	164	264	4775
1989	1015	309	2067	921	177	292	4781
	1065	244	2086	812	164	278	4649
				FORECAST			
	1068	287	1992	917	176	293	4733
	1109	295	2031	929	181	300	4845
1990	1176	302	2070	940	186	308	4981
	1183	311	2110	951	190	315	5059
	1205	319	2151	962	195	322	5153
	1247	327	2191	973	200	329	5266
1991	1314	335	2231	984	204	336	5405
	1321	343	2271	995	209	343	5483
	1344	352	2311	1006	213	350	5575
	1385	360	2351	1017	218	357	5688
1992	1453	368	2390	1027	223	364	5826
	1458	376	2428	1037	227	372	5898
	1479	383	2460	1047	229	374	5972
	1487	383	2460	1047	230	376	5983
1993	1486	383	2460	1047	231	378	5986
	1486	383	2461	1048	232	379	5989
	1486	383	2462	1048	232	379	5990
	1486	383	2462	1049	232	378	5990
1994	1486	383	2463	1049	231	378	5991
	1488	383	2465	1050	231	378	5995
	1489	383	2468	1051	231	377	5999
	1490	383	2470	1052	231	377	6003
1995	1492	383	2473	1053	230	377	6008
	1494	383	2476	1055	230	376	6014
	1496	384	2479	1056	230	376	6021
	1501	384	2486	1059	229	375	6035
1996	1511	386	2499	1063	228	373	6060
1997	1513	385	2499	1061	226	369	6054
1998	1529	388	2524	1070	225	369	6107
1999	1543	391	2544	1078	226	370	6152
2000	1549	392	2548	1079	226	369	6163
2001	1556	393	2552	1080	225	368	6174
2002	1562	394	2556	1080	225	368	6185
2003	1569	394	2560	1081	225	367	6196
2004	1575	395	2564	1082	224	366	6207
2005	1589	399	2583	1090	226	370	6256
2006	1602	402	2602	1097	228	373	6306
2007	1616	406	2622	1105	231	377	6355
2008	1630	409	2641	1112	233	380	6405
2009	1643	413	2660	1119	235	384	6455
2010	1657	416	2680	1127	327	388	6595

Notes: Monthly data by Quarter is end of month counts.  
Annual data is end of June estimate.

Source: Jack O'Connell, "King County Jail Population Forecast, 1989 - 2010," January 1990, p. 41.

Table 4

Comparison of Projected Jail Population  
Using Different Incarceration Rates

YEAR	King Co. Pop	Jail Pop	IncarRate	Constant IncarRate	Constant RatePop	Linear IncarRate	Linear Pop
1985	136.5	1267	9.202				
	138.3	1442	10.427				
	140.2	1489	10.621				
	142.1	1830	12.878				
144.0	2017	14.007					
1990	145.9	2194	15.038				
	148.2	2505	16.903				
	150.6	2651	17.603				
	153.0	2560	16.732				
155.4	2657	17.098					
1995	156.8	2664	16.990	17.6	2760	19.476	3054
	160.2	2669	16.660	17.6	2820	20.461	3278
	162.6	2665	16.390	17.6	2862	21.446	3407
	164.1	2688	16.380	17.6	2888	22.431	3681
	167.4	2707	16.171	17.6	2946	23.416	3920
2000	169.8	2713	15.978	17.6	2988	24.401	4143
	171.8	2719	15.827	17.6	3024	25.386	4361
	173.9	2725	15.670	17.6	3061	26.371	4586
	176.1	2731	15.508	17.6	3099	27.356	4817
178.1	2737	15.368	17.6	3135	28.341	5040	
2005	180.2	2760	15.316	17.6	3172	29.326	5285
	182.3	2782	15.261	17.6	3208	30.311	5526
	184.4	2805	15.211	17.6	3245	31.296	5771
	186.5	2828	15.164	17.6	3282	32.281	6020
188.6	2851	15.117	17.6	3319	33.266	6274	
2010	190.5	2882	15.129	17.6	3353	34.251	6525

\* Linear IncarRate = 1985-1994 (actual and assumption-rich period)

Source: DAD briefing paper, March 1990.

Table 5.

KING COUNTY JAIL POPULATION FORECAST  
BY JAIL STATUS BY QUARTER  
Revised 1990 Forecast: July 1989 -- 2010

Quarter/ Year	Felons		Misdemeanors		Holds		Jail Status Total	Total
	PreSent	Sentenced	PreSent	Sentenced	State	Other		
1989 July	754 *	264 *	315 *	299 *	134 *	56 *	1822 *	1877
Oct	833 *	285 *	309 *	327 *	148 *	76 *	1978 *	2036
1990 Jan	677 *	321 *	266 *	321 *	175 *	59 *	1819 *	1874
April	694 *	235 *	275 *	306 *	198 *	44 *	1752 *	1805
July	670 *	279 *	293 *	251 *	174 *	49 *	1716 *	1768
Oct	739 *	284 *	233 *	316 *	154 *	54 *	1780 *	1834
1991 Jan	697	297	289	292	187	61	1821	1876
April	710	309	300	308	192	55	1874	1930
July	697	338	278	330	185	57	1886	1943
Oct	733	336	320	346	189	59	1982	2041
1992 Jan	763	298	340	354	195	61	2011	2072
April	782	373	331	351	204	61	2102	2165
July	764	394	297	353	206	62	2075	2138
Oct	848	387	341	353	209	63	2201	2268
1993 Jan	801	326	363	363	212	64	2129	2193
April	821	399	353	359	214	65	2211	2278
July	802	407	316	354	217	66	2162	2228
Oct	891	331	363	359	219	68	2232	2299
1994 Jan	842	439	386	358	222	69	2315	2385
April	877	449	369	359	225	69	2347	2418
July	914	424	326	359	231	68	2322	2392
Oct	921	435	369	366	234	68	2393	2465
1995 Jan	887	347	387	366	237	68	2292	2361
April	899	458	371	367	237	68	2400	2472
July	926	462	328	368	237	68	2389	2461
Oct	956	437	366	368	237	68	2432	2506
Year: 1996	935	433	367	369	238	68	2411	2484
1997	936	433	367	369	240	67	2411	2484
1998	946	436	371	372	240	67	2432	2506
1999	954	439	374	375	242	67	2452	2526
2000	957	440	375	375	245	67	2459	2534
2001	961	441	375	375	245	67	2465	2539
2002	964	442	376	376	246	67	2471	2546
2003	968	443	376	376	247	67	2477	2551
2004	971	444	377	376	248	67	2483	2558
2005	979	448	380	379	249	67	2502	2577
2006	987	452	383	381	251	68	2522	2598
2007	995	455	385	384	253	68	2541	2617
2008	1003	459	388	386	255	69	2561	2638
2009	1011	463	391	389	257	70	2582	2659
2010	1019	467	394	391	259	70	2601	2679

- Notes: 1. "\*" Actual Populations.  
2. Monthly data by Quarter is end of month counts/estimates.  
3. Annual data is end of June estimates.  
4. "Total" includes the Peaking Factor.

Source: Jack O'Connell, "Draft King County Revised Jail Population Forecast: 1991 to 2010, December 1990, p. 7.

Table 6

KING COUNTY JAIL BOOKINGS: ACTUAL AND FORECAST  
BY JAIL STATUS BY QUARTER  
Revised 1990 Forecast: July 1989 -- 2010

Quarter/ Year	Felons		Misdemeanor		Holds		Total
	PreSent	Sentenced	PreSent	Sentenced	State	Other	
1988 Jan	884 *	272 *	1792 *	989 *	139 *	240 *	4316 *
April	847 *	210 *	1789 *	792 *	137 *	232 *	4008 *
July	973 *	265 *	2029 *	857 *	146 *	358 *	4521 *
Oct	1076 *	302 *	2083 *	886 *	164 *	264 *	4775 *
1989 Jan	1015 *	309 *	2067 *	921 *	177 *	292 *	4781 *
April	1065 *	244 *	2086 *	812 *	164 *	278 *	4649 *
July	934 *	215 *	2191 *	799 *	190 *	264 *	4613 *
Oct	1140 *	299 *	2008 *	864 *	152 *	324 *	4767 *
1990 Jan	963 *	292 *	1870 *	785 *	156 *	301 *	4367 *
April	975 *	233 *	1969 *	778 *	142 *	299 *	4395 *
July	976 *	290 *	2228 *	752 *	148 *	303 *	4697 *
Oct	981 *	253 *	2131 *	792 *	141 *	357 *	4655 *
1991 Jan	992	270	2231	823	156	336	4808
April	997	271	2271	855	158	343	4894
July	1015	276	2311	886	159	350	4996
Oct	1035	285	2351	917	161	357	5106
1992 Jan	1085	295	2390	925	165	364	5224
April	1099	299	2430	932	173	372	5304
July	1113	303	2470	940	175	374	5374
Oct	1126	306	2510	947	177	361	5447
1993 Jan	1140	310	2550	948	179	388	5515
April	1154	314	2590	948	181	395	5582
July	1169	318	2630	949	183	402	5651
Oct	1183	322	2669	949	186	409	5718
1994 Jan	1197	330	2709	949	188	416	5789
April	1232	335	2712	950	190	415	5834
July	1249	340	2714	951	196	415	5865
Oct	1260	344	2717	970	199	415	5904
1995 Jan	1261	344	2720	971	200	414	5910
April	1263	345	2723	972	201	414	5917
July	1265	345	2727	974	201	413	5924
Oct	1269	345	2735	976	201	412	5939
Year: 1996	1277	347	2749	980	202	410	5965
1997	1279	346	2749	978	203	406	5961
1998	1292	349	2776	987	203	406	6013
1999	1303	352	2798	994	205	406	6058
2000	1308	352	2803	995	207	406	6071
2001	1312	353	2807	995	208	405	6081
2002	1317	354	2811	996	209	404	6090
2003	1322	355	2816	997	209	404	6102
2004	1326	355	2820	997	210	403	6112
2005	1337	358	2841	1004	211	407	6158
2006	1348	362	2863	1010	213	411	6207
2007	1359	365	2884	1017	214	414	6253
2008	1370	368	2905	1024	216	418	6301
2009	1381	371	2926	1030	218	422	6348
2010	1392	374	2948	1037	220	426	6397

Notes: 1. "\*" Actual Populations.  
2. Monthly data by Quarter is end of month counts/estimates.  
3. Annual data is end of June estimates.

Source: Jack O'Connell, "Draft King County Revised Jail Population Forecast: 1991 to 2010, December 1990, p. 8.

TABLE 7

Jail Population Forecast Policy Adjustments  
Updated Policy Adjustments to Updated O'Connell Forecast

Original Policy Adjusted Jail Population Forecast

Year	King Co. Pop.	O'Connell Forecast Pop.	Incarcer. Rate	Constant IR	Policy Adj. Jail Pop.
1985	1,365,000	1267 *	9.282		
	1,383,000	1442 *	10.427		
	1,402,000	1489 *	10.621		
	1,421,000	1830 *	12.878		
	1,400,000	2017	14.007		
1990	1,459,000	2194	15.038		
	1,482,000	2505	16.903		
	1,506,000	2651	17.603		
	1,530,000	2560	16.732		
	1,554,000	2657	17.098		
1995	1,568,000	2664	16.990	17.6	2760
	1,602,000	2669	16.660	17.6	2820
	1,626,000	2665	16.390	17.6	2862
	1,641,000	2688	16.380	17.6	2888
	1,674,000	2707	16.171	17.6	2946
2000	1,698,000	2713	15.978	17.6	2988
	1,718,000	2719	15.827	17.6	3024
	1,739,000	2725	15.670	17.6	3061
	1,761,000	2731	15.508	17.6	3099
	1,781,000	2737	15.368	17.6	3155
2005	1,802,000	2760	15.316	17.6	3172
	1,823,000	2782	15.261	17.6	3208
	1,844,000	2805	15.211	17.6	3245
	1,865,000	2828	15.164	17.6	3282
	1,886,000	2851	15.117	17.6	3319
2010	1,905,000	2882	15.129	17.6	3353

\* Actual value at end of October.

Updated Policy Adjusted Jail Population Forecast

Year	King Co. Pop.	Updated O'Connell Jail Pop.	Incarcer. Rate (IR)	Constant IR for 1995-2010	Updated Policy Adj. Jail Pop.	Orig. Policy Adj. Jail Pop.	Diff.
1985	1,365,000	1267 *	9.282				
	1,383,000	1442 *	10.427				
	1,402,000	1489 *	10.621				
	1,421,000	1830 *	12.878				
	1,440,000	1978 *	13.736				
1990	1,460,996	1780 *	12.183				
	1,484,648	2041	13.747				
	1,508,301	2268	15.037				
	1,531,953	2299	15.007				
	1,555,606	2465	15.846				
1995	1,579,258	2506	15.868	15.846	2540	2820	-280
	1,602,910	2484	15.497	15.846	2577	2862	-285
	1,626,562	2484	15.271	15.846	2615	2888	-273
	1,650,214	2506	15.186	15.846	2652	2946	-294
	1,673,866	2526	15.091	15.846	2690	2988	-298
2000	1,697,518	2534	14.928	15.846	2723	3024	-301
	1,718,379	2539	14.776	15.846	2756	3061	-305
	1,739,240	2546	14.639	15.846	2789	3099	-310
	1,760,101	2551	14.493	15.846	2822	3155	-333
	1,780,962	2558	14.363	15.846	2855	3172	-317
2005	1,801,823	2577	14.302	15.846	2888	3208	-320
	1,822,684	2598	14.254	15.846	2921	3245	-324
	1,843,545	2617	14.195	15.846	2954	3282	-328
	1,864,406	2638	14.149	15.846	2987	3319	-332
	1,885,267	2659	14.104	15.846	3020	3353	-333
2010	1,906,128	2679	14.055	15.846			



TABLE 8

Total Jail Population Forecast  
And  
Revised Policy Adjusted  
for Population, Bookings, and Length of Stay

Year	Bookings		Population (ADP)		Length of Stay (Days)	
	No.	% Change	No.	% Change	No.	% Change
ACTUAL VALUES						
1980	34622		922		9.720120	
1981	34869	0.71%	966	4.77%	10.11184	4.03%
1982	36941	5.94%	1047	8.39%	10.34500	2.31%
1983	35533	-3.81%	1077	2.87%	11.06309	6.94%
1984	34089	-4.06%	1088	1.02%	11.68142	5.59%
1985	38716	13.57%	1195	9.83%	11.26601	-3.56%
1986	43517	12.40%	1368	14.48%	11.47413	1.85%
1987	47296	8.68%	1481	8.26%	11.42940	-0.39%
1988	52851	11.75%	1665	12.42%	11.53034	0.88%
1989	55316	4.66%	1864	11.95%	12.29951	6.67%
1990	52630	-4.86%	1738	-6.76%	12.05339	-2.00%
PROJECTED VALUES						
1991	61272	16.42%	2041	17.43%	12.15832	0.87%
1992	65364	6.68%	2268	11.12%	12.69946	4.45%
1993	68616	4.98%	2299	1.37%	12.22943	-3.70%
1994	70848	3.25%	2465	7.22%	12.69937	3.84%
1995	71268	0.59%	2506	1.66%	12.83451	1.06%
1996	73194	2.70%	2540	1.36%	12.70108	-1.04%
1997	74210	1.39%	2577	1.46%	12.67488	-0.21%
1998	75294	1.46%	2615	1.47%	12.67656	0.01%
1999	76322	1.36%	2652	1.41%	12.68281	0.05%
2000	77337	1.33%	2690	1.43%	12.73052	0.38%
2001	78260	1.19%	2723	1.23%	12.69987	-0.24%
2002	79108	1.08%	2756	1.21%	12.71606	0.13%
2003	80056	1.20%	2789	1.20%	12.71598	-0.00%
2004	80914	1.07%	2822	1.18%	12.76488	0.38%
2005	81860	1.17%	2855	1.17%	12.73001	-0.27%
2006	82814	1.17%	2888	1.16%	12.72876	-0.01%
2007	83744	1.12%	2921	1.14%	12.73119	0.02%
2008	84699	1.14%	2954	1.13%	12.76483	0.26%
2009	85615	1.08%	2987	1.12%	12.73435	-0.24%
2010	88541	3.42%	3090	3.45%	12.73816	0.03%

Note: 2010 figure includes adjustment for 70 lost municipal beds.

TABLE 9

Projected Jail Population by Security Classifications III, 1990 - 2010

	Actual Year 1990		Forecast Year 1995		Forecast Year 2000		Forecast Year 2005		Forecast Year 2010		Total				
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women					
<b>INTAKE</b>	35	7	42	50	10	60	54	10	64	57	11	68	61	12	71
<b>24-HOUR SECURE RESIDENTIAL</b>															
General Population	184	32	215	258	44	302	279	48	327	297	51	348	323	56	379
Unclassified	337	48	385	485	71	556	525	77	601	559	82	641	609	89	698
Minimum/Community	330	22	352	492	35	527	532	38	570	567	41	607	617	44	661
Medium	112	5	117	162	7	169	175	8	183	186	9	195	203	9	212
Close/Maximum															
Subtotal -- General	962	107	1069	1396	158	1554	1510	171	1681	1609	182	1791	1752	198	1950
<b>SPECIAL CUSTODY</b>															
Psychiatric/Mentally Ill	91	10	101	137	15	152	148	17	165	158	18	175	172	19	191
Medical	74	8	82	111	12	122	120	12	132	128	13	141	139	14	153
Administrative Segregation	35	2	37	47	3	50	51	3	54	54	3	57	59	4	63
Disciplinary Segregation	15	2	17	21	4	25	23	4	28	24	4	28	26	4	30
Subtotal -- Special Custody	214	22	236	315	35	349	341	36	377	363	38	401	395	42	437
<b>SUBTOTAL -- 24-HOUR SECURE RESIDENTIAL</b>	1176	129	1305	1712	191	1903	1851	207	2058	1972	220	2192	2147	240	2382
<b>COMMUNITY BASED</b>															
Community (NRF) Long Term	174	18	192	244	34	278	262	37	299	278	39	317	301	42	343
Community (NRF) DUI-Program	4	1	5	6	1	7	6	1	8	7	1	8	7	2	9
Work Education Release	145	12	157	189	18	207	191	20	211	198	22	219	202	24	226
Electronic Home Detention	31	5	36	43	7	50	43	7	50	43	7	50	43	7	50
Subtotal -- COMMUNITY BASED	355	36	391	483	60	543	503	65	568	526	69	595	554	74	628
<b>TOTAL POPULATION</b>	1566	172	1738	2244	261	2506	2408	282	2690	2555	300	2855	2762	326	3009

TABLE 10

Projected Jail Population by Security Classification III, 1990 - 2010

	Actual 1990			Forecast 1995			Forecast 2000			Forecast 2005			Forecast 2010		
	Percentage Distribution		Total	Percentage Distribution		Total	Percentage Distribution		Total	Percentage Distribution		Total	Percentage Distribution		Total
	Men	Women		Men	Women		Men	Women		Men	Women		Men	Women	
INTAKE	1.99%	0.39%	2.38%	1.99%	0.39%	2.38%	1.99%	0.39%	2.38%	1.99%	0.39%	2.38%	1.99%	0.39%	2.38%
24 HOUR SECURE RESIDENTIAL															
General Population															
Unclassified	10.57%	1.82%	12.39%	10.26%	1.78%	12.06%	10.36%	1.79%	12.15%	10.40%	1.80%	12.19%	10.46%	1.81%	12.27%
Minimum/Community	19.37%	2.77%	22.14%	19.37%	2.83%	22.19%	19.51%	2.85%	22.36%	19.58%	2.86%	22.44%	19.70%	2.87%	22.57%
Medium	18.99%	1.28%	20.27%	19.63%	1.40%	21.04%	19.78%	1.42%	21.20%	19.85%	1.43%	21.27%	19.96%	1.43%	21.41%
Close/Maximum	6.42%	0.28%	6.70%	6.45%	0.30%	6.74%	6.49%	0.30%	6.80%	6.52%	0.30%	6.82%	6.56%	0.30%	6.86%
Subtotal -- General	55.36%	6.14%	61.51%	55.73%	6.30%	62.03%	56.14%	6.35%	62.49%	56.35%	6.38%	62.73%	56.69%	6.41%	63.11%
SPECIAL CUSTODY															
Psychiatric/Mentally Ill	5.23%	0.57%	5.80%	5.46%	0.61%	6.07%	5.59%	0.62%	6.12%	5.52%	0.62%	6.14%	5.55%	0.62%	6.17%
Medical	4.26%	0.45%	4.71%	4.42%	0.46%	4.88%	4.45%	0.46%	4.92%	4.47%	0.47%	4.93%	4.50%	0.47%	4.96%
Administrative Segregation	1.99%	0.12%	2.11%	1.87%	0.12%	1.99%	1.89%	0.12%	2.00%	1.89%	0.12%	2.01%	1.90%	0.12%	2.02%
Disciplinary Segregation	0.84%	0.14%	0.98%	0.84%	0.14%	0.98%	0.84%	0.14%	0.98%	0.84%	0.14%	0.98%	0.84%	0.14%	0.98%
Subtotal -- Special Custody	12.33%	1.28%	13.61%	12.59%	1.33%	13.92%	12.67%	1.34%	14.01%	12.72%	1.34%	14.06%	12.79%	1.35%	14.14%
SUBTOTAL -- 24-HOUR SECURE RESIDENTIAL	67.69%	7.42%	75.12%	68.31%	7.63%	75.95%	68.82%	7.69%	76.51%	69.07%	7.72%	76.79%	69.48%	7.77%	77.25%
COMMUNITY BASED															
Community (MRF) Long Term	10.03%	1.03%	11.06%	9.75%	1.36%	11.11%	9.75%	1.36%	11.11%	9.75%	1.36%	11.11%	9.75%	1.36%	11.11%
Community (MRF) Out-Program	0.24%	0.05%	0.29%	0.24%	0.05%	0.29%	0.24%	0.05%	0.29%	0.24%	0.05%	0.29%	0.24%	0.05%	0.29%
Work Education Release	8.35%	0.71%	9.06%	7.55%	0.72%	8.27%	7.11%	0.71%	7.85%	6.92%	0.75%	7.68%	6.53%	0.77%	7.31%
Electronic Home Detention	1.80%	0.29%	2.09%	1.72%	0.28%	2.00%	1.60%	0.28%	1.88%	1.51%	0.25%	1.75%	1.42%	0.23%	1.66%
SUBTOTAL -- COMMUNITY BASED	20.42%	2.08%	22.50%	19.26%	2.41%	21.67%	18.70%	2.41%	21.11%	18.42%	2.41%	20.83%	17.96%	2.41%	20.37%
TOTAL POPULATION	90.10%	9.89%	100.00%	89.56%	10.43%	100.00%	89.51%	10.49%	100.00%	89.48%	10.52%	100.00%	89.43%	10.57%	100.00%

TABLE 11

Projected Jail Population by Security Classifications III, 1990 - 2010 (Non-Capital Adjustments)

	Actual Year 1990		Forecast Year 1995		Forecast Year 2000		Forecast Year 2005		Forecast Year 2010					
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women				
<b>INTAKE</b>	35	7	42	10	60	54	10	64	57	11	68	61	12	74
<b>24-HOUR SECURE RESIDENTIAL</b>														
General Population														
Unclassified	184	32	215	44	302	279	48	327	297	51	348	323	56	379
Minimum/Community	337	48	385	71	556	525	77	601	559	82	641	609	89	698
Medium	330	22	352	35	527	492	38	570	567	41	607	617	44	661
Close/Maximum	112	5	117	7	169	175	8	183	186	9	195	203	9	212
Subtotal -- General	962	107	1069	158	1554	1510	171	1681	1609	182	1791	1752	198	1950
<b>SPECIAL CUSTODY</b>														
Psychiatric/Mentally Ill	91	10	101	15	152	148	17	165	158	18	175	172	19	191
Medical	74	8	82	12	122	120	12	132	128	13	141	139	14	153
Administrative Segregation	35	2	37	3	50	51	3	54	54	3	57	59	4	62
Disciplinary Segregation	15	2	17	4	25	23	4	26	24	4	28	26	4	30
Subtotal -- Special Custody	214	22	236	33	349	341	36	377	363	38	401	395	42	437
<b>SUBTOTAL -- 24-HOUR SECURE RESIDENTIAL</b>	1176	129	1305	191	1903	1851	207	2058	1972	220	2192	2147	240	2387
<b>COMMUNITY BASED</b>														
Community (NRF) Long Term	168	17	185	32	262	236	34	270	249	36	284	268	38	306
Community (NRF) DJJ-Program	4	1	5	6	7	6	1	8	7	8	8	7	8	9
Work Education Release	138	12	150	16	191	173	18	191	178	19	197	179	21	200
Electronic Home Detention	44	7	51	10	82	78	11	89	83	11	94	90	12	102
Community Work Service						9	1	10	10	1	11	10	1	11
<b>SUBTOTAL -- COMMUNITY BASED</b>	354	36	391	60	543	503	65	568	526	69	595	554	74	628
<b>TOTAL POPULATION</b>	1566	172	1738	2245	2506	2408	282	2690	2555	300	2855	2764	326	3090
<b>Non-Capital 24-hour Secure Reduction</b>														
Intake	-2	0	-2	-3	-3	-3	-1	-4	-4	0	-4	-4	0	-4
Unclassified	-12	-1	-13	-2	-19	-19	-2	-21	-20	-2	-22	-22	-2	-24
Sub-Total -- Non-Capital	-14	-2	-16	-2	-22	-22	-3	-25	-24	-2	-26	-26	-2	-28
<b>ADJUSTED TOTAL POPULATION</b>	1552	170	1722	2225	2484	2386	279	2665	2530	299	2829	2737	325	3062

Table 12  
Proposed Facilities by Option  
and Planning Regions Served

<u>Option</u>	<u>Facilities</u>	<u>Planning Regions/ Book &amp; Holds Served</u>
A	Justice Center Seattle B&H S/E (in 1995) B&H N/E (in 2005)	Seashore; B&H N/E; B&H S/E Renton Area; South Issaquah East; Northeast
B	Justice Center S/E B&H N/E (in 2005) Justice Center Seattle	Renton Area; South Issaquah East; Northeast Seashore; B&H N/E
C	Justice Center Seattle B&H N (in 2005) B&H E (in 2005) B&H S (in 1995) B&H S (in 2005 on)	Seashore; B&H N; B&H E; B&H S Northeast Renton Area; Issaquah East South; Renton; Issaquah East South
D	Justice Center Seattle	All
E	Justice Center N/E Justice Center S/E Justice Center Seattle	Northeast; Issaquah East Renton Area; South Seashore
*F	Justice Center N Justice Center E Justice Center S Justice Center Seattle	Northeast Renton Area; Issaquah East South Seashore
G	Justice Center Campus	All non-Seashore
H	Justice Center Campus	All non-Seashore; Seashore inmates over capacity

\* Option F was dropped from the analysis based on preliminary jail population and cost data.

Table 13

KING COUNTY POPULATION PROJECTIONS  
 SOURCE: PUGET SOUND COUNCIL OF GOVERNMENTS, JUNE 1988  
 10-Oct-90

REGION	EST 1990 POP % OF K.C.	EST 1990	PROJ 1995 POP % OF K.C.	PROJ 1995	PROJ 2000 POP % OF K.C.	PROJ 2000	PROJ 2005 POP % OF K.C.	PROJ 2005	PROJ 2010 POP % OF K.C.	PROJ 2010	1990-2010 GROWTH IN POP	1990-2010 GROWTH IN %
REGION 1 SEASHORE	38.86%	567,711	36.46%	575,758	34.39%	583,805	32.69%	589,092	31.18%	594,379	26,668	4.70%
REGION 2 SOUTH	26.55%	387,933	27.15%	428,846	27.67%	469,758	28.02%	504,887	28.46%	542,562	154,629	39.86%
REGION 3 NORTHEAST	22.34%	326,319	23.47%	370,676	24.45%	415,033	25.00%	450,491	25.49%	485,948	159,629	48.92%
REGION 4 RENTON	9.13%	133,353	9.52%	150,290	9.85%	167,226	10.37%	186,916	10.71%	204,061	70,708	53.02%
REGION 5 ISSAQUAH	3.13%	45,680	3.40%	53,688	3.63%	61,696	3.91%	70,437	4.15%	79,178	33,498	73.33%
TOTAL KING COUNTY	100.00%	1,460,996	100.00%	1,579,258	100.00%	1,697,518	100.00%	1,801,823	100.00%	1,906,128	445,132	30.47%

TABLE 14

REGIONAL BOOKINGS, LENGTH OF STAY, AND ADP

	Projected Bookings	Region Bookings % of Total	Projected LOS	Projected Total Pris Days	Projected Jail Pop	Region Population % of Total
Seashore (A1)	30,652	58.24%	11.64	356,835.71	978	56.25%
South (A2)	7,516	14.28%	10.63	79,859.72	219	12.59%
Northeast (A3)	3,179	6.04%	9.67	30,724.72	84	4.84%
Renton (A4)	2,253	4.28%	12.49	28,128.41	77	4.43%
Issaquah (A5)	689	1.31%	17.71	5,313.93	15	0.84%
Surrender (A8)	4,795	9.11%	15.50	74,326.98	204	11.72%
All Other (A0)	3,547	6.74%	16.68	59,180.45	162	9.33%
	52,630	100.00%	12.05	634,369.92	1738	100.00%

-----Forecast 1995-----

	Projected Bookings	Region Bookings % of Total	Projected LOS	Projected Total Pris Days	Projected Jail Pop	Region Population % of Total
Seashore (A1)	38,991	54.71%	12.44	484,999.78	1329	53.02%
South (A2)	11,220	15.74%	11.35	127,387.19	349	13.93%
Northeast (A3)	4,955	6.95%	10.33	51,171.48	140	5.59%
Renton (A4)	3,600	5.05%	13.34	48,032.72	132	5.25%
Issaquah (A5)	1,206	1.69%	8.24	9,931.74	27	1.09%
Surrender (A8)	6,493	9.11%	16.56	107,549.11	295	11.76%
All Other (A0)	4,803	6.74%	17.83	85,617.84	235	9.36%
	71,268	100.00%	12.83	914,689.86	2506	100.00%

-----Forecast 2000-----

	Projected Bookings	Region Bookings % of Total	Projected LOS	Projected Total Pris Days	Projected Jail Pop	Region Population % of Total
Seashore (A1)	39,732	51.38%	12.38	491,838.34	1344	49.96%
South (A2)	13,214	17.09%	11.30	149,303.13	408	15.16%
Northeast (A3)	6,044	7.82%	10.28	62,117.00	170	6.31%
Renton (A4)	4,482	5.80%	13.28	59,512.51	163	6.04%
Issaquah (A5)	1,608	2.08%	8.20	13,178.50	36	1.34%
Surrender (A8)	7,045	9.11%	16.48	116,129.91	317	11.80%
All Other (A0)	5,212	6.74%	17.74	92,460.83	253	9.39%
	77,337	100.00%	12.73	984,540.23	2690	100.00%

TABLE 14

REGIONAL BOOKINGS, LENGTH OF STAY, AND ADP

-----Forecast 2005-----

	Projected Bookings	Region Bookings % of Total	Projected LOS	Projected Total Pris Days	Projected Jail Pop	Region Population % of Total
Seashore (A1)	39,660	48.45%	12.41	492,241.83	1349	47.24%
South (A2)	14,828	18.11%	11.33	167,981.33	460	16.12%
Northeast (A3)	6,848	8.37%	10.30	70,565.70	193	6.77%
Renton (A4)	5,470	6.68%	13.31	72,822.83	200	6.99%
Issaquah (A5)	2,080	2.54%	8.22	17,091.77	47	1.64%
Surrender (A8)	7,457	9.11%	16.53	123,245.51	338	11.83%
All Other (A0)	5,517	6.74%	17.79	98,129.64	269	9.42%
	81,860	100.00%	12.73	1,042,078.62	2855	100.00%

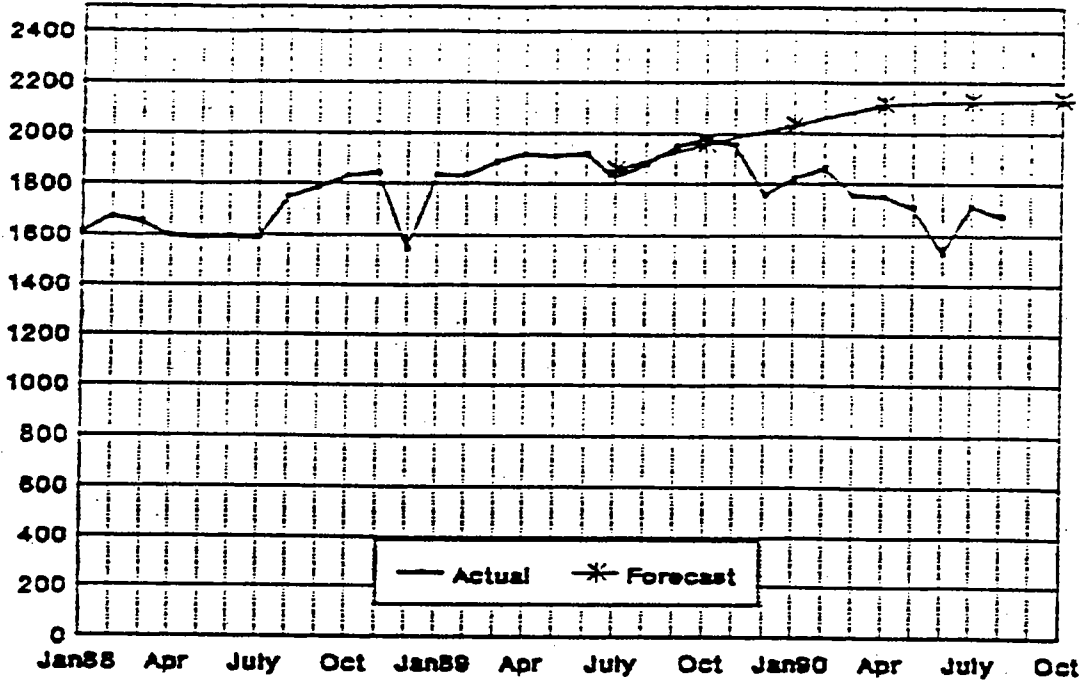
-----Forecast 2010-----

	Projected Bookings	Region Bookings % of Total	Projected LOS	Projected Total Pris Days	Projected Jail Pop	Region Population % of Total
Seashore (A1)	40,454	45.69%	12.45	503,774.04	1380	44.67%
South (A2)	16,943	19.14%	11.37	192,582.70	528	17.08%
Northeast (A3)	7,854	8.87%	10.34	81,202.48	222	7.20%
Renton (A4)	6,596	7.45%	13.36	88,106.80	241	7.81%
Issaquah (A5)	2,661	3.01%	8.24	21,939.01	60	1.95%
Surrender (A8)	8,066	9.11%	16.58	133,756.13	366	11.86%
All Other (A0)	5,967	6.74%	17.85	106,488.27	292	9.44%
	88,541	100.00%	12.74	1,127,849.42	3090	100.00%



GRAPH 1

King County Jail Population  
Actual vs. Forecast



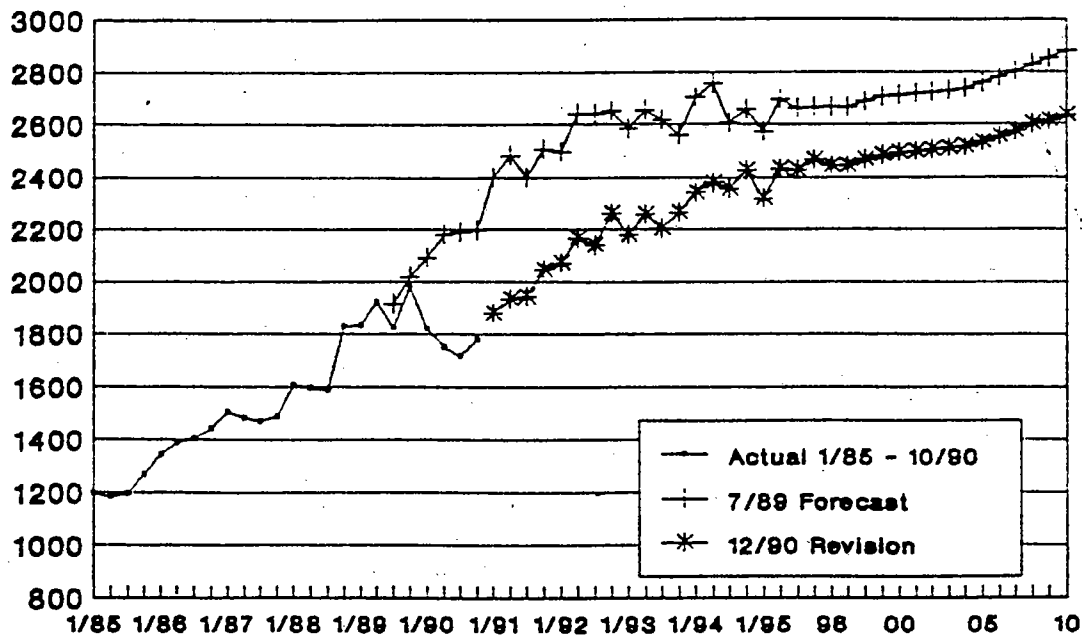
TOTAL JAIL POPULATION

	Admissions			Length of Stay			Population		
	Actual	For.	Diff.	Actual	For.	Diff.	Actual	For.	Diff.
7/89	4613	4663	-50	11.8	11.9	-0.1	1822	1857	-35
10/89	4787	4845	-58	12.4	10.9	0.3	1978	1957	21
1/90	4367	4982	-615	12.5	12.2	0.3	1819	2030	-211
4/90	4395	4982	-665	12.0	12.5	-0.5	1752	2115	-363
7/90	4668	5154	-486	11.0	12.4	-1.4	1716	2125	-409

Source: Jack O'Connell, "King County Jail Population Monitoring Report," October, 1990, p. 3.

Graph 2

### King County Jail Total Jail Population Comparisons Actual -- '89 Forecast -- '90 Revision



Note: Forecasts include jail population peaking factor of 1.03. Actuals do not.

Source: Jack O'Connell, "King County Jail Population Monitoring, July 1989 to August 1990, October 1990, p. 6.

## Department of Judicial Administration

### Workload Projection Methodologies

The Department of Judicial Administration's workload is primarily determined by number of cases filed and number of King County Superior Court judicial positions. With Superior Court, DJA used a regression analysis of historic workload to project filings through 1994. From 1995 forward, a fixed ratio of filings to population was used. With this projected filing number DJA and Superior Court were able to project judge need by dividing the number of dispositions possible per judicial position by projected filings. See Superior Court section for actual data.

### Staffing Methodologies

For staffing forecasting purposes, DJA is allotted 3.29 FTE per judge. Of this 3.29, 1.1 FTE is allotted for courtroom clerks, 2.0 FTE are used as line staff and .19 as administrative staff. Using Superior Court projections, there will be 75.3 judicial positions in 1995, 80.9 in 2000, 85.9 in 2010, and 90.9 in 2010.

### Option D

If Option D were implemented, DJA would expand on site in the Courthouse. We would require approximately 175 square feet of space in the new justice center, to locate one-two positions there to accept filings, assist litigants and court employees by accessing SCOMIS information, perform some docketing, certification of copies and receipting.

Using the judge projections presented by Superior Court, DJA calculates needed staff as follows (see spreadsheets, next 2 pages):

Explanation of Salaries:

Salary projections are figured using a weighted average based on the midpoint of the current salary range:

For Courtroom Clerks, the salary used for projections is \$22,605;

For Line Staff, the salary used for projections is \$20,831.61;

For Administrative Staff, the salary used for projections is \$31,425.72.

Explanation of Overtime:

A courtroom clerk must be present when court is in session. Due to many factors, a trial or hearing may go into overtime during the lunch hour or after the end of the County's working day. DJA has no discretion; courtroom clerks must be present and must therefore be paid overtime. DJA requires overtime in the amount of 4.6% of actual courtroom clerk hours per year.

° DJA's 1990 budget for courtroom clerk overtime was not based on 4.6% of regular hours. The amount shown here is the 1990 budgeted amount. DJA actually spent over \$53,000 in courtroom clerk overtime in 1990 and worked with the Budget Office and Council staff to arrive at the 4.6% ratio to fund this account in 1991.

Explanation of Space:

\* Space for Courtroom Clerks is included in Superior Court's information as part of courtroom space.

\*\* DJA currently occupies 25,555 square feet on the 6th floor of the Courthouse for its primary space needs for staff, records storage and public viewing areas for court records. Additional space for exhibit storage (currently in the basement of the Courthouse) and for the Juvenile Court Clerk's Office would grow comparable to primary space growth. Since space allotment for courtroom clerks is included in Superior Court's space needs, and DJA has 6 employees at other than 6th floor locations, 99.5 DJA staff share the 25,555 square feet space at 257 square feet per staff. 257 sq. ft. per FTE is misleading, in that included in that number is space for over 400,000 legal files, a public viewing and copying area for those files, and customer service counters and waiting areas. DJA space on the 6th floor is filled to over-capacity. We have already began a second shift in one of our divisions because of lack of space for allocated FTE's. We have been working with the Office of Capital Planning to alleviate our currently existing space problems.

\*\*\* Line staff space is calculated at 70 square feet per staff. Administration staff space is calculated at 100 square feet per staff. 1,500sf, 500sf, 250sf and 250sf, are added to the respective years' totals (1995, 2000, 2005, 2010) to account for equipment, file storage, public access space and exhibit space.

Explanation of Operations and Management Expenses:

As an average, and for the basis of this report, DJA will use \$5,000 per employee to cover operations and management expenses. (In 1990, DJA was allocated \$752,532 for Operations and Management expenses which is \$4,660 per FTE. For 1991, DJA was allocated \$911,403 which is approximately \$5,361 per FTE.)

Satellite Considerations:

Regarding one-time capital expenses to set up the satellite office, DJA would expect to spend approximately \$10,000 in necessary equipment to begin operations.

Detail:

copy machine	900 (on a monthly basis)
SCOMIS terminal	1,500
PC-type cash register	6,500
File Stamp	500
Telephone	240 (on a monthly basis)
	----
	9,640

## Option G

If a new Justice Center is built outside of Seattle, DJA would site approximately 3.29 staff per Superior Court Judge placed there. DJA has previous experience in siting and staffing satellite offices, and doesn't expect major differences between this satellite and those already at the Juvenile Court and our Eastside Satellite at the Bellevue District Court.

### Space:

Since Superior Court plans to site a minimum of 6 judges in a satellite, DJA would expect to place a full service Clerk's Office. DJA would use the same space standards as used in Option D, 70sf per line staff and 100sf per administrative staff. We would expect to place 1 supervisor (100sf) to every 10 line staff (70 sf) located there. DJA does not require space for courtroom clerks.

On top of the "per staff" space, DJA would require extra space for public access areas, file shelving, a secure Exhibit Room, and a file reading room.

### Satellite Issues:

DJA expects to house the legal files of those cases filed in the satellite at the satellite. DJA has made a policy decision to allow legal document filing at either site, regardless of the location of the case. This will cause some inefficiency in respect to sorting and managing papers as well as file and legal document transportation. Presently, for the purpose of transporting documents between our Courthouse location and our three outside areas (Juvenile, Eastside and Mental Illness Courtroom at Harborview), DJA already employs a courier (OTII level). Between increased document sorting and increased courier requirements, DJA would need 1 additional FTE (OTII level) over and above the 3.29 allotted per judge at the site. In addition, DJA would also need an additional van for file/document transportation. Approximate costs would be \$8,000.

We would also expect that one administrative position we place at the satellite would actually be salaried at a level higher than DJA's on site supervisors, due to off-site administrative type responsibilities that would be in addition to regular supervising responsibilities.

Similar to Option D, DJA would have high start-up capital expenses.

Copy machine	900 (per month - 1.30 FTE)
SCOMIS terminals	1,500 (each - 1 per FTE needed)
PC-type cash register	6,500 (2 or 3 would be needed)
File Stamp	500 (2 or 3 needed)
Fax machines	8,000 (1 DJA, 1 for filings)
Personal Computers	7,000 (2 at \$3,500 each)
Video Equipment*	
VCRs	1,250 (2 per courtroom, 2 in DJA)
Monitors	450 (2 in DJA)
Microfilm Reader/Printers	10,000 (2 for public - 1 for staff)
File Shelving	3,500
Exhibit Room Safe (money, jewelry)	1,000 (at least 1 needed)
Exhibit Room Locking Cabinet (guns, drugs)	1,000 (at least 1 needed)

\*(VCRs--2 per courtroom, video viewing area and equipment for public, staff (2 monitors, 2 VCRs), high speed dubbing equipment)

Many of these capital items would be needed even DJA were to expand on site in the Courthouse instead of being part of a Regional Justice Center, due simply to growth of filings and judges and therefore growth in staff.



Superior Court  
Staffing Methodology

1. Individual Calendar Assistants counted in Judicial Operations are assigned to special IC Courts at the rate of 1/2 IC Assistant: 1 Judge. Currently, there are only 12 judges participating in a pilot program. Although this program will likely expand in future years, it is assumed for this analysis that the program does not expand. This assumption will not effect the analysis of the capital options.
2. Adoption Services will not be decentralized due to its specialization and small size of staff and operation.
3. Arbitration will not need to be decentralized due to its specialization and small size. Manager/Director Carole Greene said that the staff could maintain its current size if attorneys could fax file work directly to the Arbitration office and bypass the Clerk's office. Because the staff of the Arbitration Section uses SCOMIS to track the cases with the Clerk's office as well as use their own in-house program, the time between filing (Clerk's office) and assignment (Arbitration Section) could be decreased by two weeks on an average case.
4. Juvenile Court services and Mental Health services will not be included in the proposed facility options. Both services have specialized space, judges, and staff who are currently operating separately from the downtown Courthouse.
5. In general, four methods were developed to forecast staffing for Superior Court in each of the capital options. For the specific staffing formulas, refer to the sections for Superior Court within each of the capital options in Chapter 4.
  - (1) The number of judicial positions were derived by applying disposition rates to projected workloads of cases;
  - (2) Bailiffs and Court Reporters were projected on the basis of one of each position to every judicial position;
  - (3) Most support positions were increased in the same proportion as filings;
  - (4) Supervisory positions would vary with the number of staff supervised; and
  - (5) Several management and coordinator positions would not increase with an increase in workload except in the case of a satellite facility these functions require duplication. The next section includes a discussion of these positions.

5. Staffing Inefficiencies

The following staff would increase in number due to placement in a regional justice facility:

Section/Staff Position	Option G	Option E: Phase II = NE RJC (Phase I Same as Option G)
1. Admin Services/Deputy Court Administrator	Add 1 FTE to supervise operations in satellite facility	Add 1 FTE to manage NE facility but at a director level
2. Admin Services/Coordinator III	At least one FTE to manage the mechanical operations of a satellite facility and manage court supplies, deliveries, inventory, and distribution.	At least one FTE to manage the mechanical operations of a satellite facility and manage court supplies, deliveries, inventory, and distribution
3. Admin Services/Receptionist	Add 1 FTE to receive incoming calls and direct visitors in satellite facility	Add 1 FTE to receive incoming calls and direct visitors in satellite facility
4. Court Operations/Coord III-Trial Assignment	Add 1 FTE to assign cases to judges.	Add 0.5 FTE to assign cases to judges
5. Court Operations/Supervisor I	No increase in Phase I	Add 0.5 FTE (combined with Trial Assignment) to schedule staff
6. Court Operations/Manager I	Add 1 FTE to manage criminal operations in satellite facility	No increase in Phase II
7. Court Operations/Court Operations Assistant	Add 1 FTE to schedule staff, and fill in for shortages of staff	Add 1 FTE to schedule staff, and fill in for shortages of staff
8. Court Operations/Criminal Operations	At a minimum 1 FTE is required per site to process documents in connection with guilty pleas or verdicts	At a minimum 1 FTE is required per site to process documents in connection with guilty pleas or verdicts
9. Court Operations/Confirmation Coordinator	At least 1 FTE (then volume driven)	At least 1 FTE (then volume driven)

6. Expansion into a regional justice center may have the effect of decreasing judicial efficiency in the branch courts. The primary factor which would affect efficiency is a reduction in the flexibility of scheduling and managing caseloads. However, in the options involving decentralization, the number of courts to be located in a satellite justice center is too large to expect a measurable impact to judicial efficiency. A study for San Diego County<sup>1</sup> supports this recommendation wherein it is concluded that significant inefficiencies due to this loss of scheduling flexibility would not be evident in courts with more than ten judges.

1. Geisler Smith Associates, Branch Courts Study: Report to the County of San Diego Chief Administrative Office, April 1985.

Another factor affecting judicial efficiency is the loss of time in travelling to committee meetings. The method for estimating this factor is as follows: The average number of meetings per judge was estimated based upon the current committee structure. This figure applied to an average round-trip travel time resulted in the number of hours spent travelling per judge. This time loss to travelling, as a percentage of total available hours each year per judge, is the inefficiency factor. When applied to the projected number of judges who would need to travel, the inefficiency culminated in the addition of about one judge. Refer to the attached worksheet for a more detailed illustration.

7. The Conference Committee will not decentralize due to the nature of its work with the Juvenile Court. It was not included in the Juvenile Court Operations sections of the forecast plan because its staffing has no effect on the analysis of options.

**Additional Juror Costs Related to Decentralization**

Superior Court:

Additional Juror Costs:

	Downtown 1991	1995	2000	Suburban Location Only 2005	2010
number of judges/comms in facility(ies)	53	28	32	36	39
average number of jurors per day	429	227	259	291	316
average number of jurors per judge/comm	8	8	8	8	8
percent of jurors taking the bus	84%	25%	25%	25%	25%
percent of jurors driving	16%	75%	75%	75%	75%
additional jurors driving		134	153	172	186
avg daily mileage reimbursement – driving	\$8.31	\$8.31	\$8.31	\$8.31	\$8.31
avg daily mileage reimbursement – bus	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00
<b>Total Additional Juror Cost</b>		<b>\$184,612</b>	<b>\$210,985</b>	<b>\$237,358</b>	<b>\$257,138</b>

Explanation:

- Data based on the average of a two – month survey and a three – month survey.
- Additional juror costs are anticipated for a suburban justice center(s) due to the greater percentage of jurors choosing to use the more costly mode, driving their own cars, instead of public transportation. As shown above, a rough estimate of this additional cost is calculated given the assumption that jurors assigned to the suburban facility would drive 75% of the time compared to the current average of about 16%. The current additional cost to reimburse mileage (over the bus pass) is about \$5.

**SUPERIOR COURT: DISTRIBUTION OF FILINGS BY REGION**

**Superior Court Criminal Filings**

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0092	0.0050	0.0005	0.0048	0.0018	
1990	Total by Region	5,221	1,928	161	643	80	8,033
1995	95 Pop x 90 Ratio	5,295	2,131	183	725	94	8,428
	Total by Region	6,025	2,425	208	825	107	9,590
2000	2000 Pop x 90 Ratio	5,369	2,335	205	806	108	8,823
	Total by Region	6,273	2,728	239	942	126	10,309
2005	2005 Pop x 90 Ratio	5,418	2,509	222	901	123	9,174
	Total by Region	6,656	3,083	273	1,107	152	11,270
2010	2010 Pop x 90 Ratio	5,466	2,696	240	984	139	9,525
	Total by Region	6,842	3,375	300	1,232	174	11,923

**Share of Cases in Each Region by Year**

1990	-----	64.99%	24.00%	2.00%	8.00%	1.00%	100.00%
1995	-----	62.83%	25.29%	2.17%	8.60%	1.12%	100.00%
2000	-----	60.85%	26.46%	2.32%	9.14%	1.22%	100.00%
2005	-----	59.06%	27.35%	2.42%	9.82%	1.34%	100.00%
2010	-----	57.39%	28.31%	2.52%	10.33%	1.46%	100.00%

% Annual Growth 1990-1995	2.91%	4.70%	5.27%	5.10%	5.99%	3.61%
% Annual Growth 1995-2000	0.81%	2.38%	2.83%	2.70%	3.36%	1.45%
% Annual Growth 2000-2005	1.19%	2.48%	2.68%	3.28%	3.72%	1.80%
% Annual Growth 2005-2010	0.55%	1.83%	1.91%	2.15%	2.75%	1.13%

**Superior Court Civil Filings**

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0208	0.0176	0.0153	0.0098	0.0287	
1990	Total by Region	11,808	6,822	4,985	1,312	1,312	26,239
1995	95 Pop x 90 Ratio	11,975	7,541	5,663	1,479	1,542	28,200
	Total by Region	12,192	7,678	5,765	1,505	1,570	28,710
2000	2000 Pop x 90 Ratio	12,143	8,261	6,340	1,645	1,772	30,161
	Total by Region	12,424	8,452	6,487	1,683	1,813	30,860
2005	2005 Pop x 90 Ratio	12,253	8,879	6,882	1,839	2,023	31,875
	Total by Region	12,969	9,398	7,284	1,947	2,141	33,739
2010	2010 Pop x 90 Ratio	12,363	9,541	7,424	2,008	2,274	33,609
	Total by Region	13,129	10,133	7,884	2,132	2,415	35,692

**Share of Cases in Each Region by Year**

1990	-----	45.00%	26.00%	19.00%	5.00%	5.00%	100.00%
1995	-----	42.47%	26.74%	20.08%	5.24%	5.47%	100.00%
2000	-----	40.26%	27.39%	21.02%	5.45%	5.88%	100.00%
2005	-----	38.44%	27.85%	21.59%	5.77%	6.35%	100.00%
2010	-----	36.78%	28.39%	22.09%	5.97%	6.77%	100.00%

% Annual Growth 1990-1995	0.64%	2.39%	2.95%	2.79%	3.65%	1.82%
% Annual Growth 1995-2000	0.38%	1.94%	2.39%	2.26%	2.92%	1.45%
% Annual Growth 2000-2005	0.86%	2.14%	2.34%	2.95%	3.38%	1.80%
% Annual Growth 2005-2010	0.25%	1.52%	1.59%	1.84%	2.43%	1.13%

**Superior Court Domestic Filings**

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0060	0.0072	0.0058	0.0083	0.0176	
1990	Total by Region	3,414	2,812	1,908	1,105	803	10,042
1995	95 Pop x 90 Ratio	3,462	3,109	2,167	1,245	944	10,927
	Total by Region	2,983	2,678	1,867	1,073	813	9,414
2000	2000 Pop x 90 Ratio	3,511	3,405	2,427	1,386	1,085	11,813
	Total by Region	3,007	2,917	2,079	1,187	929	10,119
2005	2005 Pop x 90 Ratio	3,543	3,660	2,634	1,549	1,238	12,623
	Total by Region	3,105	3,207	2,308	1,357	1,085	11,063
2010	2010 Pop x 90 Ratio	3,574	3,933	2,841	1,691	1,392	13,431
	Total by Region	3,115	3,427	2,476	1,473	1,213	11,703

**Share of Cases in Each Region by Year**

1990	-----	34.00%	28.00%	19.00%	11.00%	8.00%	100.00%
1995	-----	31.69%	28.45%	19.83%	11.40%	8.64%	100.00%
2000	-----	29.72%	28.83%	20.54%	11.73%	9.18%	100.00%
2005	-----	28.06%	28.99%	20.87%	12.27%	9.81%	100.00%
2010	-----	26.61%	29.28%	21.15%	12.59%	10.36%	100.00%

% Annual Growth 1990-1995	-2.66%	-0.97%	-0.43%	-0.59%	0.25%
% Annual Growth 1995-2000	0.16%	1.72%	2.17%	2.04%	2.70%
% Annual Growth 2000-2005	0.64%	1.92%	2.12%	2.72%	3.16%
% Annual Growth 2005-2010	0.06%	1.33%	1.41%	1.65%	2.25%

Superior Court Probate Filings

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0043	0.0036	0.0031	0.0020	0.0059	
1990	Total by Region	2,430	1,404	1,026	270	270	5,400
1995	95 Pop x 90 Ratio	2,464	1,552	1,165	304	317	5,804
	Total by Region	2,163	1,362	1,023	267	279	5,093
2000	2000 Pop x 90 Ratio	2,499	1,700	1,305	339	365	6,207
	Total by Region	2,204	1,500	1,151	299	322	5,475
2005	2005 Pop x 90 Ratio	2,522	1,827	1,416	378	416	6,560
	Total by Region	2,301	1,667	1,292	345	380	5,986
2010	2010 Pop x 90 Ratio	2,544	1,964	1,528	413	468	6,917
	Total by Region	2,329	1,798	1,399	378	428	6,332

Share of Cases in Each Region by Year

1990	-----	45.00%	26.00%	19.00%	5.00%	5.00%	100.00%
1995	-----	42.46%	26.74%	20.08%	5.24%	5.47%	100.00%
2000	-----	40.26%	27.39%	21.02%	5.45%	5.87%	100.00%
2005	-----	38.44%	27.85%	21.59%	5.77%	6.35%	100.00%
2010	-----	36.78%	28.39%	22.09%	5.97%	6.77%	100.00%

% Annual Growth 1990-1995	-2.30%	-0.60%	-0.06%	-0.22%	0.62%		
% Annual Growth 1995-2000	0.38%	1.94%	2.39%	2.26%	2.92%		
% Annual Growth 2000-2005	0.86%	2.14%	2.34%	2.95%	3.38%		
% Annual Growth 2005-2010	0.25%	1.52%	1.59%	1.84%	2.43%		

Superior Court Adoption Filings

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0018	0.0022	0.0018	0.0025	0.0053	
1990	Total by Region	1,023	842	572	331	241	3,009
1995	95 Pop x 90 Ratio	1,038	931	650	373	283	3,274
	Total by Region	989	887	619	356	270	3,122
2000	2000 Pop x 90 Ratio	1,052	1,020	728	415	325	3,540
	Total by Region	997	967	690	393	309	3,355
2005	2005 Pop x 90 Ratio	1,062	1,096	790	464	372	3,783
	Total by Region	1,029	1,063	766	450	360	3,668
2010	2010 Pop x 90 Ratio	1,071	1,178	852	507	418	4,025
	Total by Region	1,033	1,135	821	488	403	3,881

Share of Cases in Each Region by Year

1990	-----	34.00%	27.98%	19.01%	11.00%	8.01%	100.00%
1995	-----	31.69%	28.43%	19.84%	11.39%	8.65%	100.00%
2000	-----	29.72%	28.80%	20.55%	11.73%	9.20%	100.00%
2005	-----	28.06%	28.97%	20.88%	12.27%	9.82%	100.00%
2010	-----	26.61%	29.26%	21.16%	12.58%	10.38%	100.00%

% Annual Growth 1990-1995	-0.67%	1.06%	1.61%	1.45%	2.30%		
% Annual Growth 1995-2000	0.16%	1.72%	2.17%	2.04%	2.70%		
% Annual Growth 2000-2005	0.64%	1.92%	2.12%	2.72%	3.16%		
% Annual Growth 2005-2010	0.06%	1.33%	1.41%	1.65%	2.25%		

Superior Court Mentally Ill Filings

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0019	0.0016	0.0014	0.0009	0.0026	
1990	Total by Region	1,064	615	449	118	118	2,364
1995	95 Pop x 90 Ratio	1,079	680	510	133	139	2,541
	Total by Region	840	529	397	104	108	1,979
2000	2000 Pop x 90 Ratio	1,094	745	571	148	159	2,717
	Total by Region	856	583	447	116	125	2,127
2005	2005 Pop x 90 Ratio	1,104	800	620	165	182	2,872
	Total by Region	894	648	502	134	147	2,325
2010	2010 Pop x 90 Ratio	1,114	860	669	181	205	3,028
	Total by Region	905	699	543	147	166	2,460

Share of Cases in Each Region by Year

1990	-----	45.01%	26.02%	18.99%	4.99%	4.99%	100.00%
1995	-----	42.47%	26.76%	20.07%	5.23%	5.46%	100.00%
2000	-----	40.27%	27.41%	21.02%	5.45%	5.87%	100.00%
2005	-----	38.45%	27.87%	21.59%	5.76%	6.34%	100.00%
2010	-----	36.79%	28.41%	22.08%	5.96%	6.75%	100.00%

% Annual Growth 1990-1995	-4.61%	-2.95%	-2.42%	-2.58%	-1.75%		
% Annual Growth 1995-2000	0.38%	1.94%	2.39%	2.26%	2.92%		
% Annual Growth 2000-2005	0.86%	2.14%	2.35%	2.95%	3.38%		
% Annual Growth 2005-2010	0.25%	1.52%	1.59%	1.84%	2.44%		

Superior Court Juvenile Dependency Filings

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0010	0.0014	0.0003	0.0015	0.0006	
1990	Total by Region	548	548	84	197	28	1,405
1995	95 Pop x 90 Ratio	556	606	95	222	33	1,512
	Total by Region	502	547	86	200	30	1,364
2000	2000 Pop x 90 Ratio	564	664	107	247	38	1,619
	Total by Region	511	601	97	224	34	1,467
2005	2005 Pop x 90 Ratio	569	713	116	276	43	1,717
	Total by Region	531	666	108	258	40	1,603
2010	2010 Pop x 90 Ratio	574	766	125	301	49	1,815
	Total by Region	536	716	117	282	45	1,696

Share of Cases in Each Region by Year

1990	-----	39.00%	39.00%	5.98%	14.02%	1.99%	100.00%
1995	-----	36.76%	40.07%	6.31%	14.68%	2.18%	100.00%
2000	-----	34.81%	40.99%	6.60%	15.26%	2.34%	100.00%
2005	-----	33.12%	41.54%	6.75%	16.08%	2.51%	100.00%
2010	-----	31.61%	42.22%	6.89%	16.61%	2.67%	100.00%

% Annual Growth 1990-1995	-1.76%	-0.05%	0.50%	0.34%	1.18%	-0.59%
% Annual Growth 1995-2000	0.36%	1.92%	2.37%	2.24%	2.90%	1.45%
% Annual Growth 2000-2005	0.79%	2.07%	2.27%	2.87%	3.31%	1.80%
% Annual Growth 2005-2010	0.19%	1.46%	1.54%	1.78%	2.38%	1.13%

Superior Court Offender Filings

		Seashore	South	Northeast	Renton	Issaquah	Total
1990	Ratio Cases/Pop	0.0058	0.0085	0.0016	0.0089	0.0037	
1990	Total by Region	3,298	3,298	507	1,184	169	8,456
1995	95 Pop x 90 Ratio	3,345	3,646	576	1,334	199	9,099
	Total by Region	2,907	3,169	501	1,160	173	7,908
2000	2000 Pop x 90 Ratio	3,391	3,994	645	1,485	228	9,743
	Total by Region	2,959	3,484	563	1,295	199	8,501
2005	2005 Pop x 90 Ratio	3,422	4,292	700	1,660	261	10,335
	Total by Region	3,077	3,860	629	1,492	234	9,294
2010	2010 Pop x 90 Ratio	3,453	4,613	755	1,812	293	10,925
	Total by Region	3,107	4,151	679	1,630	264	9,832

Share of Cases in Each Region by Year

1990	-----	39.00%	39.00%	6.00%	14.00%	2.00%	100.00%
1995	-----	36.76%	40.07%	6.33%	14.66%	2.18%	100.00%
2000	-----	34.81%	40.99%	6.62%	15.24%	2.34%	100.00%
2005	-----	33.11%	41.53%	6.77%	16.06%	2.52%	100.00%
2010	-----	31.61%	42.22%	6.91%	16.58%	2.68%	100.00%

% Annual Growth 1990-1995	-2.49%	-0.80%	-0.26%	-0.41%	0.43%	-1.33%
% Annual Growth 1995-2000	0.36%	1.92%	2.37%	2.24%	2.90%	1.45%
% Annual Growth 2000-2005	0.79%	2.07%	2.27%	2.87%	3.31%	1.80%
% Annual Growth 2005-2010	0.19%	1.46%	1.54%	1.78%	2.38%	1.13%

SUPERIOR COURT

Benefits ----->	26.00%
1991 Est Total Filings ----->	64,401
1991 Est Filings: Juv Dependency ->	1,536
1991 Est Filings: Offender ----->	7,346
1991 Est Civil Filings ----->	26,713
1991 Est Criminal Filings ----->	8,520
1991 Est Domestic Filings ----->	9,755

	Method	Ratio	Salaries	Benefits
<b>Judicial Operations</b>				
Judges	Disposition Rate		\$40,250	\$0
Coord II (IC Pilot)	No Increase	6.00	\$23,786	\$6,184
Bailiffs	One per judge	1.00	\$23,786	\$6,184
<b>Juvenile Court Operations</b>				
Coordinator II	Per 1000 Juv Filings	0.4503	\$23,786	\$6,184
Supervisor III	1 to 10 Coordinators	0.1000	\$30,211	\$7,855
Coord II (Office Coord)	No Increase	1.00	\$23,786	\$6,184
<b>Guardian Ad Litem</b>				
Coordinator II	Per Managers	0.1111	\$23,786	\$6,184
Manager I	Per 1000 Dep Filings	5.2083	\$32,468	\$8,442
Manager II (Supervisor)	1 to 7 Managers	0.1429	\$34,069	\$8,858
Office Technician II	Per Managers	0.1111	\$21,629	\$5,624
Word Processing Tech	Per Managers	0.1667	\$21,629	\$5,624
<b>Administrative Services</b>				
Court Admin	No Increase	1.00	\$72,651	\$18,889
Dep Court Admin	Add 1 FTE to Option G	1.00	\$69,191	\$17,990
Director	No Increase Crths; 1 FTE to	1.00	\$46,643	\$12,127
Coordinator II	Per 1000 Total Filings	0.0543	\$23,786	\$6,184
Coordinator III	Per 1000 Filings/Min 1 FTE	0.0311	\$25,550	\$6,643
Manager I (Personnel)	No Increase	1.00	\$32,468	\$8,442
Asst Director	No Increase	1.00	\$39,695	\$10,321
OT II (Receptionist)	Add 1 FTE to Options G &	1.00	\$21,629	\$5,624
Supervisor I (Security)	Per 1000 Total Filings/Min	0.0155	\$28,115	\$7,310
Supervisor II	No Increase	1.00	\$30,211	\$7,855
Word Processing Tech	Per Judges (exc Juv & MI)	0.0816	\$21,629	\$5,624
<b>Court Operations</b>				
Director	No Increase	NA	\$46,643	\$12,127
Court Reporter	One per judge	NA	\$38,438	\$9,994
Coord II (Family Law)	Per 1000 Dom Filings	0.3075	\$23,786	\$6,184
Coord III (Trial Assgmt)	No Incr Crths; 1 FTE to G, 5	1.00	\$25,550	\$6,643
Sup I (Sup Crtr Reporters)	No Increase Crths; 0.5 to 0	1.00	\$28,115	\$7,310
Office Technician II	Per 1000 Total Filings	0.0155	\$21,629	\$5,624
Sup I (Jury Coordinator)	No Increase	1.00	\$28,115	\$7,310
Mgr I Crim Ops	No Incr Crths; add 1 to G or	1.00	\$32,468	\$8,442
Coord II (Ex Parte)	Per 1000 Total Filings	0.0078	\$23,786	\$6,184
Coord III (Crt Ops Asst)	No Incr Crths; add 1 FTE to	1.00	\$25,550	\$6,643
Coord II (Crim Ops)	1000 Crim Filings/Min 1 FT	0.1174	\$23,786	\$6,184
Coord II (Confirmation)	No Incr Crths; add 1 FTE to	1.00	\$23,786	\$6,184
<b>Arbitration</b>				
Coordinator II	Per 1000 Civil Filings	0.0374	\$23,786	\$6,184
Manager II	Per 1000 Civil Filings	0.0374	\$34,069	\$8,858
Coord II (Sec ARMs)	Per 1000 Civil Filings	0.0374	\$23,786	\$6,184
<b>Family Court Services</b>				
Director	No Increase	NA	\$46,643	\$12,127
Coordinator I	Per 1000 Domestic Filings	0.2050	\$23,786	\$6,184
Coordinator II	Per 1000 Domestic Filings	0.2050	\$23,786	\$6,184
Soc Wrkr Supervisor	1 per 7 Soc Wrkrs/Cnslrs	0.1429	\$34,069	\$8,858
Social Worker	Per 1000 Domestic Filings	1.1788	\$32,468	\$8,442
Adoption Counselor	Per 1000 Domestic Filings	0.3075	\$30,211	\$7,855
Office Technician I	Per 1000 Domestic Filings	0.1025	\$20,628	\$5,363
Supervisor II	1 per 7 Clerical	0.1429	\$30,211	\$7,855
Word Processing Tech	Per 1000 Domestic Filings	0.1025	\$21,629	\$5,624
<b>Family Law Casa Program</b>				
Coordinator I	Per 1000 Domestic Filings	0.1538	\$23,786	\$6,184
Manager I	No Increase	NA	\$32,468	\$8,442
Manager I	Per 1000 Domestic Filings	0.1025	\$32,468	\$8,442
Social Worker	Per 1000 Domestic Filings	0.3075	\$32,468	\$8,442



SUPERIOR COURT

Benefits ----->	26.00%
1991 Est Total Filings ----->	64,401
1991 Est Filings: Juv Dependency -->	1,536
1991 Est Filings: Offender ----->	7,346
1991 Est Civil Filings ----->	26,713
1991 Est Criminal Filings ----->	8,520
1991 Est Domestic Filings ----->	9,755

	Method	Ratio	Salaries	Benefits
<b>OPERATIONS AND MAINTENANCE</b>				
<b>Judicial Operations</b>				
Extra Help	Per 1000 Total Filings		\$345.11	
Supplies	Per 1000 Total Filings		\$1,280.47	
Services/Transfers	Per 1000 Total Filings		\$8,770.17	
Capital	Per 1000 Total Filings		\$326.08	
<b>Juvenile Court Operations</b>				
Extra Help	Per 1000 Juv Filings		\$3,418.97	
Supplies	Per 1000 Juv Filings		\$568.31	
Services/Transfers	Per 1000 Juv Filings		\$6,481.74	
<b>Guardian Ad Litem</b>				
Extra Help	Per 1000 Dep Filings		\$976.55	
Supplies	Per 1000 Dep Filings		\$5,607.99	
Services/Transfers	Per 1000 Dep Filings		\$63,322.01	
Capital/Lease	Per 1000 Dep Filings		\$3,572.87	
<b>Administrative Services</b>				
Extra Help	Per 1000 Total Filings		\$15.53	
Supplies	Per 1000 Total Filings		\$988.98	
Services/Transfers	Per 1000 Total Filings		\$7,399.72	
Capital/Lease	Per 1000 Total Filings		\$104.81	
Other	Per 1000 Total Filings		\$791.92	
<b>Court Operations</b>				
Extra Help	Per 1000 Total Filings		\$217.39	
Supplies	Per 1000 Total Filings		\$696.47	
Jury Fees	Per 1000 Crim & Civ Filings		\$36,359.24	
Services/Transfers	Per 1000 Total Filings		\$1,826.88	
Capital/Lease	Per 1000 Total Filings		\$302.79	
<b>Arbitration</b>				
Extra Help	Per 1000 Civil Filings		\$18.72	
Supplies	Per 1000 Civil Filings		\$58.17	
Services/Transfers	Per 1000 Civil Filings		\$11,998.42	
Capital	Per 1000 Civil Filings		\$119.79	
<b>Family Court Services</b>				
Extra Help	Per 1000 Domestic Filings		\$102.51	
Supplies	Per 1000 Domestic Filings		\$246.74	
Services/Transfers	Per 1000 Domestic Filings		\$1,588.47	
Capital	Per 1000 Domestic Filings		\$410.03	
<b>Family Law Casa Program</b>				
Extra Help	Per 1000 Domestic Filings		\$51.25	
Supplies	Per 1000 Domestic Filings		\$312.75	
Services/Transfers	Per 1000 Domestic Filings		\$1,549.00	
Capital	Per 1000 Domestic Filings		\$256.27	

Superior Court 1990 Budget -----> 11,259,946

Assumptions:

Excluded staff and costs associated with conference committees  
 IC pilot program converted to .5 FTE Coord III per additional judge position.

Superior Court  
1/17/91

CONTROL OF INEFFICIENCIES

Geisler Smith Assoc. Study\* ('85)

Arthur Young & Co. Study\* ('74)

K.C. Superior Court

Transportation Study wasn't driven by time/  
Issues distance considerations. No  
recommendations were made.

No recommendations were made

Initiate video arraignment courtroom  
technology for all facility options.

Expand video courtroom pilot project  
for any full service facility.

Initiate video conferencing for  
judicial staff in regional  
facilities, juvenile court, and the  
mental health facility at  
Harborview.

Effective  
Caseflow  
Management

The study made 4 recommendations  
for successful calendar management  
for a branch court system.

No recommendations were made

Expand Individual Calendar program  
to regional center if it succeeds  
as a pilot program.

- Good workload to judge ratio.
- Organized judicial resources  
to maximize judge time.
- Court-controlled uniform caseflow
- Adequate staffing in each branch  
to prepare calendars, monitor case  
progress, and to manage jurors.

Work Load and Staffing Methodologies  
for Jail Health Services  
New Jail Planning

Workload:

All work load calculations are based on the average daily population (ADP) in custody for which Jail Health Service is responsible. This ADP excludes Work Release, Home Detention and State beds, and includes all secure beds and NRF. Refer to the Department of Adult Detention's workload projections in this chapter for a discussion on how ADP is projected.

Staffing:

In early 1990 the Department of Public Health completed an analysis of staffing needed to meet the National Commission Correctional Health Care Accreditation Standards. This analysis was based on an ADP from January to June 1990. The recommendations for staffing to meet accreditation standards are reflected in the 1991 budget staffing. For this analysis, a ratio of staffing to ADP was calculated for each type of line position. For example, the ratio of registered nurses to ADP is 2.75 per 100. The ratio for administrative staff was calculated by relating each category of administrative staff to direct service staff. The exception to this methodology is the manager and assistant manager positions. It is assumed that Jail Health Services would have only one manager in all options. One assistant manager position would be added to each capital option in which one or more regional justice centers are located outside of the Seashore planning region.

The staffing ratios for book and hold facilities deviate from the previously described method because there is a minimum of health services presence required. Inmates within the first 36 hours typically require more health care than later during their stay. Consequently, the level of care in a book and hold facility requires a constant nurse presence -- that is 24-hours a day, 7-days a week -- with commensurate support and supervisory staff. Refer to the book and hold options in Chapter 4 for the staffing details.

The staffing ratios and adjustments described above are applied to the projected ADP for each capital option. Refer to the Jail Health pages in Chapter 4 for specific ratios and staffing projections for each of the capital options analyzed.

PAGES 68 & 69 IN CHAPTER II WORKLOADS  
WERE INTENTIONALLY LEFT BLANK.

## JAIL HEALTH

### WORKLOAD METHODOLOGIES

Jail Health Services (JHS) has regularly indicated that as we plan for the future health needs of the incarcerated population, very significant trends must be taken into account. These trends relate to (1) the HIV epidemic and (2) the aging of the incarcerated population. In an effort to quantify the impact of these trends, JHS has consulted Health Department experts in the HIV/AIDS field. For now, no quantifications related to aging are included.

It must be understood that the data and predictions are estimates based on trends seen in other parts of the country and trends in the local population. Further, these trends are applied to the jail population.

In the past four years, JHS has seen a consistent increase in the HIV-related health problems in its population. In 1990, it is estimated that on average six inmates a day had significant HIV-related problems. The problems range from need for medication to much more intensive nursing services and medical management. It is estimated that about 1/3 of these patients would meet Class IV AIDS diagnostic criteria. The national consensus is that 10 percent of Class IV AIDS patients require extensive management. It is our estimate that Class IV AIDS patient will take an estimated five hours of nursing time and a half hour of provider (MD, FNP) time per patient per day. Below, please find the table indicates the staffing implications of these estimates.

TABLE OF HIV PATIENTS AND NEEDED STAFF

Year	*ADP with HIV Related Problems	Class IV AIDS	MD/FNP Hrs./24	MD/FMP FTE	RN Hrs/24	RN
1990	.6	.2	.1	.018	1	.25
1992	1.2	.4	.2	.035	2	.45
1994	2.4	.8	.4	.070	4	.77
1996	4.8	1.6	.8	.140	8	1.40
1998	9.6	3.2	1.6	.280	16	2.80
2000	19.2	6.4	3.2	.560	32	5.60

\*ADP = Average Daily Population

### Assumptions

- HIV-related problem patients will double every two years until the year 2000, then stabilize.

- One-third of these patients will have Class IV AIDS, 10 percent requiring five hours per day of nursing time to adequately manage their care, and a half hour of MD or FNP time per patient.

The other additional cost for this population will be for pharmaceutical, laboratory diagnostic tests, and other treatment strategies. Jail planning must be flexible to accommodate such an increase in infirmary beds.

Since none of the A-H options would avoid the HIV-related expense, they do not help make a decision about which option to choose from a financial perspective.

This information is added as a reminder that future trends in jail health care, that are not fully quantifiable, will have a significant impact on life cycle cost.

**JAIL HEALTH  
HOSPITAL CARE COSTS**

In order to accurately provide a life cycle cost analysis for Jail Health Services, there was a need to determine the cost of care provided to inmates outside of Jail Health. These services are in a variety of specialties, but primarily at Harborview Medical Center (HMC). A total of 18 separate types of services were identified in an analysis done with the first quarter's 1990 referrals.

The analysis of referrals accounts for outpatient care. Inpatient care at HMC was provided by the HMC financial staff. See below.

1990

Outpatient Costs (estimate)	Inpatient Costs (estimate)
240,000 (1,200 visits)	745,000 (174 patients)

After consulting with an accredited Jail Health Service, Maricopa County in Phoenix, Arizona we found that their cost for outside health care services was approximately 22 percent of their total budget. This included emergency, outpatient specialty, and inpatient or hospitalization cost.

For King County, the need to pay a fee for service would be incurred for patients whose conditions were so unstable they needed care at the closest hospital, and if their housing is at a site where HMC is not the closest facility. It is estimated that 1/400th ADP per month would be the expected volume of these types of transports. It is estimated that the cost of each situation is would be \$2,200.00. In this way, JHS can evaluate the result of siting facilities not in proximity to HMC. For the purposes of assessing options A-H the assumptions are that when medically possible, care would be provided at HMC. In order to avoid as much as possible the most expected transports, the most acute population would be housed in the downtown facility.

jailheal  
jl 1/91

JAIL HEALTH SERVICES STAFFING AND O&M

Methodology --> Staffing Needed = Staff Ratio x Projected ADP Served  
by Health Services

Assumptions:

Health Services ADP Base Year ----->	1,600
Hours per Year ----->	2,088
Benefits ----->	26.00%
1991 Staff (+51120) ----->	81.42
1991 Nurses Salaries (RN,NP,PHN,PHSS,PHSSA) -->	1,458,021

Staff Category	Method	1991 FTEs Annualized (plus 51120)	Ratio	1990 Salary	Benefits
Registered Nurse	Staff/ADP	41.95	2.622%	35,600	9,256
Public Hlth Nurse	Staff/ADP	0.75	0.047%	39,213	10,195
Lic Prac Nurse	Staff/ADP	4.35	0.272%	21,005	5,461
Health Serv Asst	Staff/ADP	1.00	0.063%	22,947	5,966
MD	Staff/ADP	1.71	0.107%	72,976	18,974
Nurse Pract (Med)	Staff/ADP	7.00	0.438%	42,428	11,031
Dentist	Staff/ADP	1.00	0.063%	46,479	12,085
Dental Asst	Staff/ADP	1.13	0.070%	20,379	5,299
Psychiatrist/Radiologist	Staff/ADP	See O&M Contracts			
Nurse Pract (Psych)	Staff/ADP	1.00	0.063%	42,428	11,031
Pharmacist	Staff/ADP	1.14	0.071%	38,816	10,092
Pharmacy Tech	Staff/ADP	1.04	0.065%	20,379	5,299
X-Ray Tech	Staff/ADP	0.25	0.016%	26,246	6,824
CDI	Staff/ADP	2.00	0.125%	26,664	6,933
Extra Help	Admin/Direct Staff	0.35	0.55%	28,003	495
Clerical	Admin/Direct Staff	8.75	13.60%	22,738	5,912
Supervisors	Admin/Direct Staff	2.00	3.11%	48,212	12,535
Supervisors-Asst	Admin/Direct Staff	4.00	6.22%	45,205	11,753
Assistant Manager	1/Remote Facility	1.00	NA	42,635	11,085
Manager	No Increase	1.00	NA	44,767	11,639
		81.42			

OPERATING & MAINTENANCE

Overtime/Differentials	N	9.29%
Office Supplies/Services	S	\$1,198.55
Med/Dental Supplies	A	\$29.01
Pharmaceuticals	A	\$59.74
Emergency Hospital Care	A	\$66.00
Psychiatrist	A	\$64.91
Radiologist	A	\$5.63
Contract/Prof Svcs	A	\$47.75
Insurance	S	\$1,268.02
Overhead	B	13.32%
Capital	S	\$138.18

Total O&M

Notes:

- A facility outside of downtown Seattle will require an additional administrative position such as an administrative assistant in order to oversee operations in the remote facility.
- Clerical positions based on average of Admin Spec I,II, and III and ASA.
- Nurses salaries based on proposed structure pending before Council as of 1/7/91.
- ADP for Jail Health Services excludes electronic home detention and work release.
- The division of personnel among facilities will differ above if the infirmed and acute psychiatric inmates are treated in only one central facility.
- For hospital care costs, it is assumed that only life-threatening emergency episodes will be handled by a suburban hospital in options with suburban facilities. Other cases requiring hospital care will be taken to Harborview Hospital. Based on current usage, about 1 per 400 ADP requires emergency hospital care at a cost of \$2,200. This cost assumes the patient will be transported to Harborview Hospital once stabilized.

N = 1991 \$/Nurses Salaries (including RNs, NPs, PHSS, APHSS, PHNs)  
 S = 1991 \$/Total Staff (FTEs for accounts 51110 and 51120)  
 A = 1991 \$/Health Services ADP  
 B = 1991 \$/Non-overhead Budget



Jail Health Services  
Book and Hold Staffing

Staff Category	Beds -----> 30		Beds -----> 60		Beds -----> 120		Beds -----> 180	
	1-Module Salary	FTEs	1-Module Salary	FTEs	2-Module Salary	FTEs	3-Module Salary	FTEs
Registered Nurse	\$215,311	4.80	\$215,311	4.80	\$278,110	6.20	\$340,909	7.60
Health Serv Asst	\$14,457	0.50	\$28,913	1.00	\$28,913	1.00	\$43,370	1.50
Nurse Pract (Med)	\$18,711	0.35	\$37,422	0.70	\$74,843	1.40	\$106,919	2.00
Supervisors -Asst	\$11,392	0.20	\$22,783	0.40	\$28,479	0.50	\$42,719	0.75
Registered Nurse	\$215,311	4.80	\$215,311	4.80	\$278,110	6.20	\$340,909	7.60
Health Serv Asst	\$14,457	0.50	\$28,913	1.00	\$28,913	1.00	\$43,370	1.50
Nurse Pract (Med)	\$18,711	0.35	\$37,422	0.70	\$74,843	1.40	\$106,919	2.00
Supervisors -Asst	\$11,392	0.20	\$22,783	0.40	\$28,479	0.50	\$42,719	0.75
<b>OPERATING &amp; MAINTENANCE</b>								
Overtime/Differentials	259,870	5.85	304,430	6.90	410,346	9.10	533,917	11.85
Office Supplies/Services	21,747		23,485		32,798		41,615	
Med/Dental Supplies	7,012		8,270		10,907		14,203	
Pharmaceuticals	870		1,740		3,481		5,221	
Psychiatrist	1,792		3,585		7,169		10,754	
Radiologist	1,947		3,894		7,789		11,683	
Contract/Prof Svcs	169		338		675		1,013	
Insurance	1,432		2,865		5,730		8,595	
Overhead	7,418		8,749		11,539		15,026	
Capital	40,367		47,725		65,491		85,733	
	808		953		1,257		1,637	
Subtotal: O&M	83,562		101,605		146,836		195,479	
<b>Total</b>	<b>343,432</b>		<b>406,034</b>		<b>557,182</b>		<b>729,396</b>	

## EXISTING FACILITY EVALUATION

The primary County owned facilities that could be impacted by this proposed project are the King County Correctional Facility(KCCF), North Rehabilitation Facility(NRF) and the Courthouse. The following is a brief discussion about the existing situations in each facility.

KCCF is a high rise facility that was completed in 1986 and is the primary detention facility of the County, housing its secure residential population. Since its opening, major maintenance projects have been performed to keep the building systems up to date. Though no formal assessment has been performed, based on the results of recent capital improvement projects, the building can be remodeled for changes in use without extensive upgrading of existing systems.

NRF is a low rise facility built in the 1940's. There have been modest improvements to some areas of the facility in recent years. Though no formal assessment has been performed in recent years, it appears that the building's useful life could possibly extend to the year 2000 under its current occupancy.

The Courthouse is a high rise facility originally built in 1916. Major additions were provided in 1929 and 1967. It currently houses the predominance of the County's law, safety and justice functions. Among these are the Superior Court, Seattle District court, Judicial Administration, Department of Public Safety and the Prosecuting Attorney Office. Several extensive assessments have been performed on this building in the recent past. The results indicate that the building's useful life could be significantly extended with upgrades to the heating, ventilating and air conditioning(HVAC) systems. These costs are outside the scope of this facility master plan study. There has been continuous remodeling of office space over the years with successful results. Portions of the top two floors are currently used by adult detention, also with successful remodel efforts.

In summary, it appears that both KCCF and the Courthouse can accommodate future renovation projects to house additions/changes to existing uses based on the existing building conditions. The NRF facility will need replacement by the year 2000.

To accommodate the forecast NRF workload out to the year 2000, renovations of adjacent facilities at the current site will be necessary. Based on the year 2000 bed need of 79, approximately \$700,000 will have to be expended.

The year 2010 forecast NRF bed need to house the long term and DWI programs is 314 plus 21 or 335 beds. The cost of a replacement facility to house this bed need, inclusive of construction, sitework, fees, and land could approach \$15 million, stated in 1991 dollars. Further analysis will be performed outside the scope of this facility master plan study to obtain a more accurate estimate of costs.