California Department of Corrections and Rehabilitation
Mental Health Bed Plan, December 2006 Enclosure III (Corrected#)

FEMALES

Table #4: Actual vs. Target Reserve: The reserve is the number of beds above the forecasted mental health bed need in the Navigant study. The reserve is included in the Mental Health Bed Plan, December 2006, to allow additional program flexibility in an effort to ensure sufficient bed capacity exists once the facilities are constructed.
Table 4.A: Indicates how the target reserve was calculated using the percent increase in projected populations for the years indicated in the Spring 2006 Navigant Study as minimums and maximums and calculating a target reserve based on the midpoint of the two.*
Table 4.B: Indicates actual reserve for the proposal along with the difference between the actual and the target reserve.*

Table 4.A:	Minimum			Maximum			Midpoint			Table 4.B:		
	Navigant Spring 2006: Projected Population By Year and Percent Increase									Actual Reserve for Proposal		
	2010	2011	%	2007	2011	%	Target % Reserve	Target Reserve		Actual % Reserve	Actual Reserve	Difference Between Actual and Target Reserve
EOP	256	262	2%	211	262	24%	13.3%	35		13.4%	35	0
ASU	21	22	5%	19	22	16%	10.3%	2		9.1%	2	0
MHCB	22	22	0%	17	22	29%	14.7%	3		13.6%	3	0
Acute/ICF	39	39	0%	34	39	15%	7.4%	3		7.7%	3	0
							Total:	43		Total:	43	0

* Differences in the reserve numbers in Table 4.A. and Table 4.B are due to rounding.

California Department of Corrections and Rehabilitation
Mental Health Bed Plan, December 2006 Enclosure III (Corrected#)

FEMALES

LIST OF ACRONYMS (Arranged in Alphabetical Order)	
ASH	Atascadero State Hospital - DMH (Male)
ASU	Administrative Segregation Unit
CCC	Consolidated Care Center
CCWF	Central California Women's Facility
CDCR	California Department of Corrections and Rehabilitation
CIM	California Institution for Men
CIW	California Institution for Women
CMC	California Men's Colony
CMF	California Medical Facility
COR	California State Prison - Corcoran
CSH	Coalinga State Hospital - DMH (Male)
CTC	Correctional Treatment Center
DHS	Department of Health Services
DMH	Department of Mental Health
DOF	Department of Finance
DPA	Department of Personnel Administration
DTP	Day Treatment Program
DVI	Deuel Vocational Institution
EOP	Enhanced Outpatient Program
GACH	General Acute Care Hospital Bed
HDSP	High Desert State Prison
ICF	Intermediate Care Facility
ISP	Ironwood State Prison
KVSP	Kern Valley State Prison
LAC	California State Prison - Los Angeles County
MCSP	Mule Creek State Prison
MHCB	Mental Health Crisis Bed
NKSP	North Kern State Prison
PBSP	Pelican Bay State Prison
PSH	Patton State Hospital - DMH (Female)
PSU	Psychiatric Services Unit
PVSP	Pleasant Valley State Prison
RJD	Richard J. Donovan Correctional Facility
SAC	California State Prison - Sacramento
SATF	Substance Abuse Treatment Facility at Corcoran
SOL	California State Prison - Solano
SQ	California State Prison San Quentin
SVSP	Salinas Valley State Prison
VSPW	Valley State Prison for Women
WSP	Wasco State Prison

Consulting Services for California Department of Corrections

Mental Health Bed Need Study – Based on Spring 2007 Population Projections

July, 2007

Navigant Consulting

Assignment & Scope

The CDCR engaged Navigant Consulting for a three year contract to provide semi-annual updates of the forecasts for CDCR Mental Health programs. This is first update that uses CDCR population projections that were published in 2007 (Spring 2007). It follows the "Mental Health Bed Need Study – 2006 Update" (June 2006) which included the incorporation of results from the Unmet Need Assessment (UNA) into the model. It also follows the "Mental Health Bed Need Study – Based on Fall 2006 Population Projections" completed in April 2007. The original report by Navigant (then Tucker-Alan, Inc.) was the 2002 *Mental Health Bed Need Study* report.

As in 2002 and 2006, John Misener of McManis Consulting remains the lead author and forecaster for the materials in this report.

Following a discussion with CDCR it was determined that this version should be prepared using 9 months data for fiscal year 2006-2007 rather than waiting for the full fiscal year.

A session with CDCR staff, DMH representatives and the assistant attorney general was conducted to both review the March 2007 report and to discuss future modeling changes.

On May 16, 2007 Mr. Misener met with the Asst, Special Master Matthew Lopes and two court experts Dr. Melissa Warren and Dr. Jeffrey Metzner to continue the discussion of the model, it's underlying concepts and potential for future improvements.

The draft of this report was discussed on June 20, 2007 conference call with CDCR and DMH staff.

On July 9, 2007 another conference call was conducted by the Asst. Special Master Matthew Lopes, the court experts, and several key CDCR and DMH staff and Mr. Misener to discuss issues and ideas initially outlined in the May 16th meeting. Responses to some of the issues discussed in these meetings are addressed in the next section of this report.

FY2007 9 month update – Issues & Features

- Individual programs continue to grow or evolve such as the Crisis beds at CMF, the expansions at SVPP, the Coalinga ICF and changes at ASH etc. As such the modeling needs to be flexible to provide the most reasonable future projections.
- Nine months of FY2007 (ending 3/31/07) were used to forecast the full year.
- Population Update: "Spring 2007 Adult Population Projections" were received and added to the models replacing the Fall 2006 values used in the March 2007 report. The male projections were lower than the Fall 2006 projections by 0.9% to 1.5% depending on the forecast year. This is a further drop from the Spring 2006 projections used in the June 2006 report. In 2011 the male population is 3.5% lower than that forecast in Spring 2006.
- The female projections increased from the Fall 2006 CDCR projections but are still below those projections used in the June 2006 report. In 2011 the new female projection is 5.6% lower than the Spring 2006 values.
- At the Coalinga ICF, only 11 cases have been discharged since its inception in May 2006. Average length of stay of these inmates was 190 days. The average length of stay for inmates at CSH as of 5/8/07 was 296. As of 5/8/07 there have been only 60 inmates listed on the BUM report since May 2006.
- The Discharge Rate model though generally preferable is limited for certain programs because the record level data does not differentiate between more than one patient type in some facilities (e.g. DMH does not break out Acute from Intermediate patients at ASH, neither DMH or HCCCP differentiates ICF from DTP patients at CMF, or Acute from Crisis patients at CMF-APP). However use of the BUM report for VPP allowed independent analysis of the Crisis Units at CMF.

FY2007 9 month update – Issues & Features (Cont'd)

- **It is recommended that on their monthly download file that DMH separate out the Crisis and Acute patients at CMF-APP by use of separate codes or flags to allow for separation of programs. Though use of the BUM reports has improved identification of the S-1 & S-2 Crisis patient's discharge activity, the Acute patients are still too difficult to break out. It is recommended that HCCUP add Coalinga ICF; and, also to add the MHCB units at CMF to its CADDIS database separating the data out from the Acute "63" facility code.**
- **Discussion topic: At the May 16 meeting with the Asst. Special Master and court experts, Dr. Warren discussed her observation that an analysis could be made to compare rates of MHCB referrals by prison. An example HCPU document, "Transferred and Rescinded MHCB Referrals by Institution and Prior Level of Care- January 2007" could perhaps be combined with the population of those prisons to show an array of referral rates. From this information, assuming rates are consistently higher or lower by prison over several months, some observations could be made about under-referring. Should this be the case, an adjustment to the overall utilization rate could be made assuming that the low referral rates could represent unmet need. It was discussed that the mission, mental health population composition and inmate custody characteristics of each prison may make a fair comparison a modeling challenge. Mr. Misener requested and received data from HCPU to study the possibility of developing an ancillary methodology in the future.**
- **Research on MHCB wait list sampling: the author requested that HCPU gather a three month sample of MHCB wait list census on a daily basis to evaluate whether the current practice of weekly sampling was sufficient and statistically valid. The results of the weekly versus daily comparison were that the weekly sample mean was higher (9.25) than the daily mean (7.42) and that the sample was a representative sample at the 95% confidence interval. No change in methodology was recommended.**

FY2007 9 month update – Issues & Features (Cont'd)

- **MHCB Referrals from OHU's & MH-OHU's: In response to an assertion that the SAC MH-OHU is not referring MHCB cases to the HCPU, a request was made to HCPU to research MHCB referrals from all OHU's & MH-OHU's. Based on HCPU's MHCB Monthly Report and from HCPU staff daily interaction with all 33 institutions, it appears that the MHCB waiting list does effectively include the patients from OHU's and MH-OHU's either identified as in need of MHCB level of care or that have been on psychiatric observation for 48-72 hours. The MHCB Monthly Report reflects that SAC MH-OHU staff are referring MHCB cases to HCPU staff when their own CTC is full. In fact in April 2007 they had CDCR's third highest referral rate at 12, and placed 6 of those referrals in alternate MHCB's. HCPU staff are comfortable that OHU and MH-OHU staff are appropriately referring cases for MHCB level of care, noting that OHU and MH-OHU institutions want to transfer these problematic type cases to alternate institutions and have no incentive to keep them. In addition, these institutions are aware, and do not wish to be identified through monitoring for not referring these types of cases within 72 hours.**
- **Overflow MHCB Referrals from CTC/MHCB Hub institutions: It is acknowledged that HCPU staff have encountered some instances where CTC/MHCB Hub institutions have been reluctant or inconsistent with referring overflow MHCB cases to HCPU for alternate placement consideration. It is noted that there is some incentive to not refer these type of cases, because they often will have an imminent opening in their own MHCB unit, and once on the MHCB waiting list their cases would be referred to the next available MCHB that may be a great distance away. Currently these type of cases are not tracked, so it is not possible to accurately quantify whether all overflow MHCB cases are being referred appropriately to HCPU for alternate placement consideration. Further investigation regarding tracking these cases may be warranted for subsequent forecast reports.**

Forecast Index

- Acute Psychiatric Inpatient - Males p. 7-13
- Acute and Intermediate Inpatient – Females p. 14-15
- Intermediate Psychiatric Inpatient – Males p. 16-20
- Mental Health Crisis Beds – Males p. 21-26
- Mental Health Crisis Beds – Females p. 27-28
- EOP – General Pop – Males p. 29
- EOP – Ad Seg – Males p. 30
- PSU -Male (Psychiatric Services Unit) p. 31
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Acute Psychiatric Inpatient Bed Need – Male
Discharge Rate - Method 1 (adjusts for crisis patient volume)

Acute Inpatient Program at California Medical Facility (CMF) Bed Need Forecast – Discharge Rate Model

Acute Psychiatric Program (CMF)	— Actual —			Estimates /a		Est. (9mo)	— Forecast —				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population - Male Inmates (Spring 07)	148,153	150,851	152,859	153,323	160,812	163,140	165,891	168,347	170,393	172,845	175,613
Discharges /1000 Males b/	6.96	4.92	6.74	7.00	7.58	7.17	7.21	7.23	7.25	7.26	7.27
Discharges from CMF-Acute	1031	742	1031	1056	984	951					
ALOS CMF-APP c/	58.2	58.3	49.3	46.8	52.2	63.0	63	63	63	63	63
Discharges of unserved (UNA estimate) d/	-	-		17	4						
Wait List Census @ 90th Percentile e/					33	37.9					
Discharges on Waitlist @ (est) f/					231	219					
Total Discharge Est. & Forecast				1,073	1,219	1,170	1,196	1,218	1,236	1,255	1,277
Patient Days (includes waitlist & UNA est.))	59,977	43,278	50,869	50,167	63,570	73,752	75,364	76,760	77,884	79,101	80,467
Average Daily Census (unad) for MHCB & ASH)	164	119	139	137	174	202	206	210	213	217	220
Adjustments g/											
- Deductions - MHCB at CMF						35.1	36	36	37	37	38
- Additions - ADC at ASH					8.4	4.3	6.3	6.4	6.5	6.6	6.7
Adjusted ADC						171	177	181	183	186	189
Bed Need (90% Occ)	183	132	155	153	194	190	197	201	204	207	210
Discharge Rate Adj. Factor h/						0.6%	0.5%	0.4%	0.2%	0.1%	0.0%

a/ Revised DMH data was used. FY05 and FY06 were complete. FY07 annualized from 9 months data.

b/ Discharge Rate includes potential discharges estimated for UNA inmates not transferred, wait list cases and cases admitted to CMF's S-1 and S-2 units

c/ ALOS has fluctuated with an overall drop from FY2002-2006 of over 5 days. However Jul-Mar 2007 DMH data indicated a rise to 63.0 days.

d/ Distribution of discharges during UNA study of transferred inmates: 80% in FY2005; 20% in FY2006

e/ CMF-APP wait list averaged 13.5 for FY06. No wait list reported prior to July 2005. Due to great variability by month the 90th percentile was used instead of the average to help improve bed availability for monthly fluctuations. The 90th percentile increased to 37.9 for the 9 months of FY07 vs. 34.6 for the first 6 months of FY07.

f/ Potential "wait list" discharges are estimated using this 90th percentile census at the ALOS for the same year. These estimated discharges are then included in the discharge rate calculations and therefore are projected into the future.

g/ Neither Crisis patients at CMF nor Acute patients at ASH are not broken out by DMH or HCCUP. Used HCPU census data to adjust. Assumed growth with population increase.

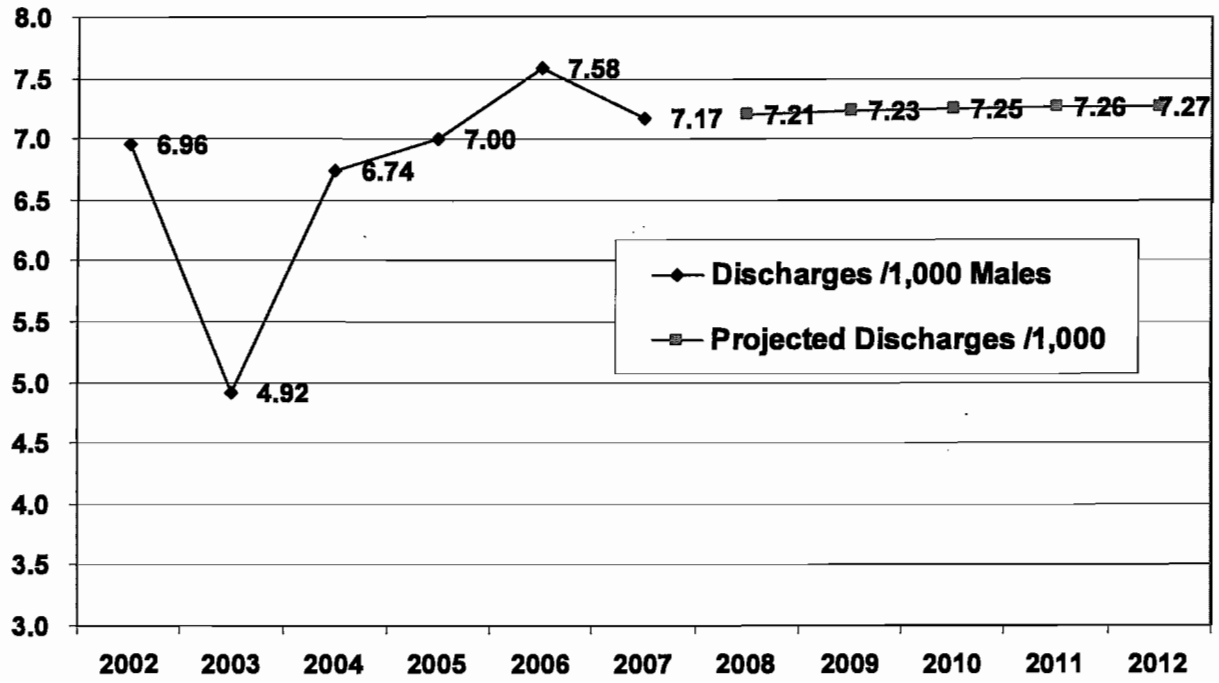
h/ Assumes that rates will continue to increase at a decelerating rate to 2012. Based on an increase of 3.1% between FY2002 and 2007.

This version of the Discharge Rate method is a called a "hybrid model" because in lieu of discharge data, the adjustments are made using HCPU census data for both the Crisis Beds at CMF and the ASH acute bed volume. The 9 month FY07 annualized volumes and rates for the CMF-APP program have some interesting features. The discharge rate drops somewhat from the FY06, but remains higher than that for FY05 when the majority of the UNA adjustments occurred. The average length of stay jumped however to 63 days, 10 days higher than in FY06. This is surprising as the jump coincides with the expansion of capacity for crisis patients. The counts for these patients however have not been segregated out from the total in DMH's database. So an adjustment is made to pull out the census tracked by HCPU for these MCHB units. Similiarly the census at ASH acute program is added into the adjusted ADC. It also should be noted that the 90th percentile of the CMF-APP waitlist was used as in FY2006. This increases the likelihood of having available beds when there is significant fluctuation in demand.

The forecast ramps up a slower than the June 2006 forecast. There is a 8.7% difference between the two forecasts (in 2011). Over 40% of this difference can be attributed to the decrease in the population forecast. The 2006 forecast did not have data with which to adjust for either the ASH acute nor the CMF-APP crisis patients. The DMH data should add "flags" to their discharge data for those inmates who are discharged from the MHCB versus the Acute unit. Alternatively the BUM report with a few changes could separate out the inmates in Acute –only units.

Acute Psychiatric Bed Need – Male
(Method 1) Cont'd

Discharge Rate Trends – CMF-APP



The Discharge Rate for FY05 & FY06 was modeled higher to account for UNA inmates not transferred and for the wait list. The FY07 9 month unadjusted discharge rate is higher than the FY05 rate (majority of UNA adjustment occurred in FY05) and lower than the FY06 rate which had additional UNA adjustments added to the FY05 rate. A factor for continued growth in the Discharge Rate was made by taking the change between 2002 and 2007, then assuming that the average annual change would slow such that 2012 the rate is constant. This assumes increasing rates of acute psychiatric care usage in the male prison population.

Note: This data includes Crisis as well as Acute patients

Acute Psychiatric Bed Need – Male
(Census Rate - Method 2) – RECOMMENDED METHOD

Acute Inpatient Program at California Medical Facility (CMF) Bed Need Forecast – Census Rate Model

Acute Psychiatric Program (CMF)	Actual			Estimates /a		Est. (9mo)	Forecast				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population (Spring 07)	148,153	150,851	152,859	153,323	160,812	163,140	165,891	168,347	170,393	172,845	175,613
Census Rate b/	0.92	0.94	0.89	0.85	1.10	0.98	0.98	0.99	1.00	1.00	1.00
ADC from databases	137	142	136	129	145	121.3					
ADC - UNA est. unserved c/				2	1						
Wait List ADC "net UNA" d/					31	37.9					
Total ADC Est. & Forecast				131	177	159	163	167	170	173	175
Bed Need (90% Occ)	152	157	151	146	197	177	182	185	189	192	195
Census Rate Adj. Factor e/						1.1%	0.9%	0.7%	0.5%	0.2%	0.0%
June Bed Need Forecast						189	202	213	221	226	229

	Est. (6mo)	Forecast				
	2007	2008	2009	2010	2011	2012
March 2007 Bed Need Forecast	194	202	209	215	219	222

a/ FY06 updated to include full FY06 (June report based on 8 months data.) FY07 based on 9 months annualization.

b/ Census rate includes potential census estimated for UNA inmates not transferred - and - wait list estimates. Also it includes new ASH Acute volumes. Average ASH census was 8.35 in FY2006 and 5.35 in the first 6 months of FY 2007. It dropped to 4.3 for the 9 months of FY07 because its census dropped to zero in February 2007.

c/ Distribution of patient days during UNA study of transferred inmates: 80% in FY2005; 20% in FY2006

d/ CMF-APP averaged 13.5 for FY06. Due to great variability by month the 90th percentile was used instead of the average to help improve bed availability for monthly fluctuations. The 90th percentile was 34.9 in the first 6 months of FY07 increasing to 37.9 for 9 months FY07.

e/ Assumes that rates will continue to increase at a decelerating rate to 2012. Based on an increase of 5.7% between 2002 and 2007.

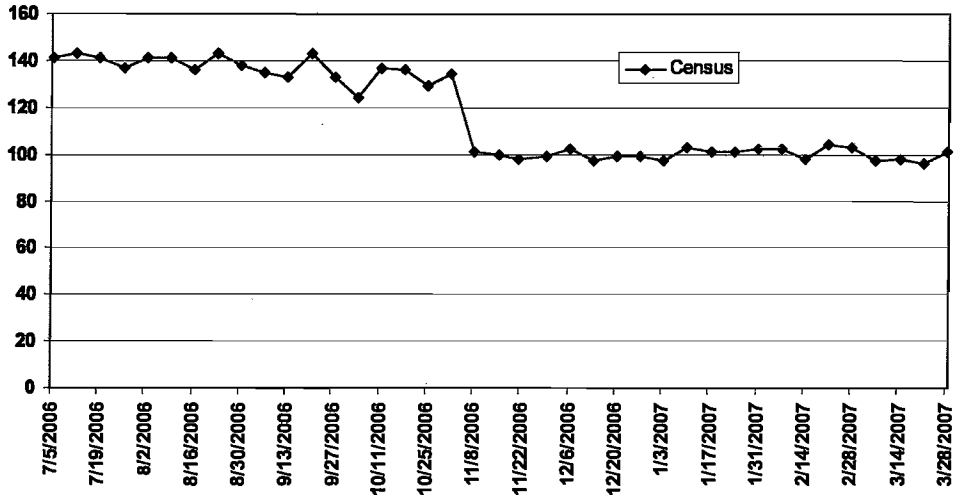
Because of the lack of separation of the Acute and Crisis patients in the discharge data, this Census Rate method is preferred over the Discharge Rate method, as HCPU separates out the MHCB patients in the new units. For this reason this is the recommended method. However, the addition of the designated crisis beds at CMF appears to have has generated a slower ramp-up in the Acute forecast compared to the June 2006 version as well as the March 2007 update.

There appears to be many transfers between the Acute and S-2 unit and length of stay analysis shows a wide variation in S-2 suggesting possible mixing of the two types of care. In short, there is a concern over the growing demand for Crisis beds at CMF distorting the true demand for Acute beds, particularly with the ASH program drop off. Because of this concern over undercounting the 2007 Acute census, the older March 2007 forecast is also shown above. It is recommended that the March 2007 forecast "stand" as the preferred forecast while bed conversion from Crisis back to Acute reaches a more stabilized pattern.

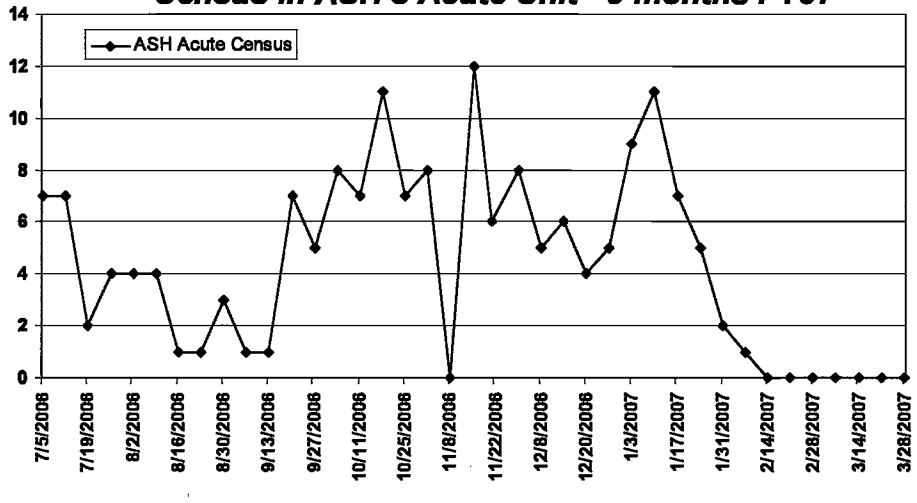
This concern may become less of an issue given the new order to return CMF's S-2 unit back to Acute use.

Acute Psychiatric Program – Male Census Trend

Census in CMF-APP - 9 months FY07



Census in ASH's Acute Unit - 9 months FY07

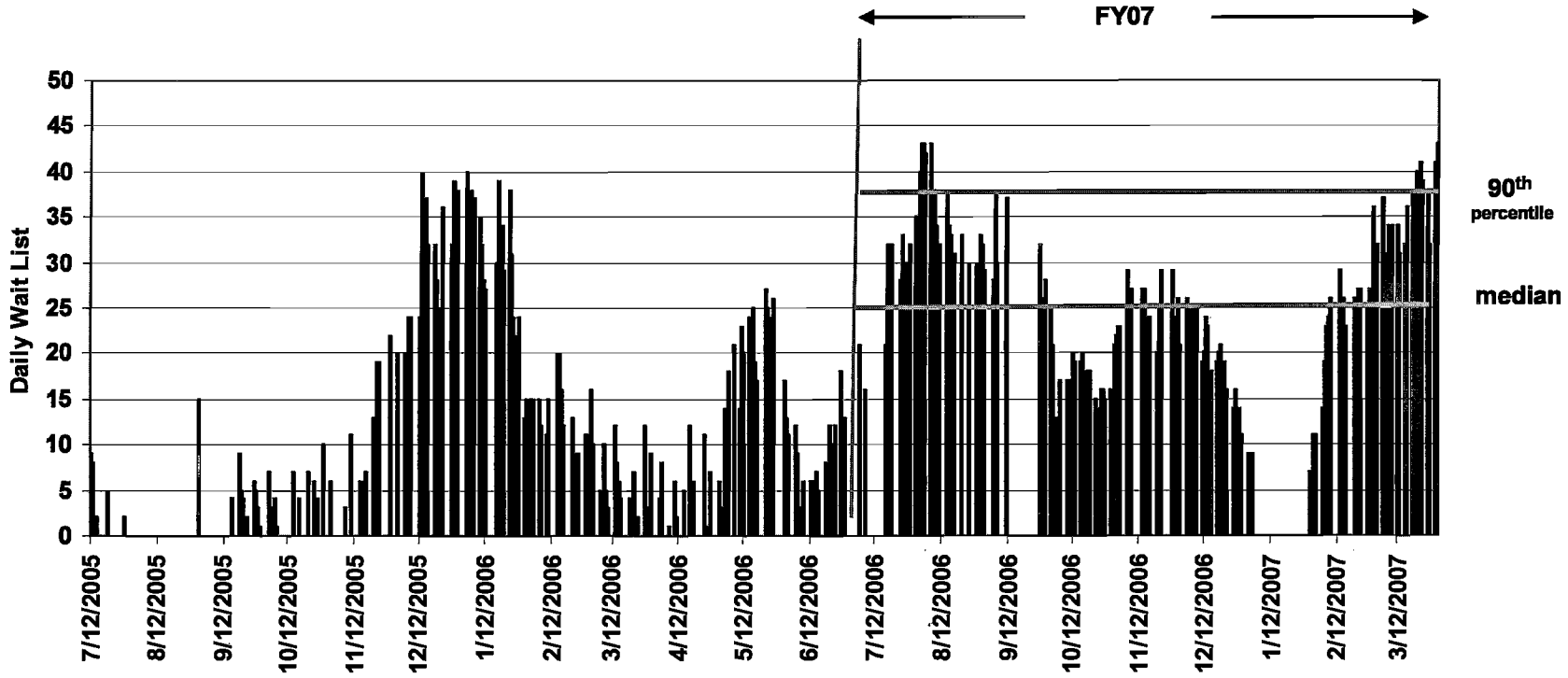


CMF-APP Census trends reflect only those inmates in the Acute program, not crisis beds

Source: HCPU 2007

Wait List Trend at CMF- Acute Psychiatric Program

Wait List Census Trend at CMF-APP



In FY07 median wait list = 25; 90th percentile = 37.9; maximum = 43; average = 23.2

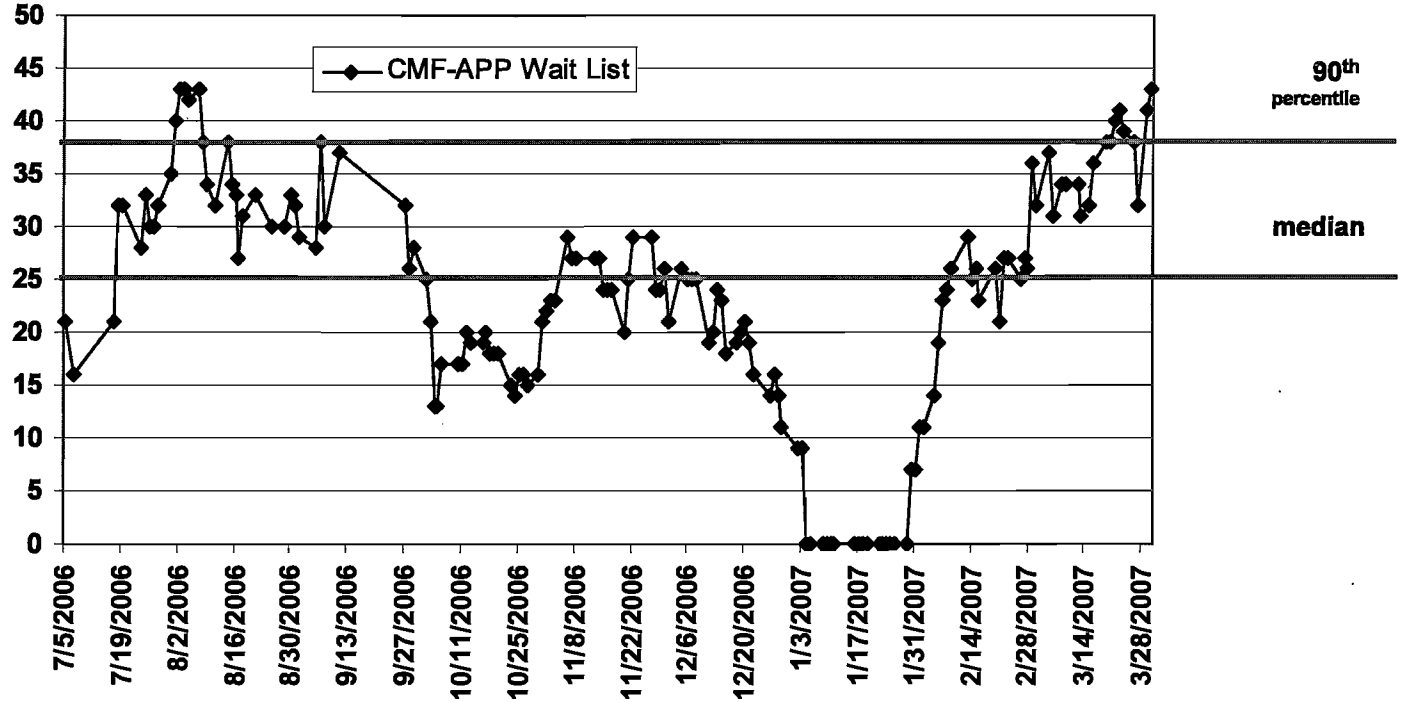
Data on the CMF Wait List was available from July 2005. Periodic wait list spikes are pronounced.

Data source: Department of Mental Health Vacaville Psychiatric Program-Acute Program Daily Review submitted to CDCR.
No evidence of Waitlist prior to July 12, 2005

Wait List Trend at CMF- Acute Psychiatric Program

This is a sub-section of the chart on the proceeding page. Fluctuations are significant.

Wait List Census Trend at CMF-APP 9 months FY2007

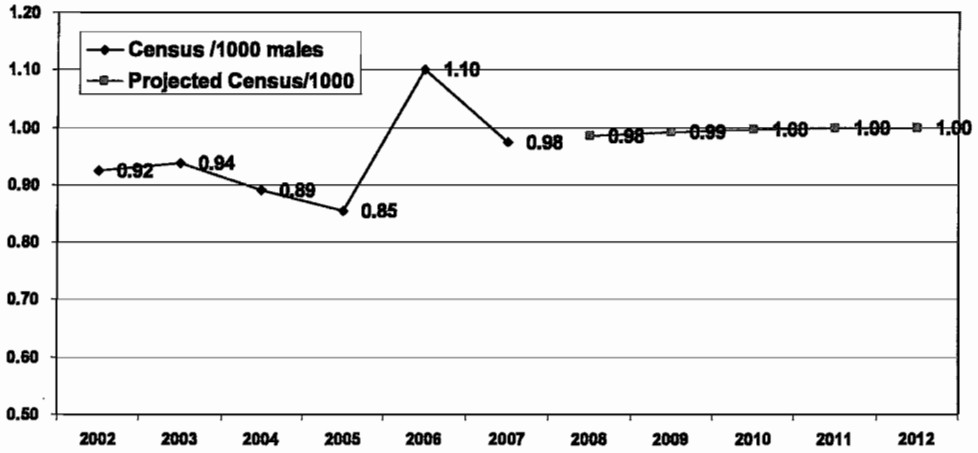


In FY07 median wait list = 25; 90th percentile = 37.9; maximum = 43; average = 23.2

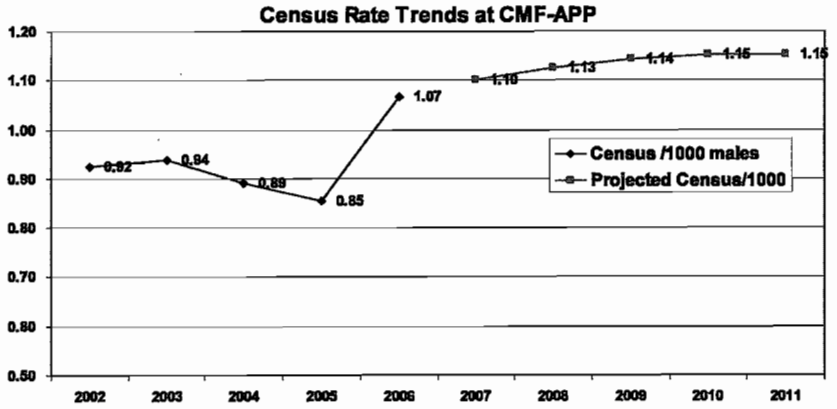
Data source: Department of Mental Health Vacaville Psychiatric Program-Acute Program Daily Review submitted to CDCR.

Acute Psychiatric Bed Need – Male
(Method 2) Cont'd

Census Rate Trends – CMF-APP – 9 mo. FY07



(From June 2006 Report)



There was a slightly lower Census Rate when recalculating for full year FY06 and using the new population projections. The FY07 (based on 9 months) rate has dropped, and therefore the Census Rate forecast increases from a lower base thus lowering the bed need using this method.

Acute & Intermediate Bed Need – Women

REV

Patton State Hospital Acute and Intermediate Programs

Acute & Intermediate - Females	— Actual —					— Forecast —					
Fiscal Year	2002	2003	2004	2005	2006	**2007 a/**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**9,826**	**10,080**	**10,641**	**10,856**	**11,749**	**12,070**	**12,345**	**12,634**	**12,907**	**13,303**	**13,563**
Discharges /1000 Females b/	10.0	7.4	7.3	8.8	6.4	4.0	4.0	4.0	4.0	4.0	4.0
Discharges	98	75	78	96	75	48	49	50	51	53	54
ALOS	94	117	79	123	127	203	203	203	203	203	203
ADC	25	24	17	32	26	27	27	28	29	29	30
Bed Need @ 90% Occ	28	27	19	36	29	**30**	**30**	**31**	**32**	**33**	**33**

a/ FY07 discharge rate dropped significanl form earlier periods. There were only 36 discharges for PC2684 patients in the first 9 mo of FY07 which would drop the discharge rate dramatically. However, the ALOS of those paients was significanty higher than prior periods.

b/ Discharge rate adjustment factor not used due to drop off in rate for FY07 (9mo).

June Bed Need Forecast						27	34	35	37	39	39

The forecast assumes a constant discharge rate (i.e. 3.7/1,000)because historical data show a generally decreasing trend. The FY2007 discharges for 9 months annualized to only 48. DMH and CDCR input suggest that the opening of the MHCB unit at CIW has had the effect of reducing volume at Patton State. The census bar chart displayed on the next page combined with the ALOS increase to 203 for discharges in FY07 suggests that the patients at Patton are changing to longer term with fewer acute stays.

This update assumes the 2006 actual discharge rate as a constant in the forecasted years. Volumes were limited to PC2684 (CDC inmates referred to DMH for treatment).

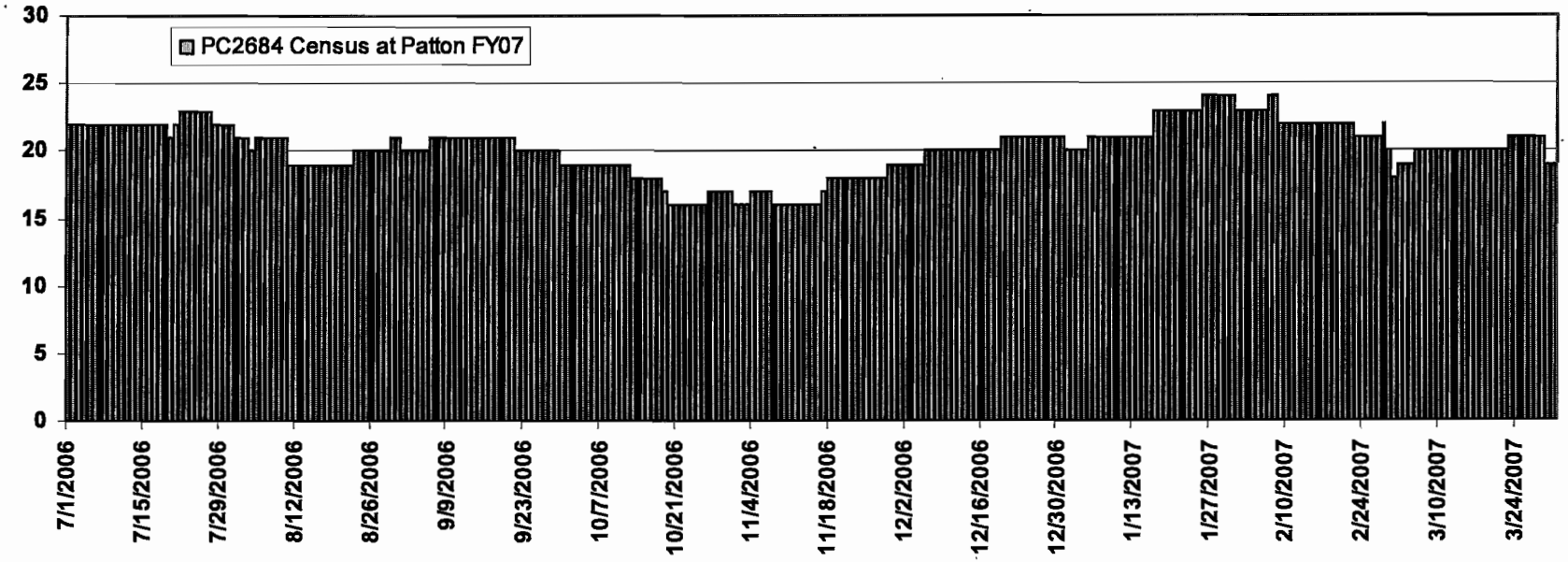
This forecast is 19% lower than the June 2006 forecast in 2011. About 29% of the difference is due to the drop in population projections from Spring 2006.

Source: DMH database 2006.mdb and text files from 3 months 2007.

Acute & Intermediate Bed Need – Women

Patton State Hospital Acute and Intermediate Programs

Census at Patton from July 2006-March 2007



Median daily census = 20; average 20.2; 90th percentile = 23; maximum - 24

Census was arrayed by inmate over the FY2007 period to obtain a better understanding of patient flow and the volume at the hospital over the period.

Source: DMH database 2006.mdb and monthly DMH downloads.

Intermediate Psychiatric Bed Need – Male
(Census Rate Method)

CMF - ICF	— Actual —					Estimate a/	— Forecast —				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population (Spring 07)	148,153	150,851	152,859	153,323	160,812	163,140	165,891	168,347	170,393	172,845	175,613
Census Rate b/	0.25	0.24	0.23	0.27	0.39	0.42	0.42	0.42	0.42	0.42	0.42
ADC (HCPU data)	37	37	36	41	63.0	68.1	69	70	71	72	73
Bed Need (90% Occ)	41	41	40	46	70	76	77	78	79	80	81
CMF - DTP	**— Actual —**					**Estimate a/**	**— Forecast —**				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Census Rate b/	0.28	0.28	0.27	0.25	0.23	0.24	0.24	0.24	0.24	0.24	0.24
ADC	42	42	41	39	37.2	39.7	41	41	42	43	43
Bed Need (90% Occ)	46	47	45	43	41	44	45	46	47	47	48
ASH	**— Actual —**					**Estimate a/**	**— Forecast —**				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Census Rate b/	1.01	0.88	0.65	0.76	0.72	0.68	0.68	0.68	0.68	0.68	0.68
ADC (HCPU data)	150	132	100	117	115.6	110.2	113	115	117	118	120
Bed Need (90% Occ)	167	147	111	130	128	122	126	128	130	131	133
Coalinga	**— Actual —**					**Estimate a/**	**— Forecast —**				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Census Rate b/						0.30	0.30	0.30	0.30	0.30	0.30
ADC (HCPU data)						48.8	50	51	52	52	53
Bed Need (90% Occ)						54	56	56	57	58	59
SVPP	**— Actual —**			**Actual/Composite a/**		**Estimate a/**	**— Forecast —**				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Census Rate c/	-	-	0.35	0.60	0.99	1.01	1.12	1.22	1.29	1.33	1.33
ADC (from HCPU database)			43	51	49.0	87.3					
ADC - UNA est. unserved d/				38	10						
ADC on Waitlist ("net" UNA)			11	3	100	77.3					
Total ADC Est. & Forecast			54	92	159	165	186	205	220	229	239
ADC on 1370 waitlist						27.9	28	28	28	28	28
Bed Need (90% Occ)			60	102	177	214	238	259	275	286	290
Sub-Total Celled Housing ADC e/						213	232	250	263	273	277
Sub-Total Celled Housing Bed Need e/						236	258	278	293	303	307
Sub-Total Intermediate Bed Need (Dorm)						274	283	290	295	300	304
All Intermediate - Combined	**— Actual —**					**Estimate a/**	**— Forecast —**				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ADC	228	211	231	288	375	459	487	511	529	542	550
Bed Need (90% Occ)	254	234	256	320	416	510	541	567	588	603	611
June 2006 bed Need Forecast					418	459	488	511	526	539	

a/ HCPU census data updated for 12 months FY06. FY07 based on 9 months.

b/ Census rates for CMF-ICF, DTP, Coalinga and ASH are assumed to be constant at 2007 levels.

c/ Census rate for SVPP in 2005 and 2006 includes potential census estimated for UNA inmates not transferred. Also the SVPP wait list is also applied and included in the census rate. SVPP census rate was projected to increase at a gradually decreasing rate until 2012.

d/ Distribution of patient days during UNA study of transferred inmates: 80% in FY2005; 20% in FY2006

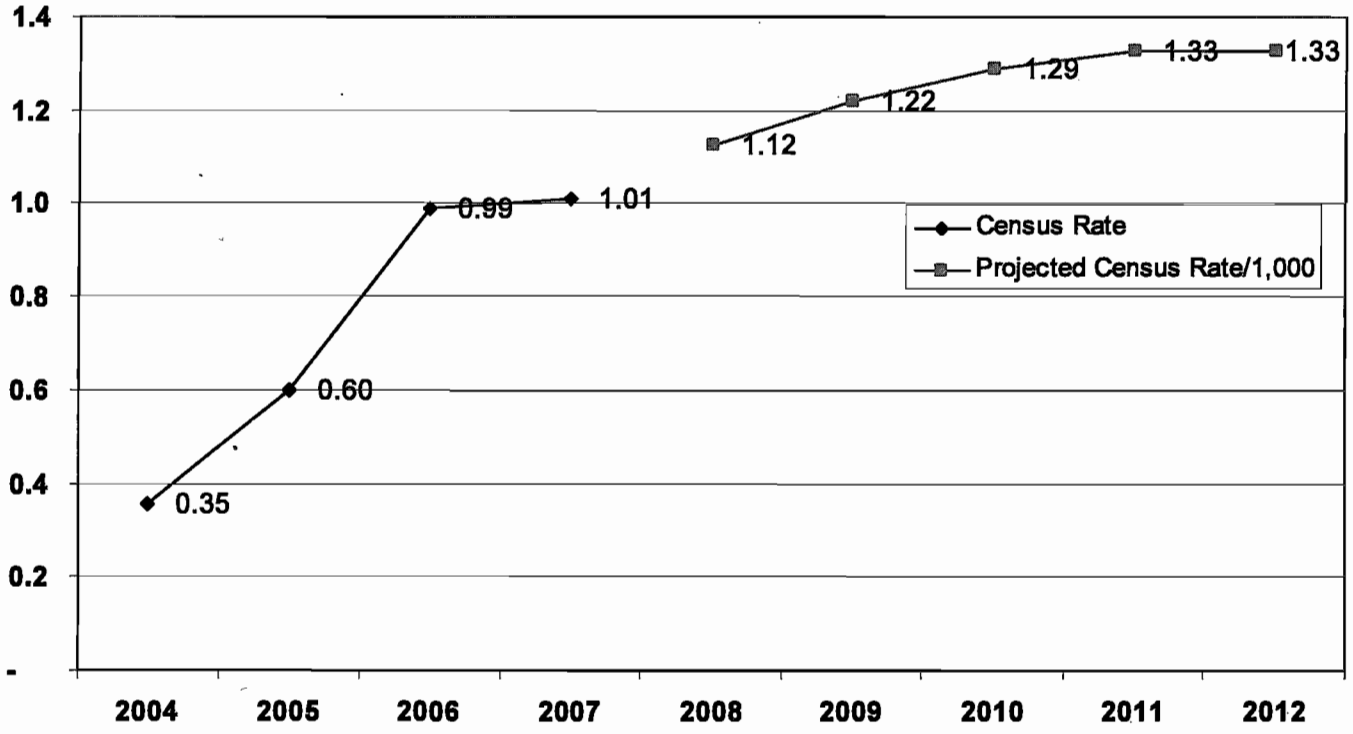
e/ Celled housing census was estimated as follows: Of the 118 beds at SVPP, 86 are celled housing and of the 32 remaining double occupancy rooms, 50% are used by celled housing which equates to 16 beds or 102 of the 118 beds being used for celled housing (or 86%)

Data for FY06 were updated for a full 12 months. FY07 forecasts were based on HCPU data for the first 9 months of the current fiscal year. The addition of the Coalinga program increased demand while lowering ASH's census. The census rate for SVPP was modeled to increase based on the overall annual rate of historical intermediate care between 2002 -2007 (assuming a leveling off in the rate by 2012). This model forecasts 2011 demand 7.3% higher than the June 2006 report's Census Rate method (exclusive of the addition for 1370 patients). Considering the lower Spring 2007 population estimates this current forecast is effectively about 10.8% higher after adjusting for the population difference. CDCR requested that additional bed need be added to accommodate 1370 patients (defendants requiring mental health services). This increased the bed need by 31 beds. These were all allocated to the "Celled housing" bed need.

The data to support the Discharge Rate model was insufficient for this program due to no Coalinga discharge data and the inability to segregate Acute patients at ASH.

SVPP Has had a dynamic ramp-up in the Census Rate because it is relatively new program

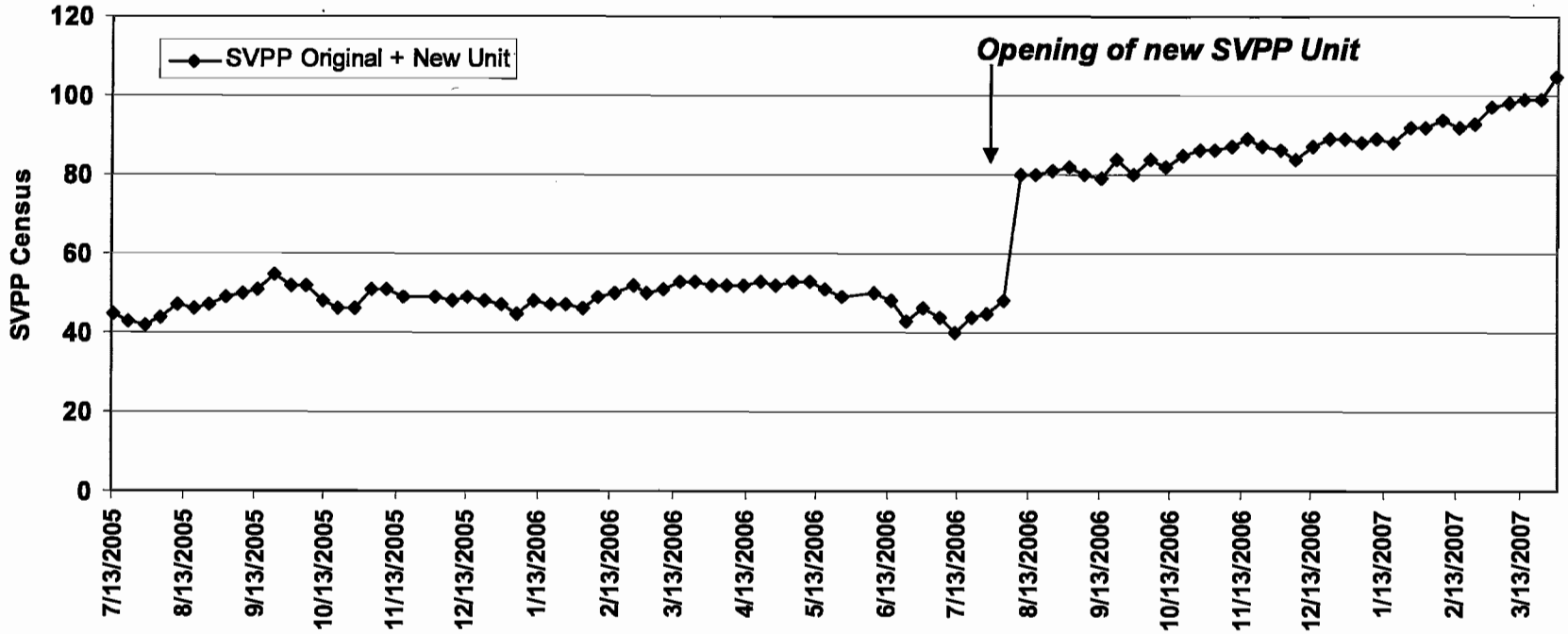
SVPP Census Rate Trend & Projection



The SVPP Census Rate in 2012 increased from 1.29 in the March 2007 study update.

SVPP Census Trends July 2005 – March 2007

The Census Trends at SVPP are relatively static until the new unit opens in August 2006.

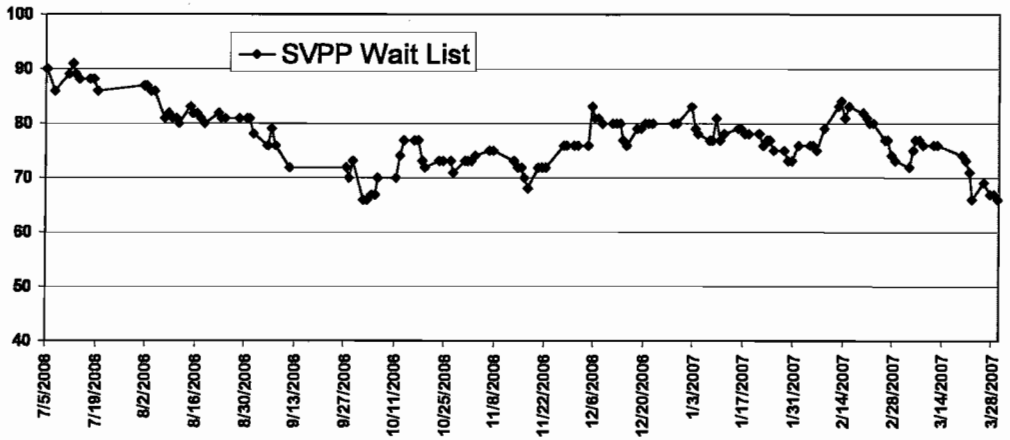


For 18 month period: SVPP median = 52; Min = 40; Max = 105

For 9 months of FY 2007 average = 82.4; median = 86; Min = 40 ; Max = 105

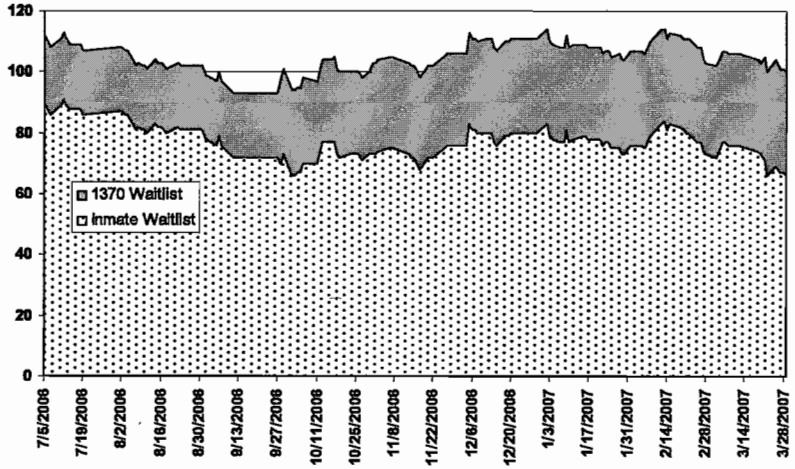
SVPP Wait List Trend (Intermediate – Male)

SVPP Wait List Census Rate Trend – (PC2684's only)



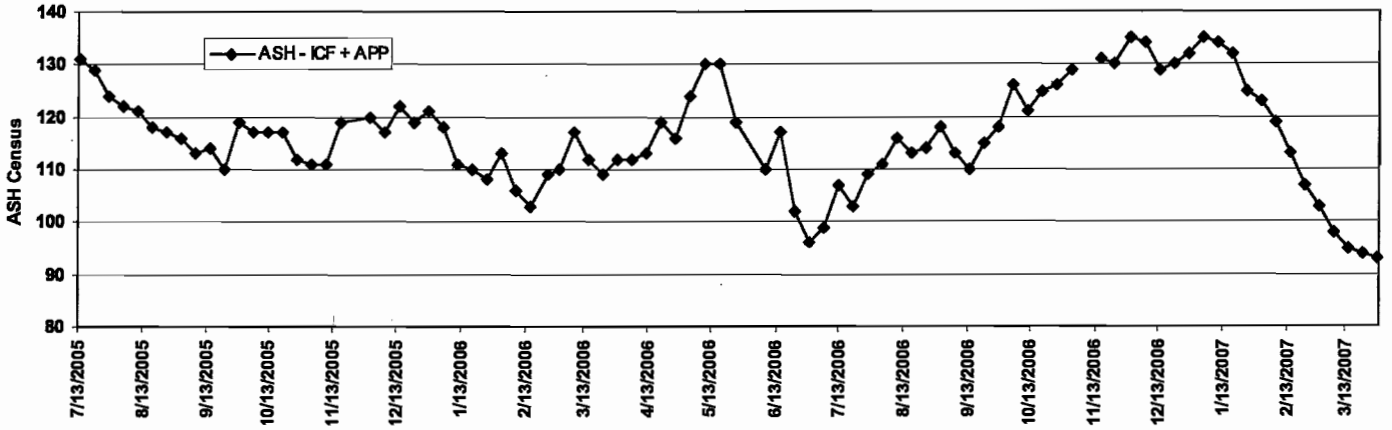
The SVPP Wait List appears to be moderating or leveling off, however in the chart below, the 1370 defendants have pushed the total waitlist above 100 for most of the 9 month period.

SVPP CDCR Inmates + 1370 Wait List Census Rate Trend



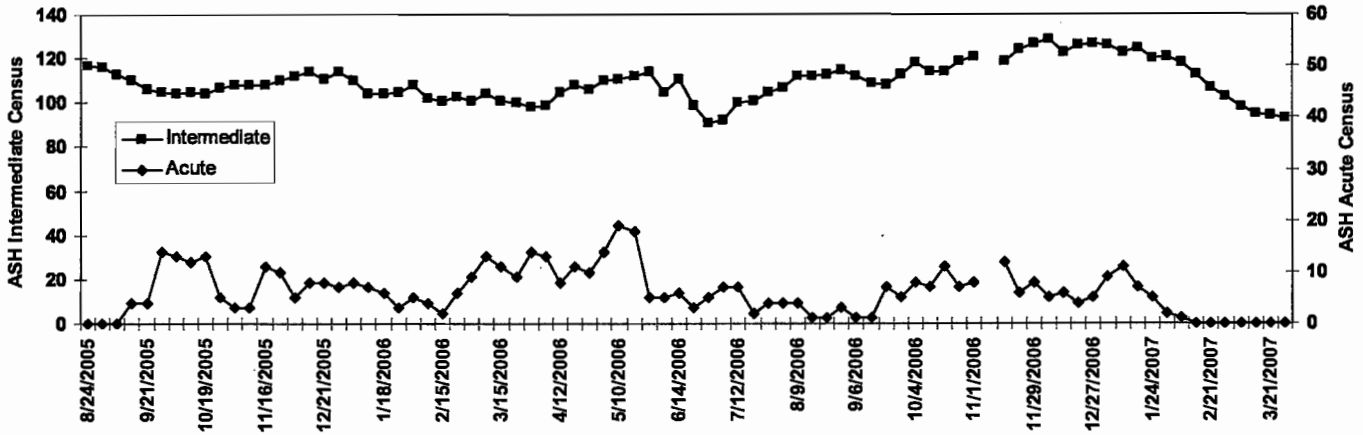
ASH Census Trends July 2005 – March 2007

The census trends at ASH exhibit variability with a drop in June 2006 (96) a peak in November 2006 (135) and the recent drop starting in January 2007 and reaching a low point on 3/28/07 at 93. . Median for the 9 mo. FY2007 is 118.



ICF and Acute Census Trends at ASH

For 9 months FY07 ICF median = 113.5.5; Min = 92; Max = 129. Acute census starts Sept 2005 (Median = 4.5, Min =0; Max = 12)



Census reported as "0" for both programs and combined on 11/8/06 assumed to be a "non-report" and was deleted from the trend line.

Mental Health Crisis Bed Need – Male: Discharge Rate Method 1

MHCB - Males	--- Actual ---					Estimate	--- Forecast ---				
Fiscal Year	2002	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**148,153**	**150,851**	**152,859**	**153,323**	**160,812**	**163,140**	**165,891**	**168,347**	**170,393**	**172,845**	**175,613**
Disch Rate **a/**	51.10	52.11	56.35	51.92	48.16	50.26	50.26	50.26	50.26	50.26	50.26
Discharge from Database	7570	7861	8613	7960	7,745	**8,200**	8,338	8,462	8,564	8,688	8,827
ALOS **b/**	8.0	7.6	7.2	7.2	8.7	8.05	8.1	8.1	8.1	8.1	8.1
Disch Days	60,402	59,618	61,854	57,424	67,086	66,017	67,130	68,124	68,952	69,944	71,064
ADC	165	163	169	157	184	181	184	187	189	192	195
Wait List Census				53	40	7.6	7.6	7.6	7.6	7.6	7.6
CMC **c/**						35.2	36	36	37	37	38
CMF 20 **c/**						16.5	17	17	17	17	18
CMF 25 **c/**						18.6	19	19	19	20	20
Total ADC	165	163	169	210	224	259	263	267	270	274	278
Bed Need (90% Occ)	184	181	188	234	**249**	**287**	**292**	**296**	**300**	**304**	**309**

a/ Discharges per 1000 dropped in 2005 and again in 2006. The discharge rate leveled out in the first 9 months of FY07 and was assumed to remain constant going forward. Annualized discharges for 9 months differed from the annualized 6 months data by 1% (8,285 in March 2007 report).

b/ The June Forecast assumed a steady ALOS of 7.2, however ALOS increased in FY2006 (full year) and then dropped in the first 9 months of FY07. It was assumed to remain at this level for the remainder of the forecast period. The 9 months annualized data increased to 8.05 from 7.93 in the 6 months data.

c/ Neither CMC nor CMF's new Crisis units are yet reporting to HCCUP. HCPU data is applied.

June 2006 Bed Need Forecast				245	252	258	262	266	268	

This Discharge Rate (Method 1) does not adequately breakout the new program census at the newest programs (CMF) or at CMC. Therefore a "hybrid" model was created to add in the census at CMF and CMC from the HCPU census reports.

It is assumed that much of the increase in this forecast compared to the 2006 forecast is the separation of the Crisis Patients in designated Units thereby increasing the MHCB demand. This forecast is 13% higher than the June 2006 version. Considering the lower population used in this forecast, the use of MHCB is projected to be more intense in the future.

Please note that data does not include the volume at SAC's MHOHU which had an average daily census of 9.6 in the first 9 months of FY2007. Discussion with CDCR staff indicated that whereas about 50% of these inmates do get referred to MHCB's, that they are already on the waitlist.

Because of data issues, the Census Rate method is recommended as the preferred forecast.

Mental Health Crisis Bed Need – Male: Census Rate Method 2: (RECOMMENDED METHOD)

MHCB Bed Need – Census Rate Model

MHCB - Males	— Actual —					Estimate/a	— Forecast —				
Fiscal Year	2002	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 2007)	**148,153**	**150,851**	**152,859**	**153,323**	**160,812**	**163,140**	**165,891**	**168,347**	**170,393**	**172,845**	**175,613**
Census Rate b/	1.11	1.15	1.13	1.33	1.16	1.48	1.56	1.63	1.67	1.69	1.69
Average census	157	167	165	151	147	234					
Waitling List	8	7	7	53	40	7.6					
Combined ADC	165	174	172	204	187	242	259	274	284	292	297
Bed Need (90% Occ)	**183**	**193**	**192**	**227**	**208**	**269**	**288**	**304**	**316**	**325**	**330**
Census Rate Adjustment factor c/						6.7%	5.3%	4.0%	2.7%	1.3%	0.0%
a/ Based on average of 9 months FY07. Both the average census and the average wait list increased over the 6 month FY07 prior version.											
b/ Rate includes actual census and Wait List.											
c/ Assumes that rates will continue to increase at a decelerating rate to 2012. Based on an increase of 33% between 2002 and 9months 2007.											

June Bed Need Forecast						227	245	252	257	261	265

This updated census rate model uses a "Census Rate adjustment" factor approach used elsewhere.

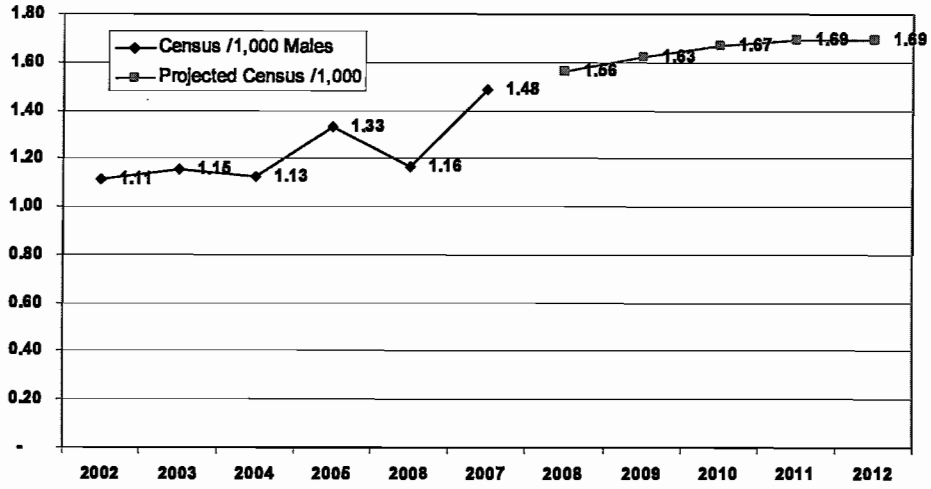
This version uses the "Version B" that was recommended in the March 2007 report because it appears that the census rate was on the increase. The 2006 forecast was probably low due to crisis patients being grouped in with Acute at CMF prior to the formal MHCB units designation.

This forecast is 22.6% higher than the June 2006 study for 2011. This forecast now captures the census of crisis patients at CMF-APP in FY2007, which comprises almost 12% of the total MHCB census. This explains some of the growth in utilization because the earlier forecast did not have the data to segregate out the crisis patients for the Acute program. The recent order requiring return of the CMF S-2 crisis beds back to acute use may have an impact on the wait list.

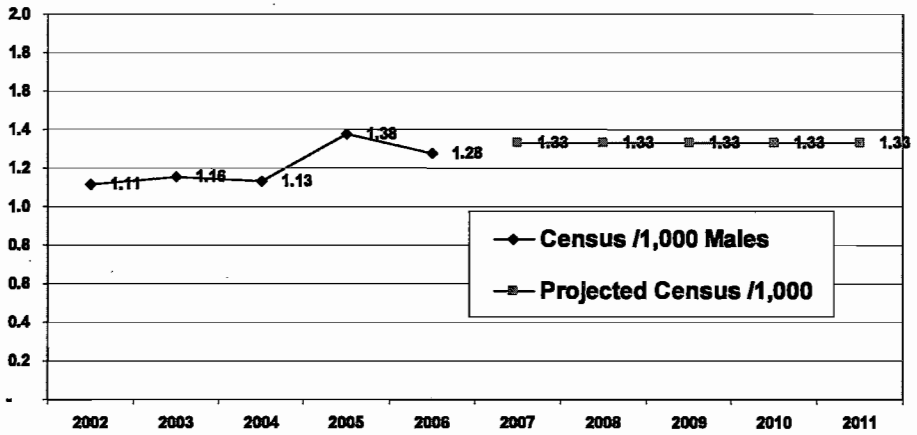
Please note that data does not include the volume at SAC's MHOHU which had an average daily census of 9.6 in the first 9 months of FY2007. Discussion with CDCR staff indicated that whereas about 50% of these inmates do get referred to MHCB's, that they are already on the waitlist. The MHOHU volume trend will be monitored along with the crisis bed census.

Mental Health Crisis Bed Need – Male: Census Rate Trends & Forecasts

Census Rate Trends – MHCB Males – FY07 Update



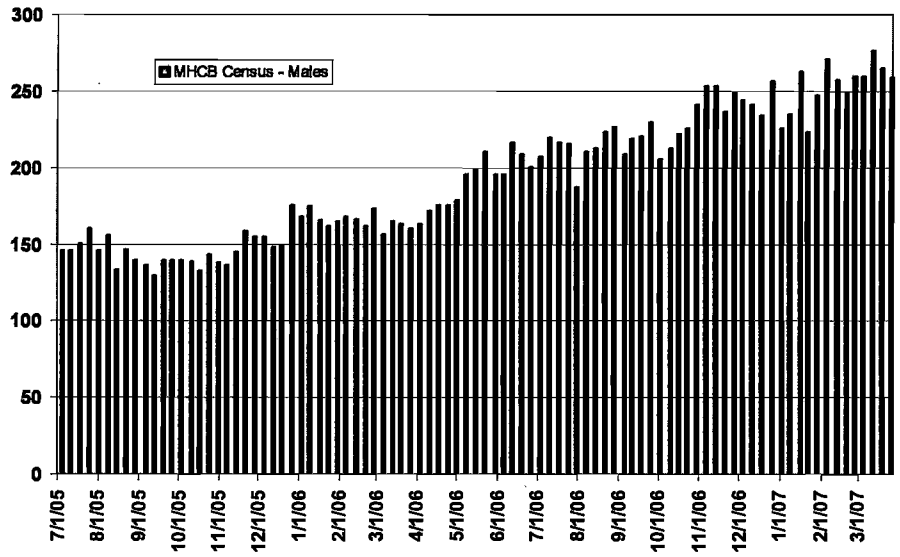
Census Rate Trends – MHCB Males – June 2006 Report



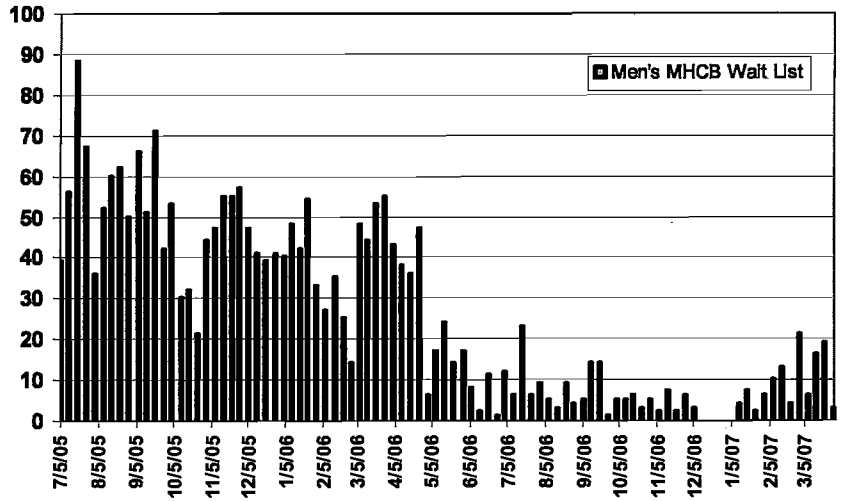
This update has a slightly higher census rate than the March 2007 study which had forecast the 2012 rate at 1.63 (vs. 1.69)

Mental Health Crisis Bed Need – Male: Wait List Trends

Census Trends MHCB – Male (July 05 – Mar 07)



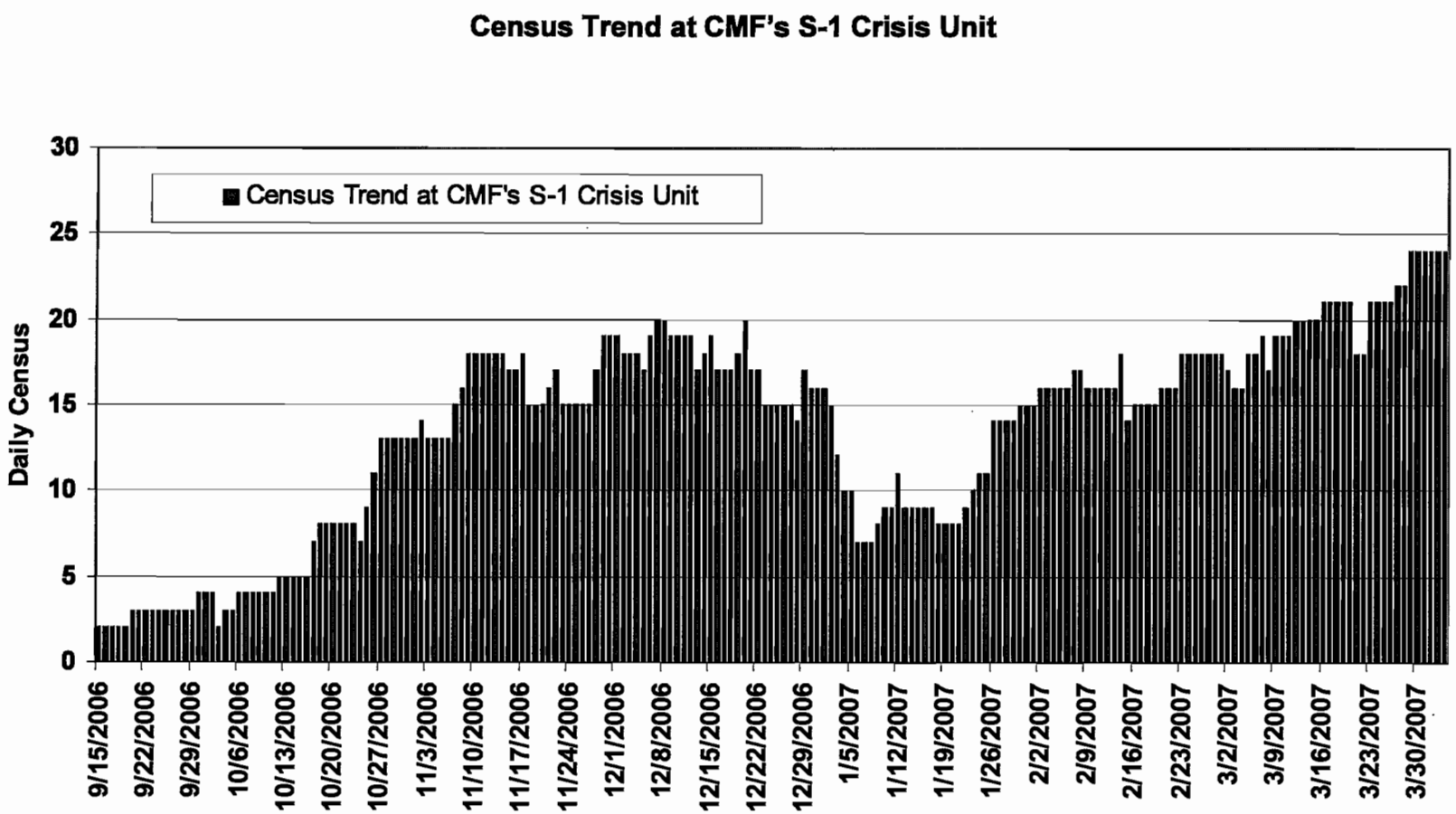
Wait List for MHCB – Male (July 06 - Mar07)



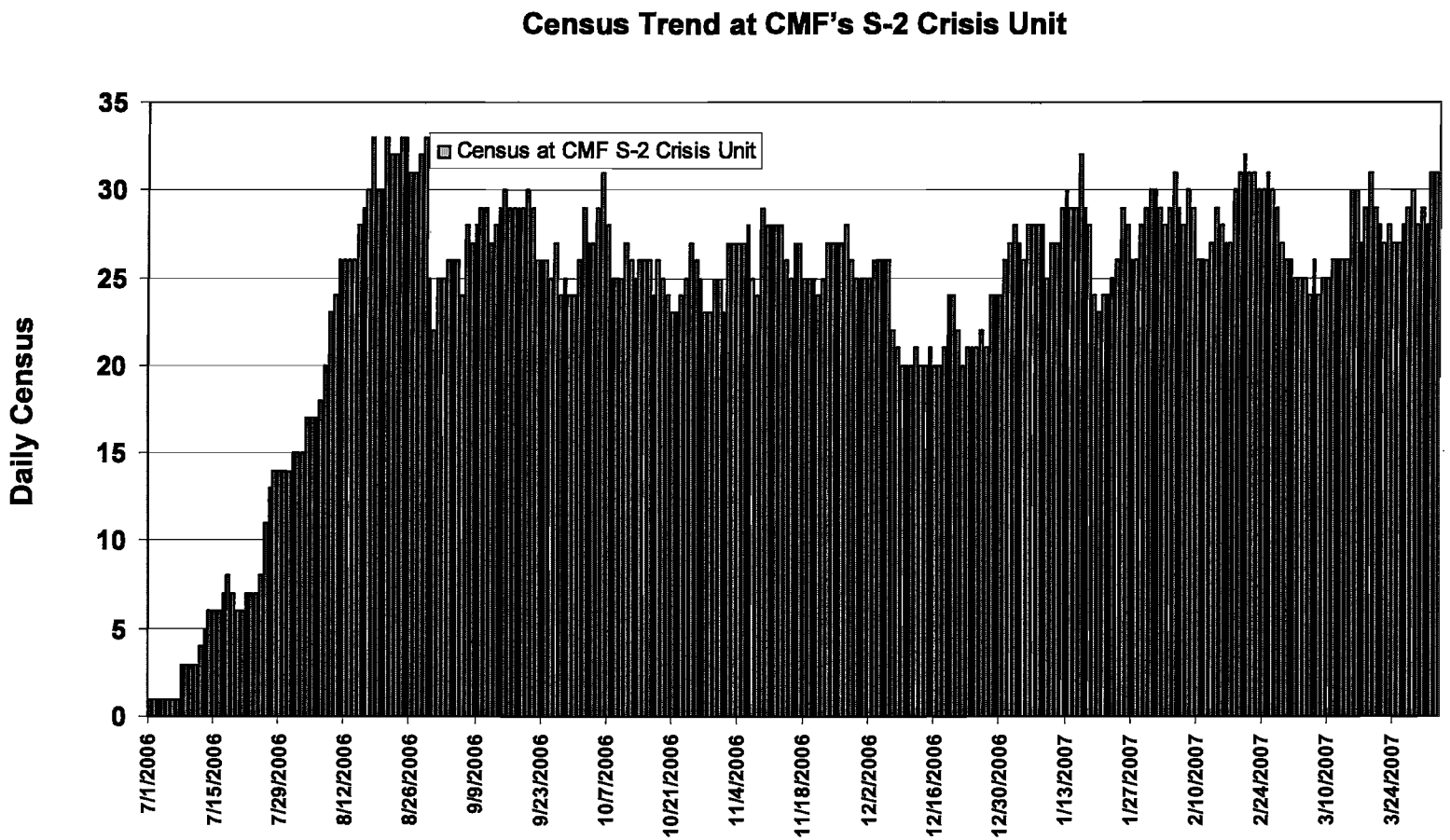
Period	FY06 July-Dec	FY06 Jan-June	FY07 July-Dec	FY07 Jan-March
Average Waitlist	50.1	30.1	6.7	9.3

New Bed Supply has a significant impact on the Wait List for MHCB's. But there is an increasing trend in the period January-March 2007 ***(missing data between 12/4/06 and 1/10/07)***

Census Trend at CMF's S-1 Crisis Unit



Census Trend at CMF's S-2 Crisis Unit



Mental Health Crisis Bed Need – Female
Census Rate Method #1 – RECOMMENDED METHOD

MHCB - Females	Estimate a/	--- Forecast ---				
Fiscal Year	2007	2008	2009	2010	2011	2012
Population (Fall 06) - Female	12,070	12,345	12,634	12,907	13,303	13,563
Census Rate/1,000	1.03	1.03	1.03	1.03	1.03	1.03
ADC b/	12	13	13	13	14	14
Bed Need (90% Occ)	14	14	14	15	15	16

a/ This is a new method using HCPU data starting in FY07 (through 3/31/07) for CIW as well as for CCWF.
b/ Includes CCWF and CIW. CIW started in August 2006. CIW Averaged based on start-up to March 2007.

June 2006 Bed Need Forecast	17	19	21	22	22

Method#1 uses HCPU data for CCWF and CIW (started reporting census in September in Fall 2006). There is a drop in the forecast as of 2011 of 31%. About 18% is due to the drop in the population projection to 2011.

There was discussion with CDCR as to whether to include VSPW's OHU psych volume to the mental health bed need forecast which averaged a census of 4.3. Staff indicated that the OHU serves as an evaluation unit where determination of the clinical requirement for a crisis bed can be made. As there is available capacity at CCWF and CIW, the OHU volume was not added to the need model. However, the OHU volume trend will be monitored along with the crisis bed census.

Mental Health Crisis Bed Need – Female
Discharge Rate – Method #2

MHCB - Females	Actual				Estimate a/	Forecast				
Fiscal Year	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**10,080**	**10,641**	**10,856**	**11,749**	**12,070**	**12,345**	**12,634**	**12,907**	**13,303**	**13,563**
Disch Rate	68.15	72.46	71.85	85.54	47.82	47.82	47.82	47.82	47.82	47.82
Discharges b/	687	771	780	1,005	577	590	604	617	636	649
ALOS c/	4.1	3.9	4.1	4.6	5.80	5.8	5.8	5.8	5.8	5.8
Disch Days	2,820	2,986	3,229	4,633	3,350	3,426	3,506	3,582	3,692	3,764
Total ADC	8	8	9	13	9.2	9	10	10	10	10
Bed Need (90% Occ)	9	9	10	14	**10**	**10**	**11**	**11**	**11**	**11**

June 2006 Bed Need Forecast	17	19	21	22	22

a/ FY2006 recalculated using complete data from CCWF & CIW. Census based on discharge days for FY07 (annualized 9 months data) dropped from 2006 volume.

b/ Includes CCWF and CIW

c/ Fluctuating ALOS - assume constant at the FY07 level.

The Discharge Rate method generates a lower Bed Need forecast. The census rate method is recommended.

EOP General Population Bed Need - Male

EOP-GP Need - Males	— Actual —				Estimate a/	— Forecast —				
Fiscal Year	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Male CDC Population (Spring 2007)	**150,851**	**152,859**	**153,323**	**160,812**	**163,140**	**165,891**	**168,347**	**170,393**	**172,845**	**175,613**
Census /1000 males	**18.12**	**18.31**	**18.93**	**20.25**	**19.29**	19.54	19.74	19.86	19.93	19.93
Average Daily Census a/	2,733	2,798	2,902	3,257	3,148	3,242	3,322	3,385	3,444	3,500
Bed Need @ 95% Occ	**2,877**	**2,946**	**3,055**	**3,428**	**3,313**	**3,413**	**3,497**	**3,563**	**3,626**	**3,684**
Census Rate Adjustment factor b/					1.6%	1.3%	1.0%	0.6%	0.3%	0.0%
Level IV census as % of total **c/**	35.7%	33.8%	33.9%	32.6%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%
Level I - III ADC	**1,568**	**1,626**	**1,663**	**1,838**	2,024	2,085	2,137	2,177	2,215	2,251
Level IV ADC	**872**	**830**	**851**	**887**	1,123	1,157	1,186	1,208	1,229	1,249
Level III Bed Need (95%)	1,849	1,950	2,020	2,312	2,131	2,195	2,249	2,291	2,332	2,369
Level IV Bed Need (95%)	1,028	995	1,034	1,116	1,182	1,218	1,248	1,271	1,294	1,314
Total III + IV	2,877	2,946	3,055	3,428	**3,313**	**3,413**	**3,497**	**3,563**	**3,626**	**3,684**

a/ Source: HCPU Management Information Reports R1-1 through R1-4 for the first downloaded day of each month. Starting in FY07, data was captured every 2 weeks. FY07 was based on 9 months avearge.

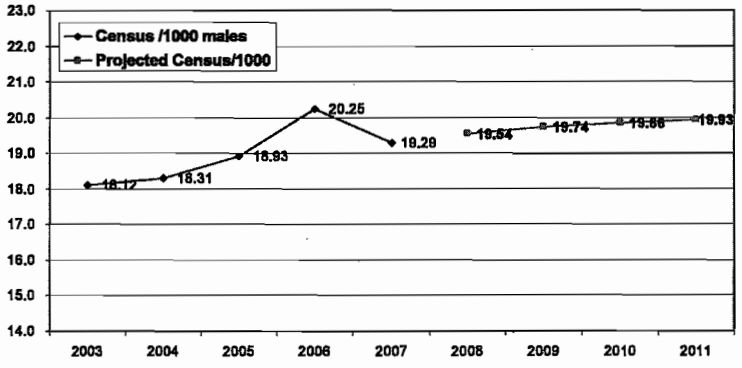
b/ Assumes that rates will continue to increase but at a decelerating rate to 2012. Based on an increase of between 2003 and 2007.

c/ Historic ratio of Level IV/ Total (calculated from endorsed EOP data) FY07 data was available from HCPU by Level of Custody (GP + Ad-Seg data combined). This higher FY07 ratio was assumed to remain constant.

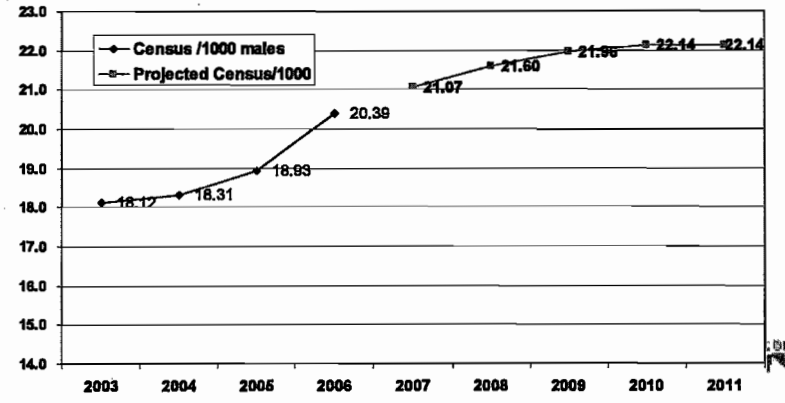
June Bed Need Forecast					3,428	3,672	3,869	4,024	4,123	4,175

The forecast uses a census rate adjustment because historical data show an increasing trend. For the first 9 months of FY07 however, the census dropped to an average of 3,148 (below FY2006). Therefore, the census rate also dropped causing a less rapid growth forecast. About 27% of the drop in the 2011 forecast is due to the lower Spring 2007 population projections.

Census Rate Trend/Forecast



Census Rate Trend/Forecast (from June 2006 Report)



EOP Ad-Seg Bed Need - Male

Ad-Seg EOP Need - Males	--- Actual ---				Estimate	--- Forecast ---				
Fiscal Year	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**150,851**	**152,859**	**153,323**	**160,812**	**163,140**	**165,891**	**168,347**	**170,393**	**172,845**	**175,613**
Census /1000 males	2.55	2.75	2.59	3.08	3.11	3.24	3.35	3.42	3.46	3.46
Avg census a/	385	420	398	496	507	538	564	583	598	607
Bed Need @ 95% Occ	**405**	**443**	**419**	**522**	**533**	**566**	**593**	**614**	**629**	**639**
Census Rate Adjustment factor b/					5.5%	4.4%	3.3%	2.2%	1.1%	0.0%

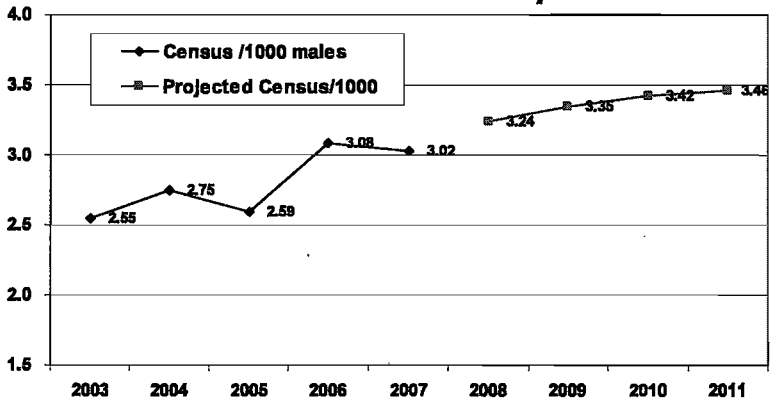
a/ Source: HCPU Management Information Reports R1-1 through R1-4 for the first downloaded day of each month. Starting in FY07, data was captured every 2 weeks. This forecast uses the average of 9 months of FY07 census data.

b/ Assumes that rates will continue to increase but at a decelerating rate to 2012.

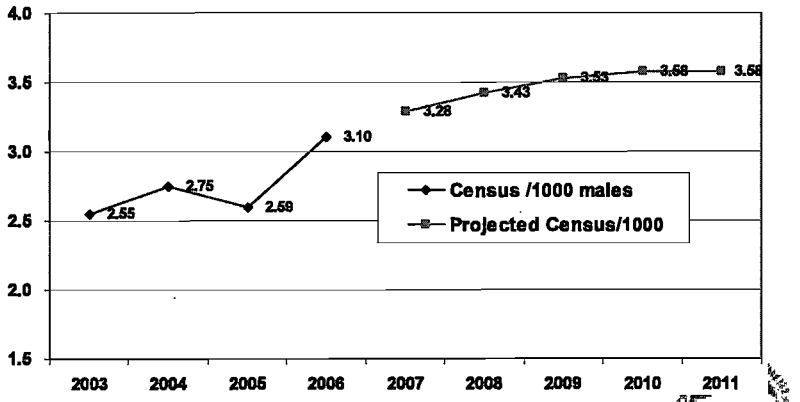
June Bed Need Forecast				522	572	614	646	666	675

This forecast uses a census rate adjustment factor because historical data showed an increasing trend. The FY07 census rate increased slightly from FY2006. This forecast is 6.7% lower than the June 2006 version. About 52% of this drop is due to the lower population projections.

Census Rate Trend/Forecast – Updated 9mo FY07



Census Rate Trend/Forecast (from June 2006 Report)



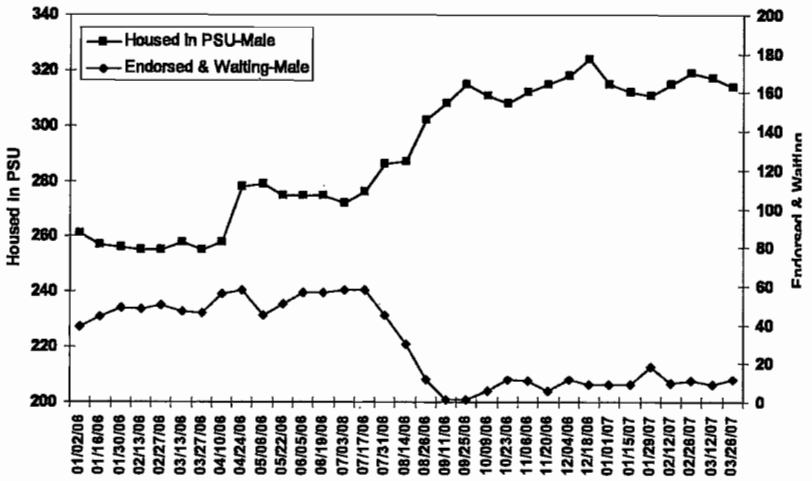
Psychiatric Services Unit (PSU) for Men - Bed Need

PSU for Males	— Actual a/ —					Estimate a/	— Forecast —				
Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male Population (Spring 07)	148,153	150,851	152,859	153,323	160,812	163,140	165,891	168,347	170,393	172,845	175,613
Census /1000 males b/	1.56	1.77	1.74	1.91	1.88	1.98	2.07	2.14	2.19	2.21	2.21
Average Daily Census	231	267	265	292	303	324	344	360	373	382	388
Bed Need @ 95% Occ	243	281	279	308	319	341	362	379	392	402	409
Census Rate Adjustment factor c/						5.5%	4.4%	3.3%	2.2%	1.1%	0.0%
June Bed Need Foecast						307	332	355	374	390	401

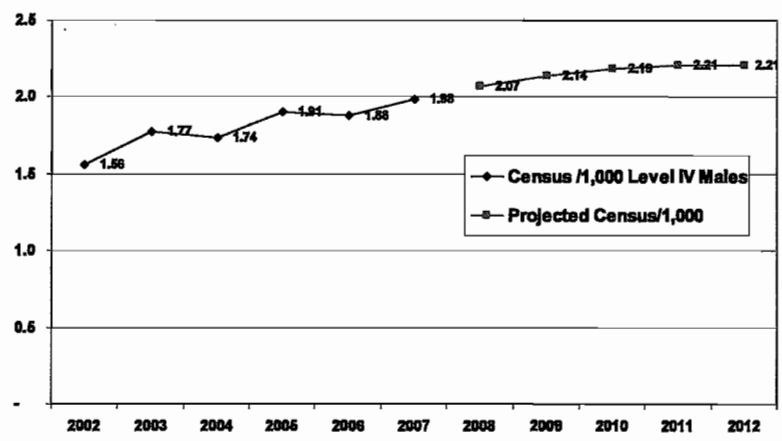
Based on a recommendation of CDCR, the population upon which the PSU forecast is modeled was changed to the entire male population (versus using only Level IV projections). The rationale was that multiple custody levels use the PSU.

The revised forecast nearly identical (0.2% higher) to the June 2006 forecasts in the outlying years despite a 3.5% drop in the male population projection from CDCR. This indicates an increasing rate of utilization as expressed in the chart below. Current capacity is 320.

PSU Housed and PSU Waiting Census - 9 mo. FY07



Census Rate Trend - PSU Modified & Updated 9 mo. FY07



Mental Health Bed Need Study Update (Spring 2007 population)

Source: HCPU – "2006-PSU-2.xls"

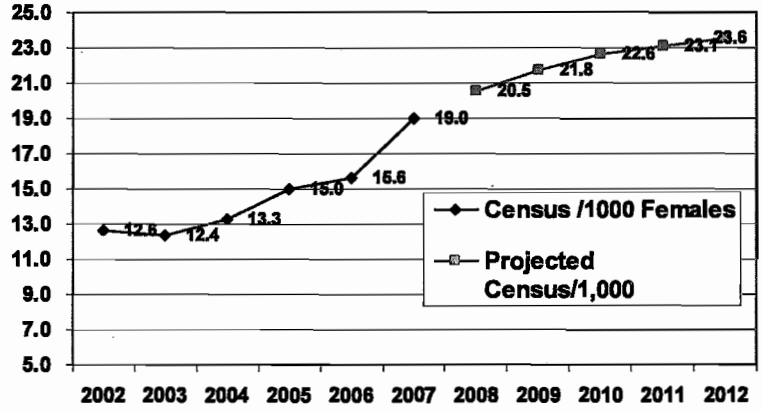
EOP General Population Bed Need - Female

EOP-GP Need - Females	--- Actual ---					Estimate	--- Forecast ---				
Fiscal Year	2002	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**9,826**	**10,080**	**10,641**	**10,856**	**11,749**	**12,070**	**12,345**	**12,634**	**12,907**	**13,303**	**13,563**
Census /1000 Females	12.62	12.37	13.28	14.99	15.63	18.99	20.52	21.76	22.64	23.09	23.56
Avg census a/	124	125	141	163	184	229	253	275	292	307	320
Bed Need @ 95% Occ	131	131	149	171	193	**241**	**267**	**289**	**308**	**323**	**336**
Census Rate Adjustment factor b/						10.1%	8.1%	6.1%	4.0%	2.0%	0.0%
a/ Source: HCPU Reports R1-1 through R1-4 used through FY2006. FY07 used HCPU data from eop-pop-female-2006.xls with data through March 26.											
b/ Assumes that rates will continue to increase at a decelerating rate to 2012. Based on the average increase between 2002 and 2007 (9 months).											

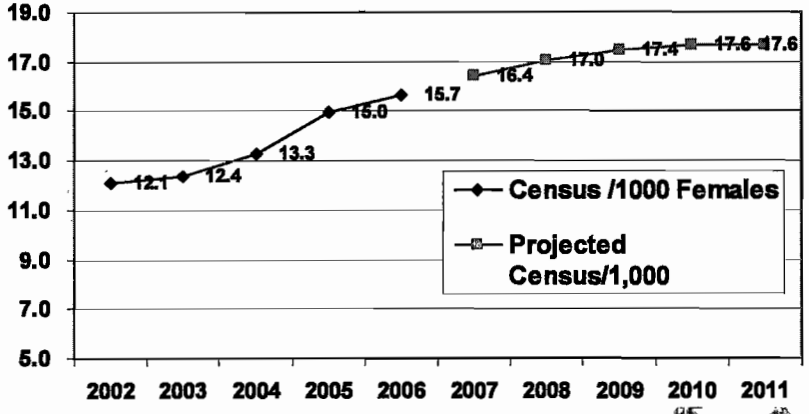
June Bed Need Forecast					193	211	227	244	256	262

Historical data show an increasing trend. FY2007 rates are higher than forecast in the June report, thereby increasing the future census rate forecast and the resulting bed need forecast. Though the forecasted census for 2011 is 24% higher than that forecasted in June 2006, the actual census rate is even higher due to the drop in CDCR's population forecast for 2011 (29%).

Census Rate Trend – 9mo FY07 Update



Census Rate Trend - (from June 2006 Report)



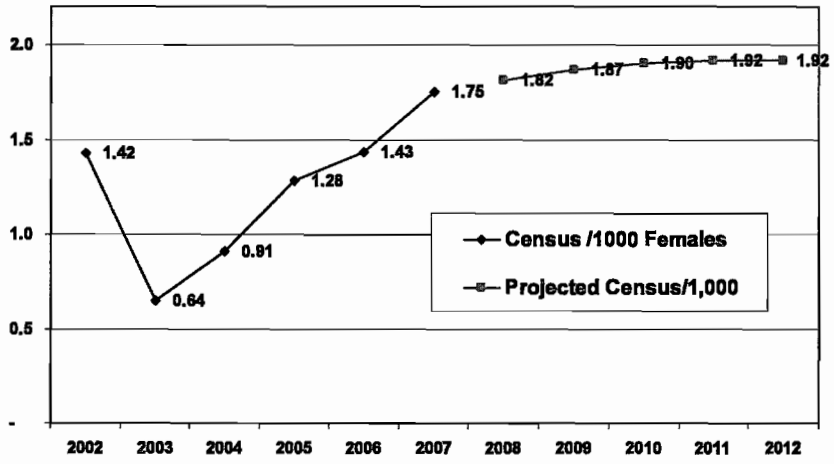
Source: "eop-pop-female-2006..xls" as updated by HCPU.

EOP Ad-Seg Bed Need - Female

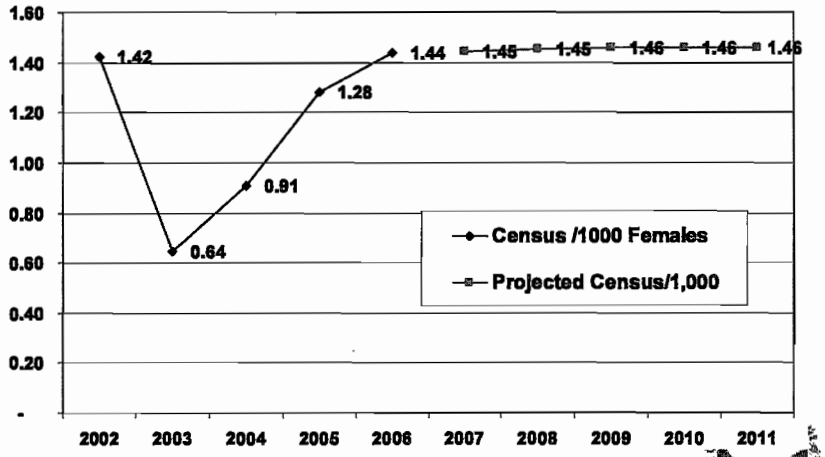
EOP Ad-Seg Need - Females	--- Actual ---					Estimate	--- Forecast ---				
Fiscal Year	2002	2003	2004	2005	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	9,826	10,080	10,641	**10,856**	**11,749**	**12,070**	**12,345**	**12,634**	**12,907**	**13,303**	**13,563**
Census /1000 Females	1.42	0.64	0.91	1.28	1.43	1.75	1.82	1.87	1.90	1.92	1.92
Average Daily Census a/	14	7	10	14	17	21.2	22	24	25	26	26
Bed Need @ 95% Occ	15	7	10	15	18	**22**	**24**	**25**	**26**	**27**	**27**
Census Rate Adjustment factor b/						4.6%	3.7%	2.8%	1.8%	0.9%	0.0%
June Bed Need Forecast					18	19	19	20	21	22	

This forecast uses a census rate adjustment because historical data shows an increasing trend. HCPU revised the reporting to include non-HUB EOPs thus increasing the census rate in FY07. The population projection actually drops but the combined result is an increase in bed need of 24%.

Census Rate Trend/Forecast – 9 mo FY07



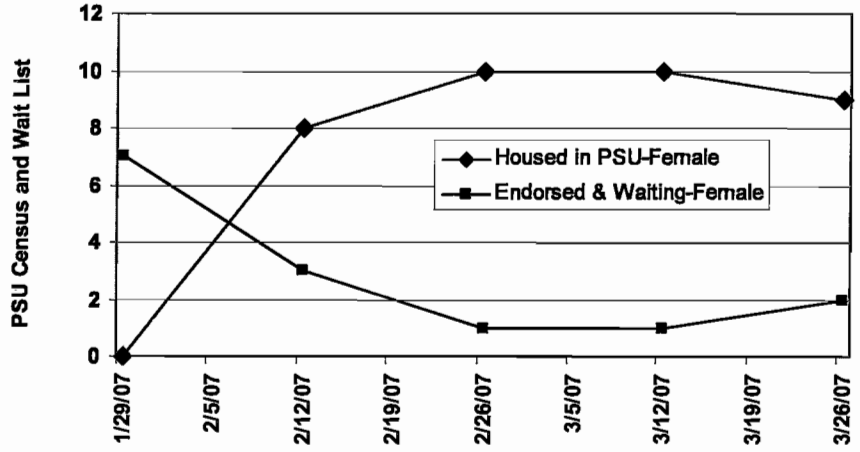
Census Rate Trend/Forecast (from June 2006 report)



Source:"adseg-eop-2006-3.xls" as updated by HCPU

PSU Bed Need - Female

Female PSU Census and Wait List January-March 2007



	01/29/07	02/12/07	02/26/07	03/12/07	03/26/07
Housed in PSU-Female	0	8	10	10	9
Endorsed & Waiting-Female	7	3	1	1	2

CDCR established a new PSU program for women which opened in January 2007. No forecast has yet been conducted due to lack of significant trend information, however judging from the early utilization pattern, the current capacity of 10 beds may need to be adjusted upward because a waiting list already exists while the census has already reached 9-10 inmates.

Source:"adseg-eop-2006-3.xls"

CCCMS - Male

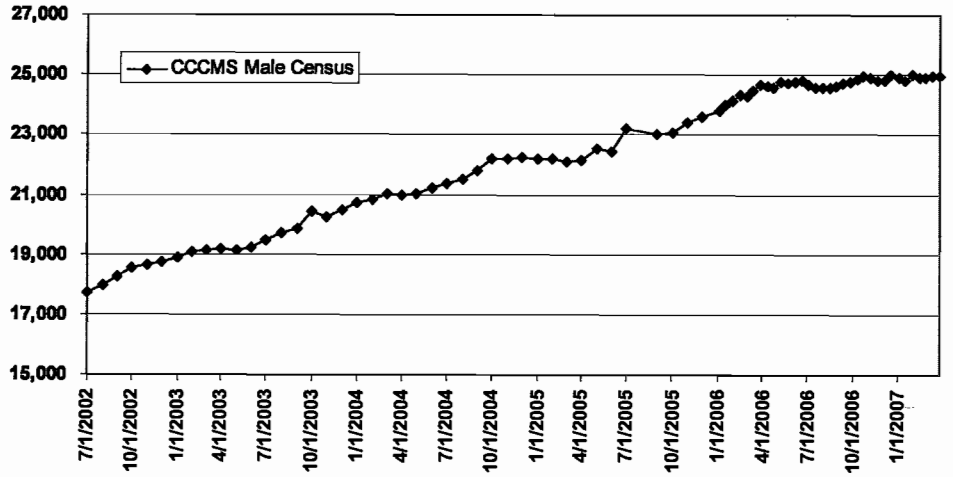
CCCMS - Males	— Actual —						Estimate	— Forecast —				
Fiscal Year	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**150,785**	**148,153**	**150,851**	**152,859**	**153,323**	**160,812**	**163,140**	**165,891**	**168,347**	**170,393**	**172,845**	**175,613**
Census/1,000 males a\	111	116	124	134	144	147	152	162	170	176	180	182
CCCMS Census & Forecast	16,724	17,119	18,712	20,501	22,070	23,575	**24,814**	**26,795**	**28,538**	**29,957**	**31,141**	**32,031**
Census Rate Adj. Factor b/							6.2%	5.0%	3.7%	2.5%	1.2%	0.0%

a/ Source: HCPU Management Information Reports R1-1 through R1-4 for the first downloaded day of each month. FY07 annualized based on 9 months.

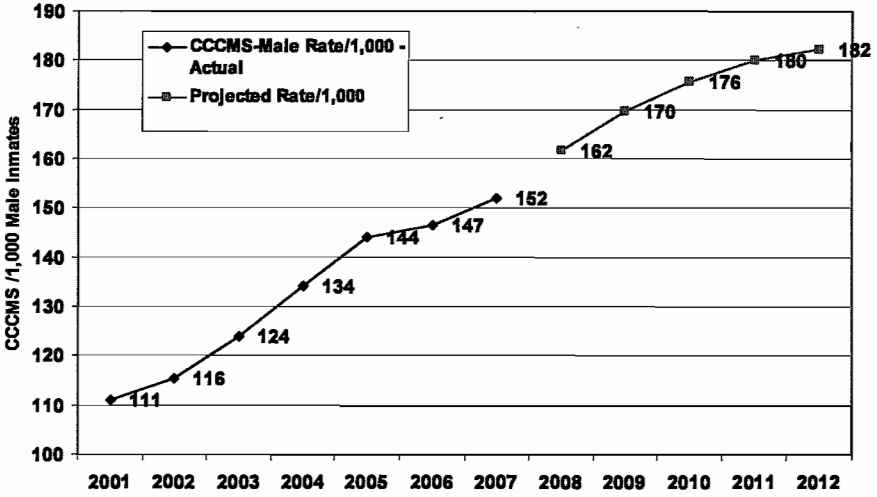
b/ Assumes that census rate will continue to increase but at a decelerating rate to 2012. Based on an increase of 37% and an average annual increase of 6.2% between 2001 and 2007.

June Bed Need Forecast							23,575	26,075	28,224	30,022	31,316	32,129

CCCMS – Male Census Trend



CCCMS – Male Census Rate/1000



Data for first 9 months of FY07 exhibits a moderating growth of CCCMS. The adjustment factor is recalculated and drops slightly (from the June 2006 report) thereby reducing forecasted need in 2011 by 989. The forecast is 3.1% lower than the June 2006 forecast. All of the drop is due to the lower population projections issued in Spring 2007.

Source: cccms-pop-male-2006.xls

CCCMS - Female

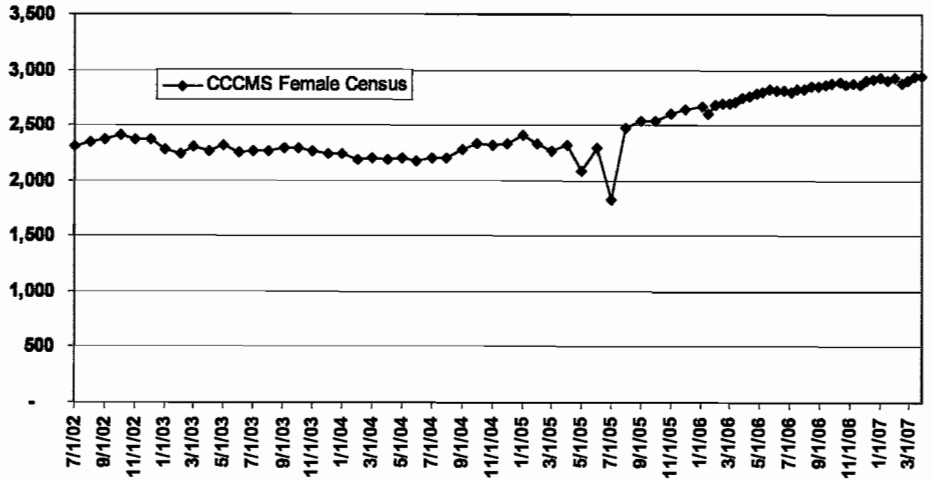
CCCMS - Females	--- Actual ---						Estimated	--- Forecast ---				
Fiscal Year	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Population (Spring 07)	**10,712**	**9,826**	**10,080**	**10,641**	**10,856**	**11,749**	**12,070**	**12,345**	**12,634**	**12,907**	**13,303**	**13,563**
Census /1,000 Females **a/**	197	223	230	210	210	220	239	246	251	255	257	257
CCCMS Census & Forecast	2,105	2,194	2,322	2,237	2,283	2,587	**2,885**	**3,035**	**3,174**	**3,289**	**3,414**	**3,481**
Census Rate Adj. Factor **b/**							3.6%	2.9%	2.2%	1.4%	0.7%	0.0%

a/ Source: HCPU Management Information Reports R1-1 through R1-4 for the first downloaded day of each month. Starting in FY07, data was captured every 2 weeks. FY07 was based on 9 months.

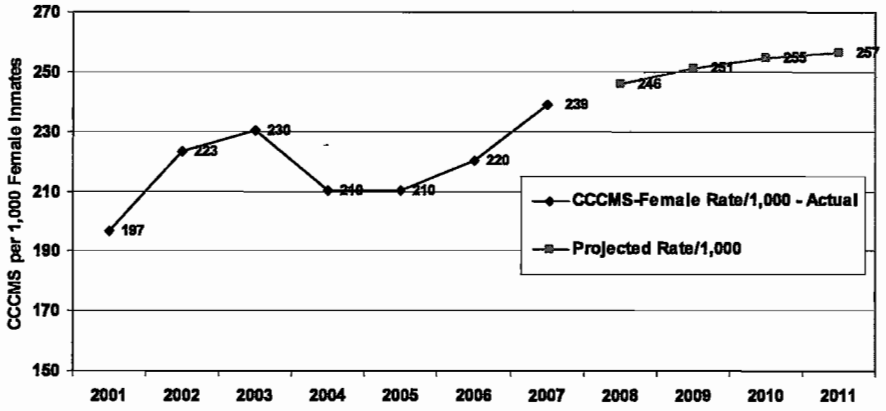
b/ Assumes that census rate will continue to increase but at a decelerating rate to 2012. Based on an increase of 22% between 2001 and 2007.

June Bed Need Forecast							2,587	2,742	2,887	3,061	3,199	3,265

CCCMS Female Census Trend



Census Rate Trend/Forecast



Historical data show an increasing trend. The estimated FY07 census in 2011 is about 4.6% higher then the June forecast. However there is a higher utilization <u>rate</u> of about 11% over the June 2006 forecast.

Source: cccms-pop-female-2006.xls

Appendix

Modeling using Census Rate vs. Discharge Rate Methods

Discharge Rate/ALOS Method

- A population-based model (rate x population = volume projection)
- Requires discharge data (usually available at the record level) from DMH or CADDIS.
- Rate calculation: Discharges for a period (e.g. year) per 1,000 population in that year.
- Average Length of Stay – total discharge days (i.e. sum of discharge date – admission date) / total discharges for a year.
- Calculations: (POP x Disch Rate/ 1000) x ALOS = patient days. Patient day projection / 365 = ADC. ADC/ occupancy standard (90% or 95%) = Bed need.
- Advantages: allows for more assumptions –
  - Increasing discharge rate may imply greater morbidity in the population. Steady discharge rate implies that incidence may have leveled off.
  - Average length of stay can be trended and modeled to increase/decrease or remain constant. ALOS effected by
    - Case management
    - New drugs/ technology reducing need for long stay
- Disadvantages: data systems trail changes in facility program composition. More than one program type (e.g. crisis and acute) can be reported without distinction of flagging.

Census Rate Method

- Also a population-based model (rate x population = volume projection)
- This method requires periodic (daily, weekly, bi-monthly, etc) census counts by program from HCPU.
- Rate calculation: Average of periodic (daily/monthly) census for the year / population.
- Calculations: (POP x Census Rate/ 1000) = patient days. Patient day projection / 365 = ADC. ADC/ occupancy standard (90% or 95%) = Bed need.
- Advantages:
  - Simpler, easy to calculate
  - Can be run using data that is available more consistently

Abbreviations used in report

- ADC – Average Daily Census
- AdSeg or ASU – Administrative segregation unit
- ALOS – Average Length of Stay
- ASH - Atascadero State Hospital
- CADDIS - Census And Discharge Data Information System
- CCCMS - Correctional Clinical Case Management System
- CCWF – California Correctional Women's Facility
- CDCR – California Department of Corrections and Rehabilitation
- CIW – California Institute for Women
- CMF-APP - California Medical Facility – Acute Psychiatric Program
- CMF-DTP - California Medical Facility – Day Treatment Program
- CMF-IC - California Medical Facility – Intermediate Care Program
- CTC – Correctional Treatment Center
- DMH - Department of Mental Health
- EOP – Enhanced Outpatient Program
- FY – Fiscal Year – the convention used here indicates the fiscal year ending e.g. FY06 ends June 30, 2006.
- GP – General Population
- HCCUP – Health Care Cost and Utilization Program
- HCPU - Health Care Placement Unit
- MHCB – Mental Health Crisis Beds
- MH-OHU – Mental Health Outpatient Housing Unit
- OHU – Outpatient Housing Unit
- PSU – Psychiatric Services Unit
- SAC – California State Prison - Sacramento
- SVPP - Salinas Valley Psychiatric Program
- UNA – Unmet Needs Assessment

Comparison of new 2011 Bed Need Forecasts – vs. June 2006

The forecasts produced for the June 2006 report are compared to the new forecasts in this report that uses the Spring 2007 population projections. *(The forecast is considered "stable" if the difference between the older and newer versions is +/- 1%). The Fall 2006 update is provided for information.*

Program	Higher/ Lower	2011 (Spring 07) Update 7/07	2011 (Fall 06 Update (3/07)	2011 Forecast (June 2006 report)	2011 Spring 07 Update - minus June 2006	Variance (Spring 2007 update - June 2006)	Comment
Males							
Acute	Lower	192	219	229	(37)	-16.3%	Fall 2006 forecast recommended
Intermediate	Higher	603	554	533	70	13.1%	Census Rate Method recommended/compared
MHCB	Higher	325	303	265	60	22.6%	Census Rate ver #2 recommended. June forecast underestimated due to crisis patients at CMF-APP
EOP - GP	Lower	3,626	3,755	4,175	(549)	-13.2%	
EOP ASU	Lower	629	611	675	(46)	-6.8%	
PSU	Stable	402	402	401	1	0.3%	
CCCMS	Lower	31,141	31,092	32,129	(988)	-3.1%	
Females							
Acute/Intermediate	Lower	33	31	39	(7)	-16.6%	
MHCB	Lower	15	13	22	(7)	-30.6%	Census Rate Method recommended/compared
EOP - GP	Higher	323	307	262	61	23.4%	
EOP ASU	Higher	27	27	22	5	22.1%	
CCCMS	Higher	3,414	3,233	3,265	149	4.6%	

When there are more than one method used in the program forecast, the value used above is the "recommended" method. This recommended method is then compared to the analogous method from June 2006. Intermediate bed need excludes beds needed for 1370 inmates (31). They were excluded for comparability purposes only.

Summary of Program Supply And Bed Need

Program	Current as of 7/13/07 except male ICF (6/29/07)	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
Acute Male Bed Need (March Forecast recommended)	**194**	**202**	**209**	**215**	**219**	**222**
Acute Supply/Planned	**130**	150	150	150	240	240
Bed Surplus/<Deficit>	(64)	(52)	(59)	(65)	21	18
Intermediate Male Bed Need Total (includes 1370 beds)	**510**	**541**	**567**	**588**	**603**	**611**
Intermediate Supply/Planned	**614**	616	680	680	626	626
Bed Surplus/<Deficit>	104	75	113	92	23	15
Intermediate Male Celled Housing	**236**	**258**	**278**	**293**	**303**	**307**
Intermediate celled housing Supply/Planned	**207**	209	273	273	312	312
Bed Surplus/<Deficit>	(29)	(49)	(5)	(20)	9	5
Acute & Intermediate Women Bed Need	**30**	**30**	**31**	**32**	**33**	**33**
Acute & Intermediate Women (Patton) Supply/Planned	**30**	30	30	30	42	42
Bed Surplus/<Deficit>	0	(0)	(1)	(2)	9	9
MHCB Bed Need - Method #2 (Recommended)	**269**	**288**	**304**	**316**	**325**	**330**
MHCB - Male Supply/Planned	**284**	319	319	351	342	342
Bed Surplus/<Deficit>	15	31	15	35	17	12
MHCB Female Bed Need - Method #1 (Recommended)	**14**	**14**	**14**	**15**	**15**	**16**
MHCB - Female Supply/Planned	**22**	22 ~~38~~	22 ~~38~~	22 ~~38~~	22 ~~42~~	25 ~~42~~
Bed Surplus/<Deficit>	8	8 ~~16~~	8 ~~16~~	7 ~~15~~	7 ~~27~~	9 ~~26~~
EOP GP - Male Bed Need	**3,313**	**3,413**	**3,497**	**3,563**	**3,626**	**3,684**
EOP GP - Male Supply/Planned	**3,043**	3,043	3,043	3,043	4,488	4,488
Bed Surplus/<Deficit>	(270)	(370)	(454)	(520)	862	804
EOP ASU - Male Bed Need	**533**	**566**	**593**	**614**	**629**	**639**
EOP ASU - Male Supply/Planned	**524**	524	524	524	752	752
Bed Surplus/<Deficit>	(9)	(42)	(69)	(90)	123	113
PSU- Male Bed Need	**341**	**362**	**379**	**392**	**402**	**409**
PSU- Male Supply/Planned	**320**	320	320	320	448	448
Bed Surplus/<Deficit>	(21)	(42)	(59)	(72)	46	39
EOP GP - Female Bed Need	**241**	**267**	**289**	**308**	**323**	**336**
EOP GP - Female Supply/Planned	**129**	129	129	129	297	297
Bed Surplus/<Deficit>	(112)	(138)	(160)	(179)	(26)	(39)
EOP ASU - Female Bed Need	**22**	**24**	**25**	**26**	**27**	**27**
EOP ASU - Female Supply/Planned	**9**	9	9	9	24	24
Bed Surplus/<Deficit>	(13)	(15)	(16)	(17)	(3)	(3)
PSU- Female - Bed Need	New Program - to be determined					
PSU- Female Supply/Planned	**10**	10	10	10	10	10
Male CCCMS	24,814	26,795	28,538	29,957	31,141	32,031
Female CCCMS	2,885	3,035	3,174	3,289	3,414	3,481

Note: Changes to the original forecast (due to typographical errors) are limited to these two rows with original text to be removed indicated in strikeout, and new text to the left of the original text.

Note: The Acute Male bed need forecast shown on the chart retains the March 2007 study values. Considering the recent shifting of capacity from acute to crisis beds, and the possible mix of patients between these levels of care, the current utilization mix was considered too volatile to uses as the base of a 5 year forecast.

Source: Navigant Mental Health Bed Need Model Update using Fall 2006 population and CDCR summary using December 2006 bed plan. Red font in the "Current" column indicates current capacities.

APPENDIX 3

IN THE UNITED STATES DISTRICT COURTS

FOR THE EASTERN DISTRICT OF CALIFORNIA

AND THE NORTHERN DISTRICT OF CALIFORNIA

RALPH COLEMAN, et al.,

Plaintiffs, No. CIV S-90-0520 LKK JFM P (E.D.Cal.)

vs.

ARNOLD SCHWARZENEGGER, et al.,

Defendants.

_____/

MARCIANO PLATA, et al.,

Plaintiffs, No. C 01-1351 TEH (N.D.Cal.)

vs.

ARNOLD SCHWARZENEGGER, et al.,

Defendants.

_____/

CARLOS PEREZ, et al.,

Plaintiffs, No. C 05-05241 JSW (N.D.Cal.)

vs.

JAMES TILTON, et al.,

Defendants.

_____/

JOHN ARMSTRONG, et al.,

Plaintiffs,

v.

ARNOLD SCHWARZENEGGER, et al.,

Defendants.

/

No. C 94-2307 CW (N.D.Cal.)

ORDER TO SHOW CAUSE

The Receiver in Plata, the Special Master in Coleman, and the Court Representatives in Perez and Armstrong have presented to the judges in the above-captioned cases an agreement that they have reached during the coordination meetings that they have held to date. The agreement, which is attached to this order, is presented to the undersigned for review and approval.

Good cause appearing, IT IS HEREBY ORDERED that the parties in the above-captioned cases are granted until November 26, 2007 to show cause why the attached agreement should not be adopted as an order of the court. Any response to this order to show cause shall be filed in each of the above-captioned cases and served on all of the parties to all of the cases and on the Receiver, the Special Master, and the Court Representatives. Thereafter, the request for

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approval of the agreement will be taken under submission for individual and joint consideration by the undersigned.

DATED: 11/13/07

LAWRENCE K. KARLTON
SENIOR JUDGE
UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA

DATED: 11/13/07

THELTON E. HENDERSON
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF CALIFORNIA

DATED: 11/13/07

JEFFREY S. WHITE
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF CALIFORNIA

DATED: 11/13/07

CLAUDIA WILKEN
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF CALIFORNIA

CONSTRUCTION

The Receiver in *Plata* has begun to implement three separate but related construction projects:

A. The construction of a medical center at San Quentin State Prison;

B. The addition of needed temporary and permanent clinical, office, supply, and record space at existing California Department of Corrections and Rehabilitation (CDCR) adult prisons; and

C. The construction of approximately 5,000 additional CDCR medical beds and approximately 5,000 CDCR mental heath beds.[1]

The Office of the Receiver will assume leadership responsibility for each of the above referenced projects.

1. San Quentin Medical Center. The *Plata* receivership is the project lead for the San Quentin construction. The Medical Center, which has already been designed and for which construction has commenced, will provide additional reception, clinical, treatment, and office space for CDCR medical, mental health, and dental personnel. Medical Center facilities will be ADA compliant. Court representatives from *Perez* and *Coleman* as well as CDCR mental health and dental officials have been active participants in the design stage for this construction. The State has determined that funding for the San Quentin Medical Center will be provided through Assembly Bill (AB) 900 funds.

2. Additional temporary and permanent clinical, office, supply, and record space at CDCR prisons. The *Plata* receivership is the project lead for the additional medical construction projects at existing CDCR institutions. The Receiver is in the process of implementing his initial prison upgrade project at Avenal State Prison. Court representatives from *Coleman* and *Perez* have participated in this initial effort. The upgrades anticipated will be primarily medical; however the upgrades will conform to *Armstrong* requirements and will consider, when possible, some of the additional space needs of the CDCR mental health and dental programs. In this regard, the Court representatives in *Armstrong*, *Coleman*, and *Perez* agree to work with the Receiver by exploring with CDCR and their respective courts ways to effectuate the funding necessary for their specific programs in a timely and effective manner. This project will *not* involve the construction of the additional dental facilities necessary to effectuate the *Perez* roll-outs.

3. The construction of approximately 5,000 additional CDCR medical beds and approximately 5,000 CDCR mental heath beds. The *Plata* receivership is the project lead for the 5,000/10,000 bed construction project. URS Corporation, Bovis Lend Lease, Brookwood Program Management, Lee Burkhard Liu, and Robert Glass & Associates will serve as the Receiver's Project Coordinator for 5,000/10,000 bed construction. The initial planning for design, site selection, and patient demographics will commence during August 2007.

Based on an initial review of the patient demographics by the Abt study, the Receiver anticipates that the majority of medical beds constructed will not be licensed. Given the significant need to

[1] The actual number of medical and mental health beds to be constructed by the Receiver will depend upon site selection, contingency issues, determinations concerning what year to build out to, as well as possible coordination of construction with CDCR's AB 900 building projects.

coordinate the long-term treatment and care of mentally ill patients who also have serious medical problems, there exist both strong patient care and fiscal incentives to plan, design, and construct health care facilities that will effectuate coordinated medical and mental health treatment. Therefore, participation by *Coleman* representatives in this construction program is imperative. Likewise, the special needs of disabled and elderly prisoner/patients, who represent a significant number of patients who require improved housing, warrant participation by an expert in accessibility for persons with disabilities. The Court expert in *Armstrong* and the Receiver in *Plata* mutually selected such an expert who will be added to the program and who will communicate with both the *Armstrong* court expert and the Receiver about his recommendations. The new facilities will be designed and built to be in full compliance with applicable ADA requirements for both staff and inmates, including applicable accessibility provisions of the ADA Accessibility Guidelines, the Uniform Federal Accessibility Standards, and California Code of Regulations, Title 24, Part 2, California Building Code (CBC). The Receiver also intends to construct adequate dental clinics and other necessary dental program space in order to provide Perez standards of care for the prisoner/patients housed in the 5,000/10,000 bed facilities. Therefore, participation by a *Perez* representative will be necessary to coordinate dental construction design and planning. In this regard, the Court representatives in *Armstrong, Coleman,* and *Perez* agree to work with the Receiver by exploring with CDCR and their respective courts ways to effectuate the funding necessary for their specific programs in a timely and effective manner.

This project will *not* involve the construction of the additional dental facilities necessary to effectuate the *Perez* roll-outs.

The State has determined that funding for an 8,000-beds construction project will be provided through AB 900 funds. The *Coleman* Special Master and the *Plata* Receiver have indicated that up to 10,000 beds may be necessary. Whether the projected funding is adequate for the necessary construction will be determined by the Receiver after site selection issues, coordination issues, and design issues are resolved.