

# Time Served Overview for 2012

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## INTRODUCTION

Measuring time served and estimating its value for an inmate is no mean task; yet how long an inmate spends with Massachusetts Department of Correction jurisdiction is an important measure for both planning and programming reasons. Two primary ways of measuring this value are the numerical time served (how long an inmate resided in DOC jurisdiction) and percent of time served (what percentage of an inmate's maximum sentence was he or she incarcerated). Time served is also useful in looking at pre-trial detainees and civil commitments in order to best plan for their stays within DOC custody.

Time served is calculated by adding together an inmate's jail credits and their length of stay. To clarify, each are defined as:

**Jail credits** are days of credit for time served awaiting trial. The DOC does not award or take away jail credits; pre-trial confinement is determined by the courts.

**Length of stay** is the total number of days an inmate is incarcerated on the same DOC commitment number within the DOC jurisdiction population; the total number of days may include time from multiple admission and releases on that same commitment number.

**Time Served** is defined as the sum of an inmate's total length of stay on the same commitment number within the DOC jurisdiction population including jail credit days.

## EXECUTIVE SUMMARY

This report is the first of several relevant to "time served" to best inform policy and practice. Traditional "averaging" has not been used due to the distortion of outliers with extreme lengths of stay that skews averages. Subgroups of inmates are addressed herein separately having significant differences between the groups, such as state vs. county, males vs. females and criminal vs. civil vs. pretrial status. Based on 9,768 releases from the DOC in CY2012, with 3,091 criminally sentenced, 2,659 civilly committed and 4,018 pretrial detainees, 6110 were male and 3,659 were female.<sup>a</sup>

- Estimated time served for the 2,403 male state sentenced inmates was 1,301 days or about 3.7 years;
- Estimated time served for the 124 female state sentenced inmates was 981 days or about 2.7 years;
- Estimated time served for the 564 female county sentenced inmates was 142 days or 4.7 months;
- Criminally sentenced male violent (sex or person) offenders served more time than those with non-violent (drug, property or other) offenses; whereas female state sentenced inmates with non-violent offenses served 43.6% more time than their violent counterparts;
- Overall, inmates served approximately 87% of their maximum sentence, with drug offenders serving the smallest portion of their maximum sentences compared to other offense types;
- Additional variables including race/ethnicity and age are examined herein

Preliminary results of forthcoming analyses indicate total time served by state inmates has been declining over at least the last four years, with implications this may be attributed to inmates serving drug sentences and females, in general.

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<sup>a</sup> 1,784 Lifers and 147 male county criminally sentenced inmates were excluded from the analyses.

## ANALYSIS

The graphs and tables below represent the Massachusetts Department of Correction release cohort for 2012. Inmates in the cohort were all released from a sentence at the DOC due to expiration of sentence, parole, court release, or payment of fines. This cohort consisted of 9,768 releases, consisting of 3,091 criminally-sentenced inmates, 2,659 civil commitments, and 4,018 pre-trial detainees; also, 6,110 were male and 3,658 were female. None of the 1,784 lifers (including both first- and second-degree lifers) were included in this analysis due to significantly longer stays and differences in sentence structure.

All measures of **inmate time served**, or **percent of time served**, were done using Huber's M-Estimator, a robust, non-parametric, maximum likelihood-type estimation of center. Huber's M-Estimator, the median, or other robust statistic, is preferred to the average when examining time served due to the skewed nature of the variable; the average has a tendency to produce greatly inflated values.

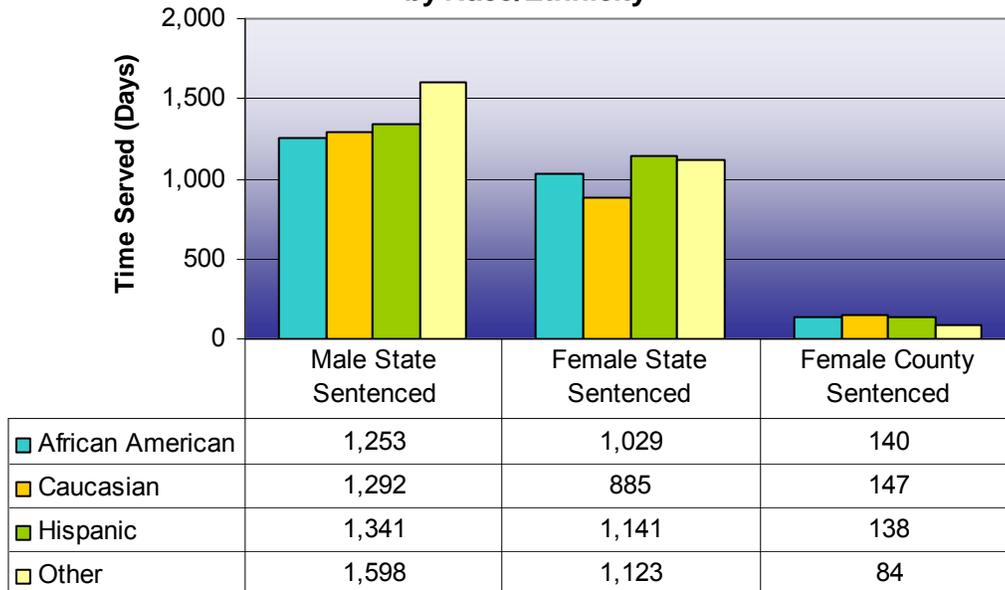
Any **tests of significance** were done using the Mann-Whitney U at a significance level of  $\alpha=0.05$ . The Mann-Whitney U is a robust, non-parametric test which compares the ranking of different variable levels. Any values which appear to be missing are due to small cohort sizes being inadequate to provide reliable results. Note that male county-sentenced inmates were excluded (n = 147) due to small cohort size.

## CRIMINALLY SENTENCED

Overall, male state-sentenced inmates (n= 2,403) had an estimated time served of 1,301 days (@3.7 years), female state-sentenced (n = 124) an estimated time served of 981 days (@2.7 years), and female county-sentenced (n= 564) an estimated time served of 142 days (@4.7 months).

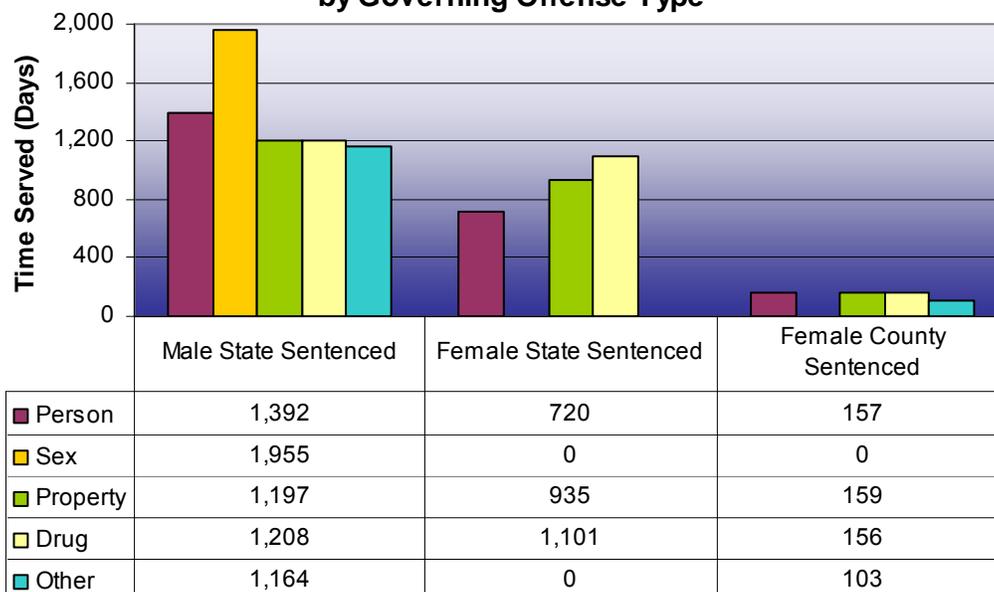
## TIME SERVED

**Graph I: 2012 Criminally Sentenced Time Served by Race/Ethnicity**



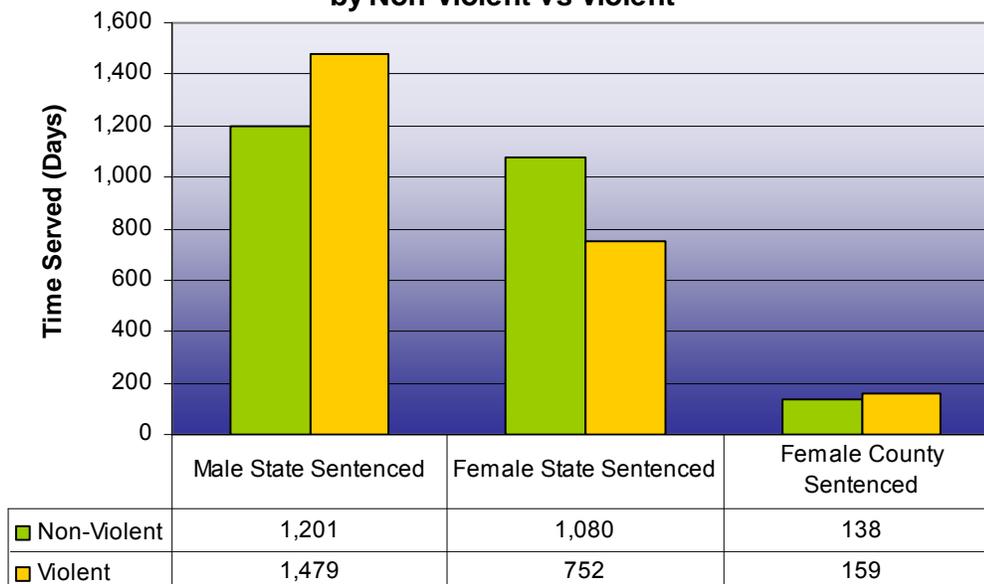
- 'Other' males state-sentenced inmates, which consisted of Asians, Native Americans, and Pacific Islanders, served 19.2% longer than the next longest serving racial group, Hispanics.
- African American male state-sentenced inmates served significantly shorter sentences than every race other than Caucasians.
- Overall, by race, female state-sentenced inmates served 23.5% less time than their male counterparts.

**Graph II: 2012 Criminally Sentenced Time Served  
by Governing Offense Type**



- Male state-sentenced sex offenders served 40.4% longer sentences than person offenders, the next highest governing offense group.
- Female person offenders, served just over half the time of their male counterparts.

**Graph III: 2012 Criminally Sentenced Time Served  
by Non-Violent vs Violent**

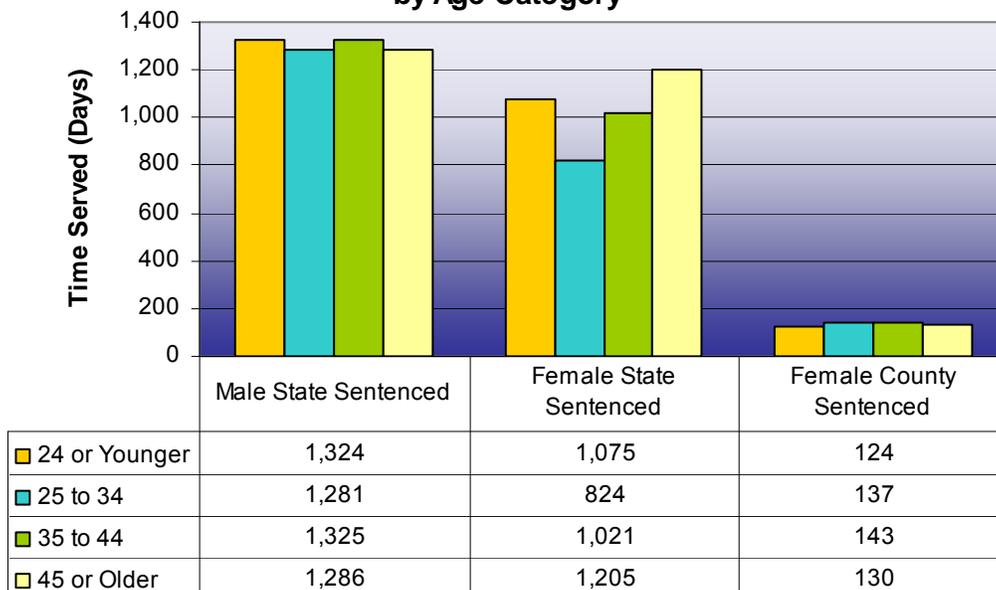


- Male non-violent<sup>a</sup>, state offenders served 11.2% longer sentences than female non-violent state offenders.
- Non-violent, female state offenders served 43.6% longer sentences than their violent<sup>b</sup> offender counterparts.
- Female violent offenders served around half what male violent offenders did.

<sup>a</sup> Non violent offense category includes governing property, drug, or 'other' offenses.

<sup>b</sup> Violent offense category includes governing property of sex offenses.

**Graph IV: 2012 Criminally Sentenced Time Served by Age Category**

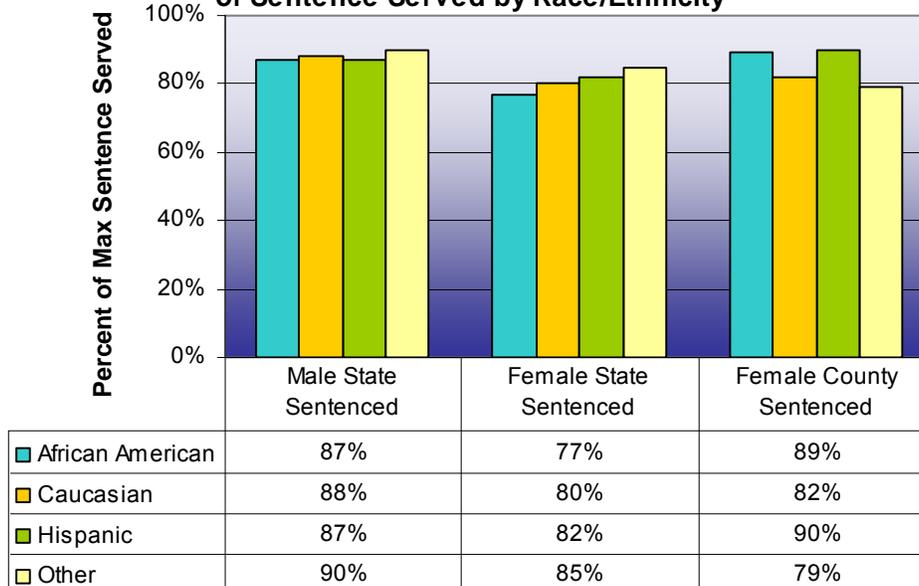


- Female state-sentenced inmates with ages 25-34 served 35.7% less time than male state-sentenced inmates of the same age range.
- Male state-sentenced inmates had similar time served, regardless of age, with the estimated times served ranging from 1,281 to 1,325.

## PERCENT OF TIME SERVED

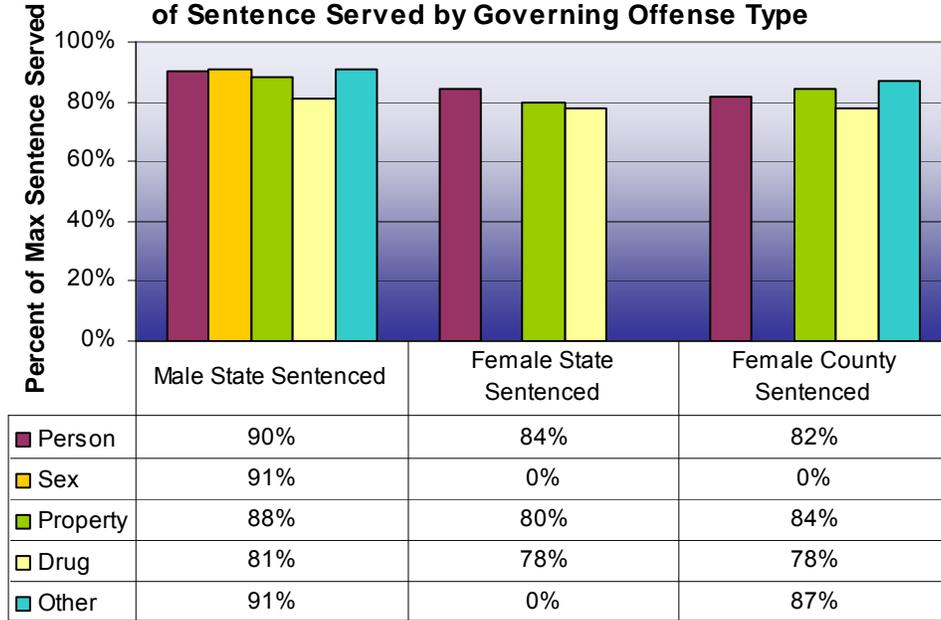
The graphs below look at **estimated percent of maximum governing sentence** served for several different variables, including: race, sentence type, governing offense category, and age category at admission. **Overall, inmates served approximately 87% of their maximum sentence.**

**Graph V: 2012 Criminally Sentenced Percent of Sentence Served by Race/Ethnicity**



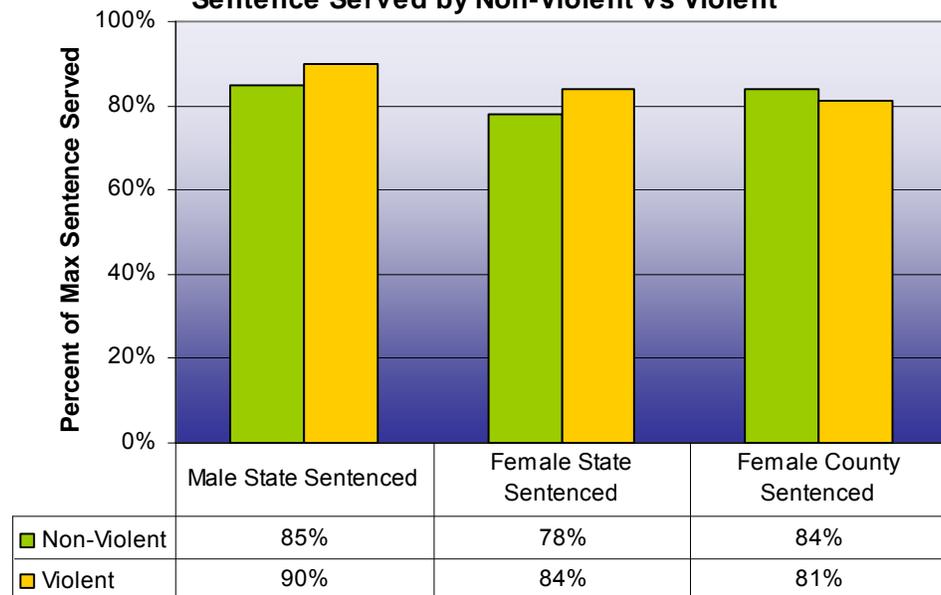
- Compared to female state-sentenced inmates, male state-sentenced inmate served an average of 7% more of their maximum sentence.
- Female county-sentenced inmates served, on average, 4% more of their maximum sentence than female state-sentenced inmates.

**Graph VI: 2012 Criminally Sentenced Percent of Sentence Served by Governing Offense Type**



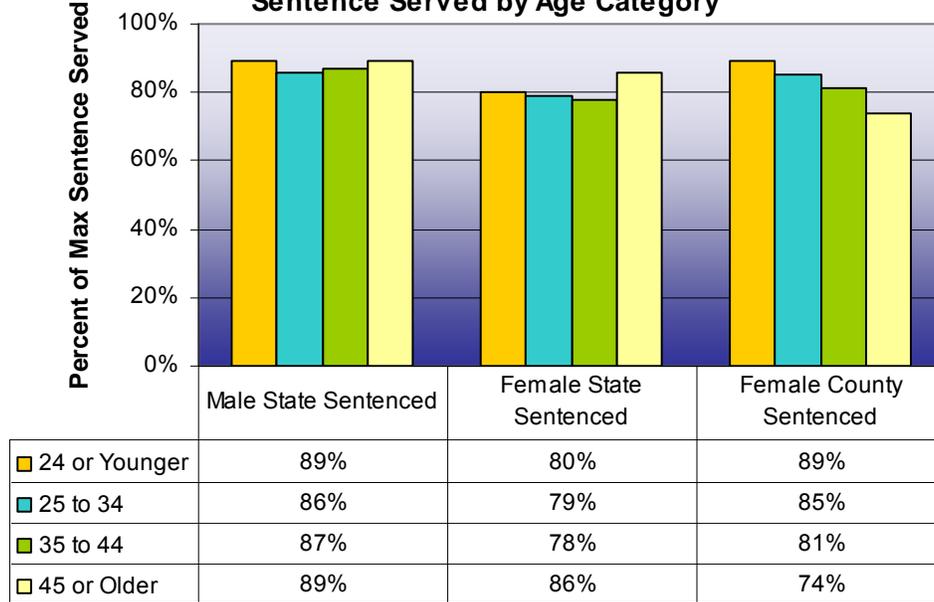
- Male sex and 'other' offenders served the greatest portion of their maximum sentences at 91%.
- Drug offenders served the smallest proportion of their sentences, at 81% for male state-sentenced, and 78% for both state- and county-sentenced females.

**Graph VII: 2012 Criminally Sentenced Percent of Sentence Served by Non-Violent vs Violent**



- Female state-sentenced, violent offenders, despite having shorter time served than non-violent, served a longer proportion of their sentence.
- Female county-sentenced inmates served 3% more of their sentence if non-violent offenders than if violent offenders.

**Graph VIII: 2012 Criminally Sentenced Percent of Sentence Served by Age Category**

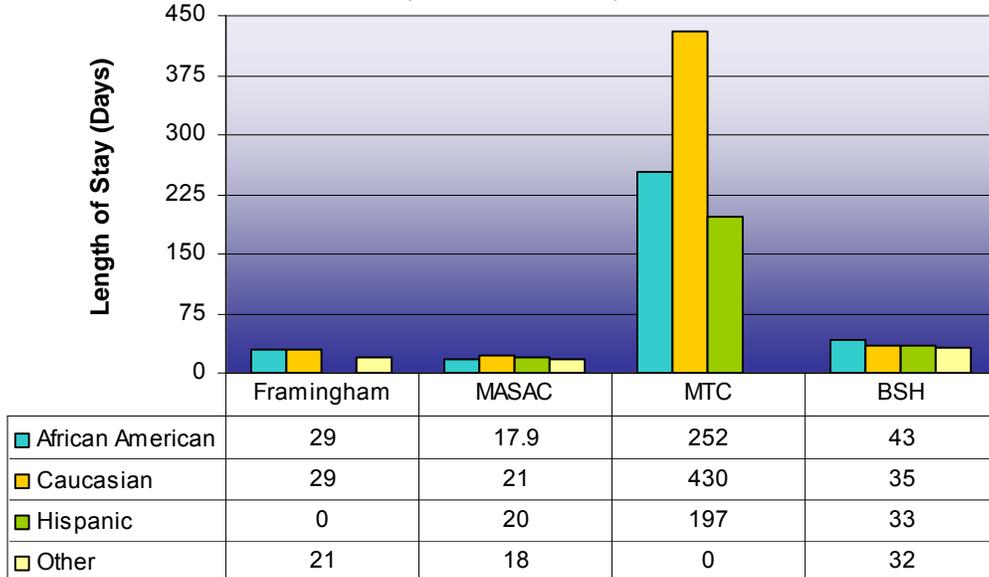


- The oldest (45 or Older) and youngest (24 or Younger) categories for male state-sentenced inmates served slightly greater proportions, 89%, of their sentences than did the middle two categories, at 86% and 87%.
- Female state- and county-sentenced served time differently as their admission ages increased: state offenders served around 79% of their sentence, except for the oldest group, who served 86%; county offenders served less of their sentence as admission ages increased.

**CIVIL COMMITMENTS**

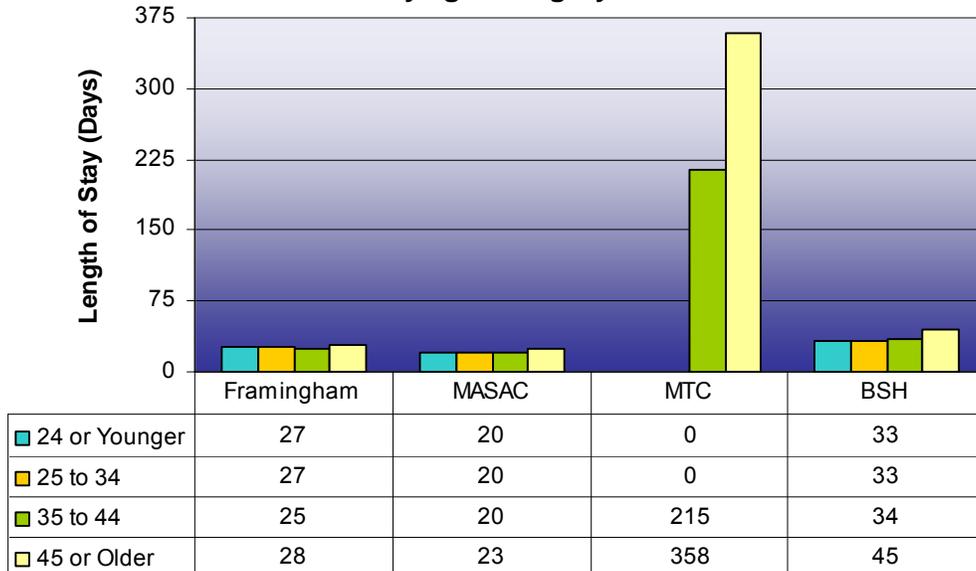
Overall for the 2012 civil commitment release cohort, the estimated length of stay for Framingham (n = 359) was 26 days, for MASAC (n = 1,676) was 21 days, for Massachusetts Treatment Center (n = 68) was 357 days, and for Bridgewater State Hospital (n = 556) was 36 days.

**Graph IX: 2012 Civilly Committed Length of Stay by Race/Ethnicity**



- The release cohorts for Framingham and MASAC did not display any significant differences by race/ethnicity.
- The Massachusetts Treatment Center (MTC) release cohort had longer stays for Caucasian commitments than for other races.
- Bridgewater State Hospital (BSH) showed a significant difference in length of stay between African Americans and all other racial groups.

**Graph X: 2012 Civilly Committed Length of Stay by Age Category**

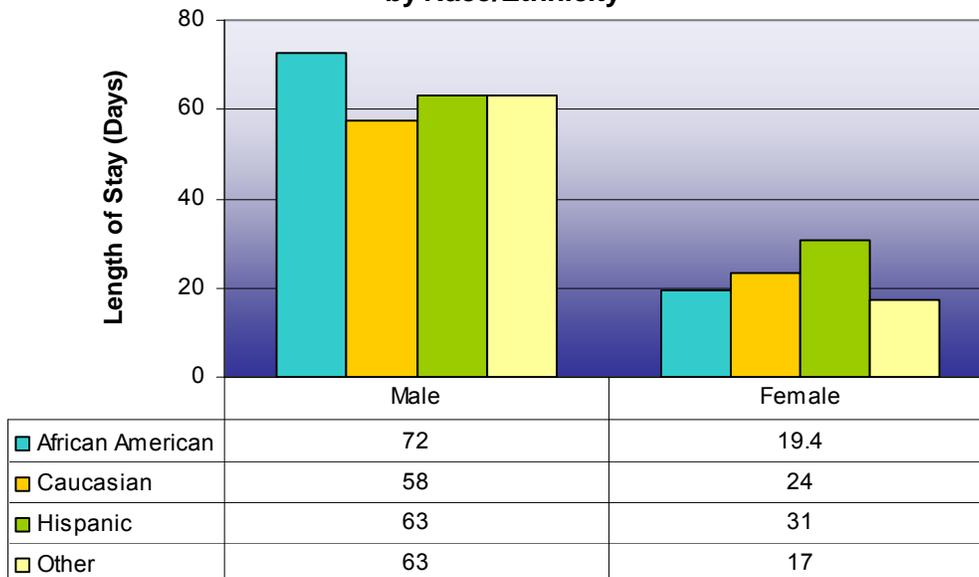


- Bridgewater State Hospital had a significantly longer length of stay for commitments aged 45 and older than for the younger age groups.
- Massachusetts Treatment Center committed population by age category displayed a difference in time served; however due to cohort size this was not considered significant.

## PRE-TRIAL DETAINEES

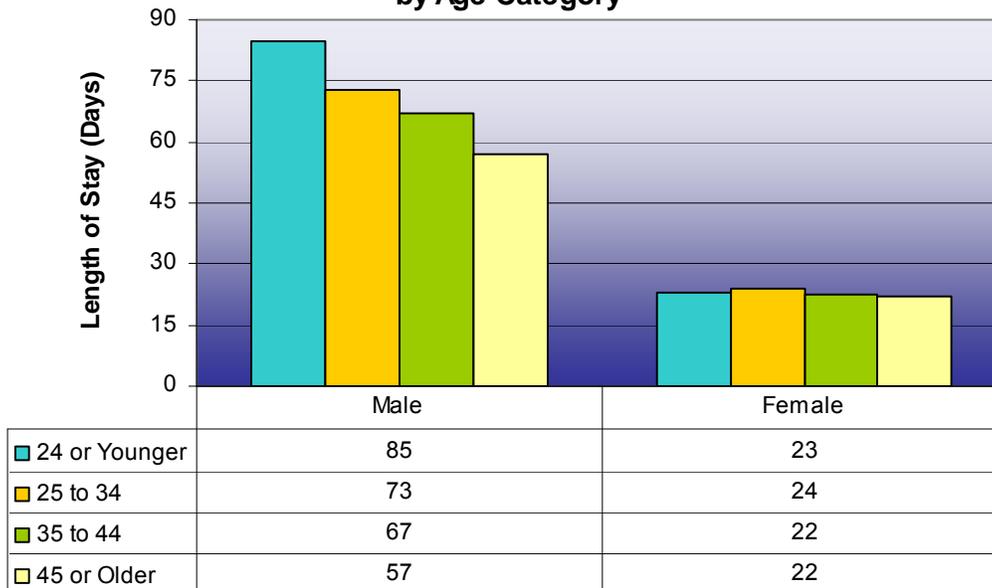
Overall for the 2012 release cohort, the estimated length of stay for male pre-trial detainees (n = 1,407) was 65 days, and for female pre-trial detainees (n = 2,611) was 23 days.

**Graph XI: 2012 Pre-Trial Detainee Length of Stay by Race/Ethnicity**



- Male African American pre-trial detainees stayed significant longer than Caucasians, but not significantly longer than the other racial/ethnic groups.
- While female Hispanic detainees appeared to have long lengths of stay than other races, the difference was not statistically significant.

**Graph XII: 2012 Pre-Trial Detainee Length of Stay by Age Category**



- By age, male pre-trial detainees tended to have shorter stays as they got older.
- Female detainees did not show any differences in length of stay by age category.

**APPENDIX**

**Table I: 2012 Criminally Sentenced Jurisdiction Release Population Estimated Time Served**

		State-sentenced		County-sentenced*	
		Male (n=2,403)	Female (n=124)	Female (n=564)	
<b>Time Served (Days)</b>	Overall Estimated Time Served		1,301	981	142
	Race	African American	1,253	1,029	140
		Caucasian	1,292	885	147
		Hispanic	1,341	1,141	138
		Other	1,598	1,123	84
	Governing Offense Type	Person	1,392	720	157
		Sex	1,955	n/a*	n/a*
		Property	1,197	935	159
		Drug	1,208	1,101	156
		Other	1,164	n/a*	103
Offense Category	Non-Violent	1,201	1,080	138	
	Violent	1,479	752	159	
Age at Admission	24 or Less	1,324	1,075	124	
	25-34	1,281	824	137	
	35-44	1,325	1,021	143	
	45 or More	1,286	1,205	130	
<b>Percent of Max Sentence Served (%)</b>	Overall Percent of Sentence Served		87	81	83
	Race	African American	87	77	89
		Caucasian	88	80	82
		Hispanic	87	82	90
		Other	90	85	79
	Governing Offense Type	Person	90	84	82
		Sex	91	n/a*	n/a*
		Property	88	80	84
		Drug	81	78	78
	Offense Category	Non-Violent	85	78	84
Violent		90	84	81	
Age at Admission	24 or Less	89	80	89	
	25-34	86	79	85	
	35-44	87	78	81	
	45 or More	89	86	74	

Data in this table was gathered and compiled by the MA DOC Research and Planning Division.

\*sample is too small to give a reliable estimate (n<10)

•Male county-sentenced inmates have been excluded due to small cohort size.

**Table III: 2012 Pre-Trial Detainees Release Population Estimated Length of Stay**

		Sex		
		Male (n=1,407)	Female (n=2,611)	
<b>Length of Stay (Days)</b>	Overall Estimated Stay		65	23
	Race	African American	72	19.4
		Caucasian	58	24
		Hispanic	63	31
		Other	63	17
	Age at Admission	24 or Less	85	23
		25-34	73	24
		35-44	67	22
45 or More		57	22	

Data in this table was gathered and compiled by the MA DOC Research and Planning Division.

\*sample is too small to give a reliable estimate (n<10)

**Table II: 2012 Civilly Committed Release Population Estimated Length of Stay**

		Releasing Institution				
		Framingham (n=359)	MASAC n=(1,676)	MTC (n=68)	BSH n=556)	
<b>Length of Stay (Days)</b>	Overall Estimated Stay	26	21	358	36	
	Race	African American	29	17.9	252	43
		Caucasian	29	21	430	35
		Hispanic	n/a*	20	197	33
		Other	21	18	n/a*	32
	Age at Admission	24 or Less	27	20	n/a*	33
		25-34	27	20	n/a*	33
		35-44	25	20	215	34
		45 or More	28	23	358	45

Data in this table was gathered and compiled by the MA DOC Research and Planning Division.

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