

Changing Trends: An Analysis of the Allegheny County Jail Population

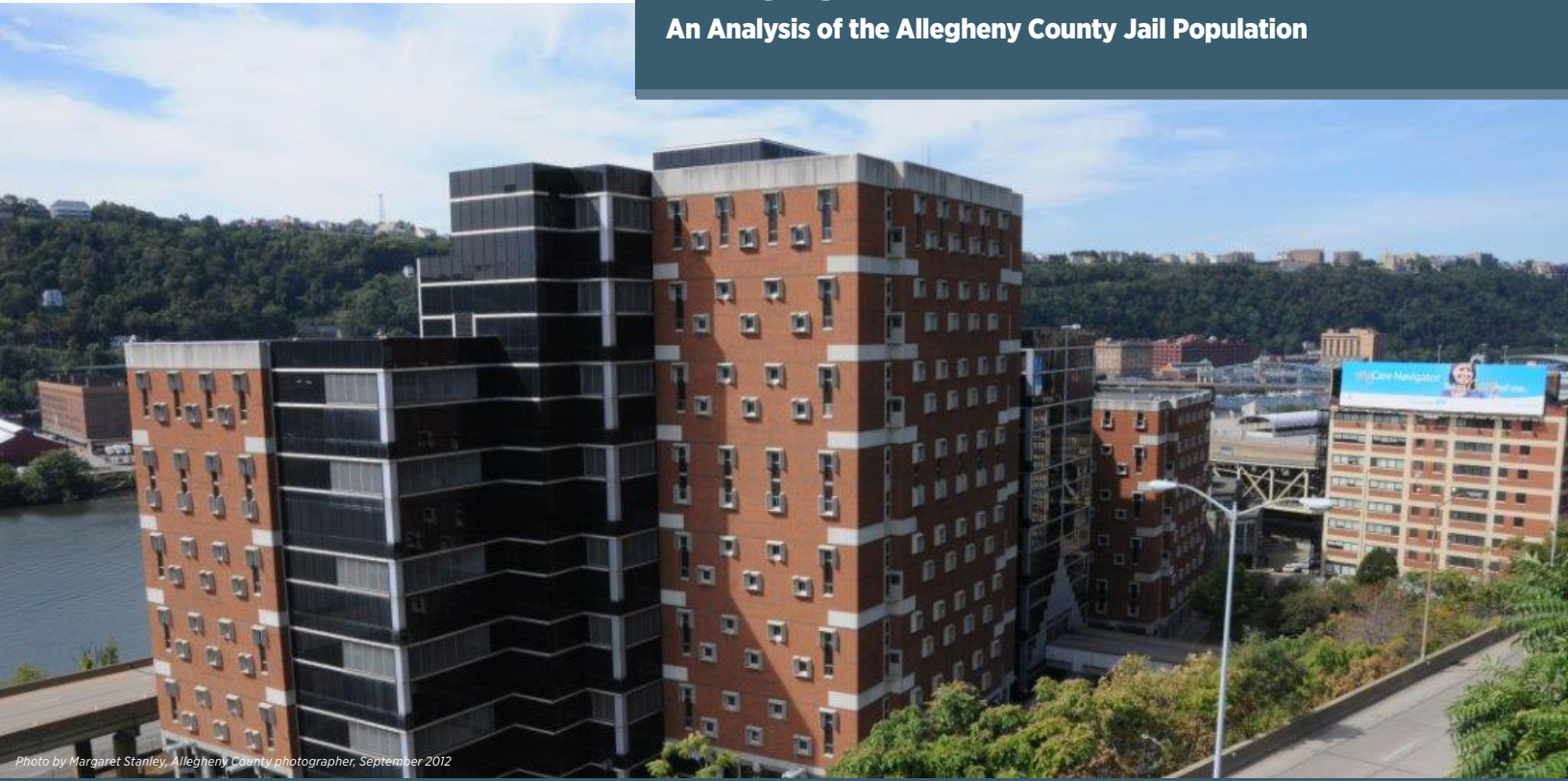


Photo by Margaret Stanley, Allegheny County photographer, September 2012

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September 2014



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The Allegheny County Department of Human Services (DHS) is dedicated to meeting the human services needs of county residents, particularly the county's most vulnerable populations, through an extensive range of prevention, intervention, crisis management and after-care services.

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DHS would like to thank the following individuals for their help in the preparation and review of this report: Claire Capristo, Chris Connors, Janice Dean, Orlando Harper, Tom McCaffrey, Kathy McCauley, Ron Seyko and LaToya Warren.

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ACRONYMS AND DEFINITIONS

Acronyms

ACJ	Allegheny County Jail
DHS	[Allegheny County] Department of Human Services
DUI	Driving Under the Influence [of alcohol or a controlled substance]
LOS	Length of Stay

Definitions

- **Arrest rate** — The number of arrests per 1,000 people in the reference population, calculated by dividing the number of arrests in a jurisdiction by the corresponding population estimates.
- **Booking rate** — The number of bookings per 1,000 people in the reference population, calculated by dividing the number of bookings associated with a certain population group by the corresponding population estimates.
- **Bookings to arrests ratio (BTAR)** — Calculated by dividing the number of bookings by the number of arrests in a jurisdiction within a certain time period; compares the relative size of bookings and arrests.
- **Length of stay (LOS)** — The period of time between admission and release of each booking. (*LOS = release date and time - admission date and time*) LOS is calculated for bookings with release dates. In this analysis, a partial day is counted as one full day.¹
- **Jail-bed days** — Jail-bed days, or bed-days, represent the total utilization of jail beds by a given population.² It can be calculated either by summing LOS for all bookings or by multiplying the number of bookings by average LOS:

$$jail\text{-}bed\ days = LOS_1 + LOS_2 + LOS_3 + \dots + LOS_n \quad (n = total\ number\ of\ jail\ bookings)$$

$$jail\text{-}bed\ days = number\ of\ bookings \times ALOS$$
- **Entry cohort** — All offenders first committed to the jail during a given year.
- **Re-booking** — A booking that takes place after release from the first booking; re-bookings are calculated for entry cohorts.
- **Time to first re-booking** — The time between release from the first booking and occurrence of the second booking.
- **Service exposure time** — The window of time during which we can assess participation in human services.

¹ This computation of length of stay is consistent with a previous Allegheny County Jail bed utilization analysis performed by the National Institute of Corrections, as well as most other jail population analyses, in which offenders who are committed and released on the same day are counted as a stay of one day.

² Basic Jail Population Analysis, Community Resources for Justice, http://www.crj.org/page/-/cjfiles/Jail_Pop_Overview_071311.pdf.

EXECUTIVE SUMMARY

The Allegheny County Jail (ACJ) population is highly transient, with thousands of offenders booked for relatively short times each year. Nevertheless, there have been some changes to this population, and its needs, over time.

Arrests are the principal contributor to the number of bookings over time, but the number of arrests that result in a booking has decreased over time due to changes in judicial procedure regarding arrests for Driving Under the Influence (DUI) and use of a validated risk-assessment instrument to facilitate pre-trial release decisions. These changes appear to be largely responsible for a decrease in bookings, since 2000, by approximately one-third. The decrease has also had some effect on the composition of the booked population. In particular, booking rates for men in their 20s dropped sharply between 2006 (when the changes in judicial procedure occurred) and 2011.

Changes in judicial policy may have also helped reduce re-booking rates, which were at their lowest in 2007, although such rates have increased in recent years. Both booking and re-booking rates were highest for African American men. Nearly half of African American men booked into the ACJ were re-booked within two years of their release.

The average Length of Stay (LOS) in the jail has increased, causing some greater overall use of the jail as measured in jail-bed days. Categorizing bookings into LOS groups reveals that reductions in bookings from 2000 to 2011 were for stays of two days or less. The increase in jail-bed days used was impacted most significantly by an increased number of bookings for stays of one month or greater.

Most ACJ inmates are involved in human services before or after booking, primarily in mental health, drug and alcohol, or child welfare (as a parent) services.

People booked in the ACJ resided, at the time of booking, in relatively few neighborhoods; most city neighborhoods and suburban municipalities have booking rates of fewer than 10 per 1,000 population. Further analysis of those with higher rates may yield some insights for targeting preventive social and criminal justice services.

INTRODUCTION

The Allegheny County Jail (ACJ) provides detention and incarceration for people committed to it by a legal authority. These include people who have been arrested on new charges and are awaiting a preliminary arraignment as well as those who have had their bonds revoked, have been apprehended as fugitives, were sentenced to the jail for offenses, or are awaiting transfer to other corrections facilities.

Each day, scores of people are committed to or released from the jail, with many also moving to and from court hearings or trials. This movement, as well as the typically short stay of jail inmates, distinguishes the county jail from prisons whose inmates serve longer sentences and that take in or release few people on a given day.

Managing such a transient population is a complex operation for programs, services, management and operations. This brief summarizes trends in jail bookings, including human-services involvement of inmates, and some of the implications of these trends. It considers the following trends:

1. Bookings — After a period of sharp increase, bookings dramatically decreased; this reduction is primarily attributable to two significant changes in the criminal justice system described in this report.
2. Inmate demographics — Compared with the county's total population, the jail population is younger and more likely to be male and African American.
3. Length of stay and bed use — These measures have increased even as the number of people booked into the jail has decreased.
3. Re-bookings — Re-bookings are a primary indicator of recidivism and have increased since 2007.
4. Human services involvement — Our analysis indicates a high rate of involvement in behavioral health and child welfare services.
5. Geographic distribution of inmate residence prior to booking — A disproportionate number of inmates resided in relatively few areas of the city and county.

Our sources include ACJ bookings (totals through 2012, demographic characteristics through 2011), Allegheny County Department of Human Services (DHS) data, Pennsylvania Uniform Crime Report data, and U.S. Census data on total populations.

BOOKINGS

A booking occurs when an individual is admitted to the jail and assigned a jail bed. Bookings at the jail tended to increase from 2000 through 2006, but have dropped sharply since then. In 2012, there were 45 average daily bookings at the jail, or less than two-thirds the average number of daily bookings in 2006. **Table 1** presents the number of ACJ bookings from 2000 through 2012.

TABLE 1: ACJ Bookings, 2000 through 2012

YEAR	BOOKINGS	AVERAGE NUMBER OF BOOKINGS PER DAY	% CHANGE IN TOTAL BOOKINGS FROM PREVIOUS YEAR
2000	21,074	57.6	n/a
2001	22,935	62.8	8.8
2002	23,934	65.6	4.4
2003	23,401	64.1	-2.2
2004	23,965	65.5	2.4
2005	25,013	68.5	4.4
2006	25,537	70.0	2.1
2007	24,145	55.2	-5.5
2008	20,373	55.7	-15.6
2009	18,125	49.7	-11.0
2010	17,306	47.4	-4.5
2011	16,436	45.0	-5.0
2012	16,344	44.7	-0.6
Total	278,588	58.7	n/a

We stress that this population is very transient. Indeed, as we later discuss, most prisoners spend relatively few days, not weeks or months, in the ACJ. As a result, the number of annual bookings exceeds, by far, the number of prisoners in the jail at any one time. In recent years, the average population of the jail has fluctuated between 2,900 and 3,100.

The principal contributor to the number of bookings is the number of people arrested each year by law-enforcement agencies. **Figure 1** shows the number of ACJ bookings and the people arrested in the county each year, as well as the booking-to-arrest ratio.³

Although arrests and bookings tend to change together, not all arrests lead to a booking. In recent years, about one in three arrests have led to a booking, which is a decrease from one in two during the early 2000s. Arrests and bookings do not always change concurrently; in 2007 and 2008, the number of bookings decreased 20 percent, while the number of arrests increased 11 percent.

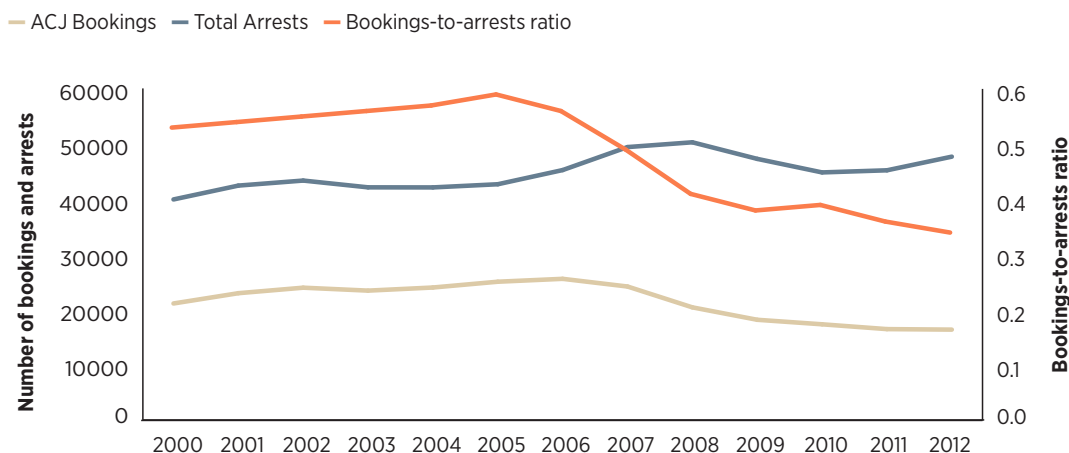
³ Arrest data from Pennsylvania Uniform Crime Reports: <http://www.paucrs.pa.gov/UCR/Reporting/Annual/AnnualSumArrestUI.asp>.

Two changes in criminal-justice policy and procedure may have contributed to the sharp decrease in bookings and, in particular, the number of arrests that resulted in bookings. First, since August 2006, Pennsylvania law has required an arresting officer to promptly release rather than book a defendant if (1) the defendant’s most serious charge is a misdemeanor of the second degree or a misdemeanor of the first degree associated with Driving Under the Influence (DUI) of alcohol or a controlled substance, (2) the defendant poses no threat of immediate physical harm, and (3) the arresting officer has reasonable grounds to believe the defendant will appear as required.⁴ Because all DUI charges (except those related to homicide, aggravated assault or fleeing) are misdemeanors,⁵ this change made it possible for most DUI arrests — whose total numbers for Allegheny County approached 5,000 in some recent years — to be released before trial without a booking. This change also affects arrests and bookings for simple assaults and simple drug crimes.

⁴ See 234 Pa. Code Rule 519, Procedure in Court Cases Initiated by Arrest Without Warrant, as modified and amended through August 1, 2013. <http://www.pacode.com/secure/data/234/chapter5/s519.html>.

⁵ See § 303.15. Crimes Code Listings. <http://www.pacode.com/secure/data/204/chapter303/s303.15.html>.

FIGURE 1: ACJ Bookings and Allegheny County Arrests, 2000 through 2012



Second, in September 2007, the Allegheny County Pretrial Services Office implemented new procedures, including a validated risk-assessment instrument (assessing failure to appear and risk of re-offending at the pre-trial stage), to facilitate pre-trial release decisions. This led to fewer monetary bails and more defendants being offered non-financial releases (e.g., release on own recognizance) without being booked at the ACJ.

INMATE DEMOGRAPHICS

Similar to local jail populations elsewhere in the United States, the local jail population in Allegheny County is distinct from the total population in its age, gender and race characteristics. Specifically, individuals committed to the jail were most often male, disproportionately African American, and ages 18 through 34. **Table 2** presents demographic characteristics of people booked in the jail from 2000 through 2011.

TABLE 2: Demographic Characteristics of ACJ Bookings, 2000 through 2011

	CATEGORIES	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TOTAL
SEX	FEMALE	3,380	3,881	4,168	4,087	4,284	4,281	4,621	4,474	3,855	3,525	3,362	3,197	47,115
		16%	17%	17%	17%	18%	17%	18%	19%	19%	19%	19%	19%	18%
SEX	MALE	17,694	19,054	19,766	19,314	19,681	20,732	20,916	19,671	16,518	14,600	13,944	13,237	215,127
		84%	83%	83%	83%	82%	83%	82%	81%	81%	81%	81%	81%	82%
RACE	WHITE	9,476	10,351	11,364	11,211	11,401	11,990	11,865	10,843	9,007	8,372	8,133	7,874	121,887
		45%	45%	47%	48%	48%	48%	46%	45%	44%	46%	47%	48%	46%
	AFRICAN AMERICAN	11,018	11,960	11,921	11,393	11,954	12,126	12,653	11,758	10,364	9,196	8,727	8,091	131,161
RACE		52%	52%	50%	49%	50%	48%	50%	49%	51%	51%	50%	49%	50%
	OTHER	580	624	649	797	610	897	1,019	1,544	1,002	557	446	471	9,196
RACE		3%	3%	3%	3%	3%	4%	4%	6%	5%	3%	3%	3%	4%
	< 18	99	72	93	127	130	115	113	181	154	140	103	79	1,406
AGE		0.5%	0.3%	0.4%	0.5%	0.5%	0.5%	0.4%	0.7%	0.8%	0.8%	0.6%	0.5%	0.5%
	18-24	5,837	6,699	6,787	7,031	6,919	6,973	6,857	6,228	5,054	4,676	4,484	4,167	71,712
AGE		28%	29%	28%	30%	29%	28%	27%	26%	25%	26%	26%	25%	27%
	25-34	6,468	7,025	7,349	6,988	7,146	7,612	7,856	7,432	6,451	5,737	5,663	5,519	81,246
AGE		31%	31%	31%	30%	30%	30%	31%	31%	32%	32%	33%	34%	31%
	35-44	5,976	6,183	6,382	5,945	6,101	6,312	6,502	5,966	4,843	4,088	3,729	3,427	65,454
AGE		28%	27%	27%	25%	25%	25%	25%	25%	24%	23%	22%	21%	25%
	45-54	2,190	2,425	2,709	2,754	3,054	3,301	3,508	3,550	3,165	2,810	2,602	2,498	34,566
AGE		10%	11%	11%	12%	13%	13%	14%	15%	16%	16%	15%	15%	13%
	55-65	391	429	495	460	523	606	609	681	606	590	631	642	6,663
AGE		2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	4%	3%
	> 65	108	97	110	85	91	93	88	96	99	83	94	104	1,148
AGE		0.5%	0.4%	0.5%	0.4%	0.4%	0.4%	0.3%	0.4%	0.5%	0.5%	0.5%	0.6%	0.4%
	Total	21,074	22,935	23,934	23,401	23,965	25,013	25,537	24,145	20,373	18,125	17,306	16,436	262,244

Overall, men accounted for 82 percent of bookings from 2000 through 2011. Since peaking in 2006, the number of male bookings has decreased by a little more than one-third, while the number of female bookings has decreased by a little less than one-third.

African American offenders accounted for 50 percent of all bookings from 2000 through 2011, and white offenders accounted for 46 percent. Among those of “other race,” nearly nine in 10 were of “unknown” race. Since 2006, when the total number of bookings peaked, the number of bookings has decreased more for African American offenders than for white offenders, while the rate of decrease for other-race bookings has been still more rapid.

Nearly one in three bookings were for offenders ages 25 through 34, and more than one in four were for offenders 18 through 24, with those 35 through 44 also accounting for one in four bookings. Since the total number of bookings peaked in 2006, bookings have decreased most for those ages 35 through 44. Bookings for people at least 55 years old have increased since 2006 but remain low.

Figure 2 illustrates how booking rates vary by age group over time for populations defined by race and gender. Each graph presents booking rates in 2000, 2006 (when bookings peaked) and 2011 (most recent year for which demographic detail is available). Each also has a horizontal line showing the overall booking rate per 1,000 population at least 20 years old for each group in each of the three years.⁶ (Note varying vertical axes for each group.)

⁶ For annual population estimates by sex, race and age, we use two Census Bureau sources. These are

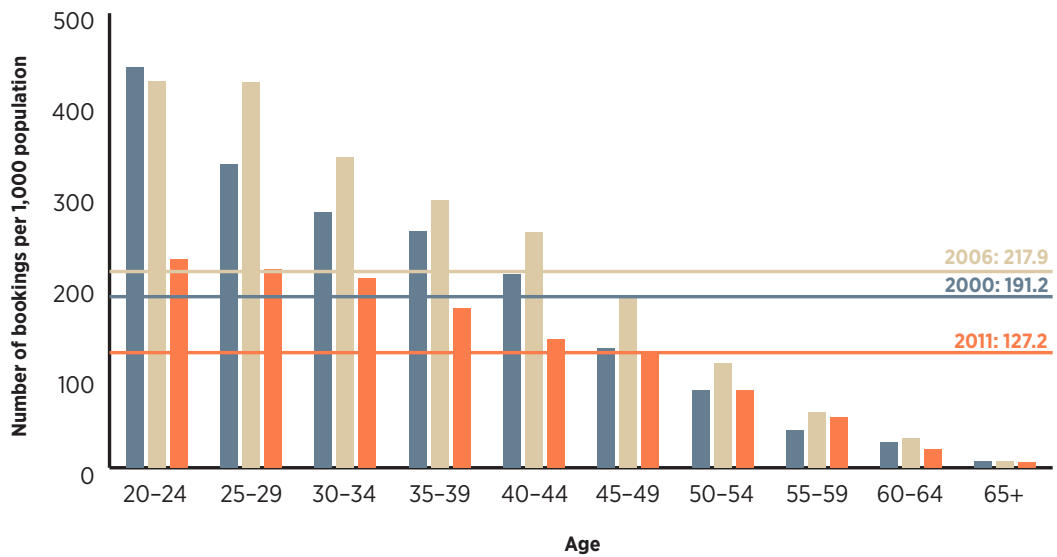
- CO-EST00INT-ALLDATA-[ST]: Intercensal Estimates of the Resident Population by Age, Sex, Race, and Hispanic Origin for Counties: April 1, 2000 to July 1, 2010, <https://www.census.gov/popest/data/intercensal/county/CO-EST00INT-alldata.html>.
- CC-EST2012-ALLDATA-[ST-FIPS]: Annual County Resident Population Estimates by Age, Sex, Race, and Hispanic Origin: April 1, 2010 to July 1, 2012, <https://www.census.gov/popest/data/counties/totals/2011/CO-EST2011-01.html>.

Because these sources use five-year age groups (e.g., 15-to-19 and 20-to-24), and because Allegheny County offenders less than 18 years old are typically detained at juvenile facilities rather than at the ACJ, we focus our analyses of bookings by age on offenders at least 20 years old.

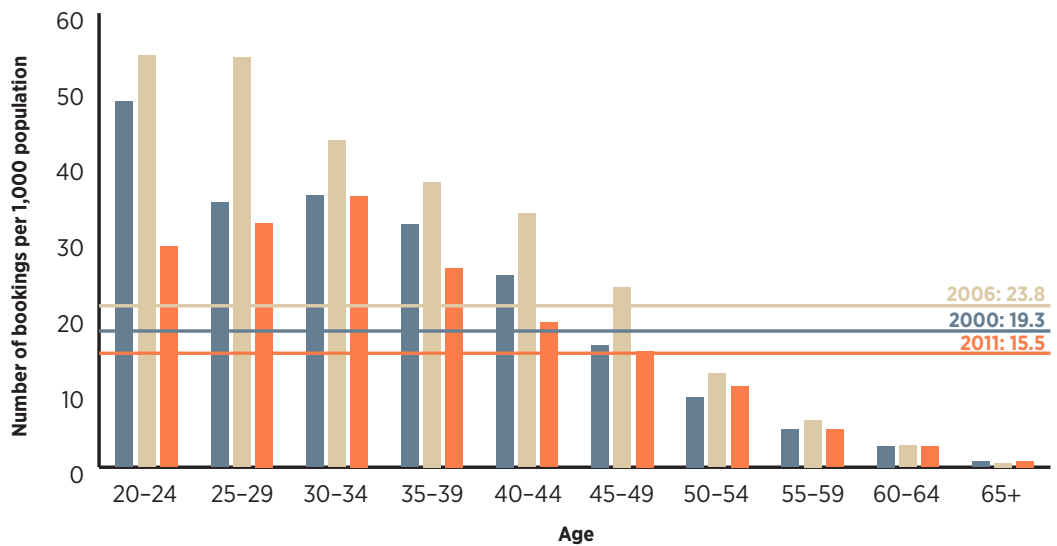
FIGURE 2: Bookings per 1,000 Population by Age Group for Race/Gender Populations, 2000, 2006 and 2011 (note varying axes)

■ 2000 ■ 2006 ■ 2011

African American Males

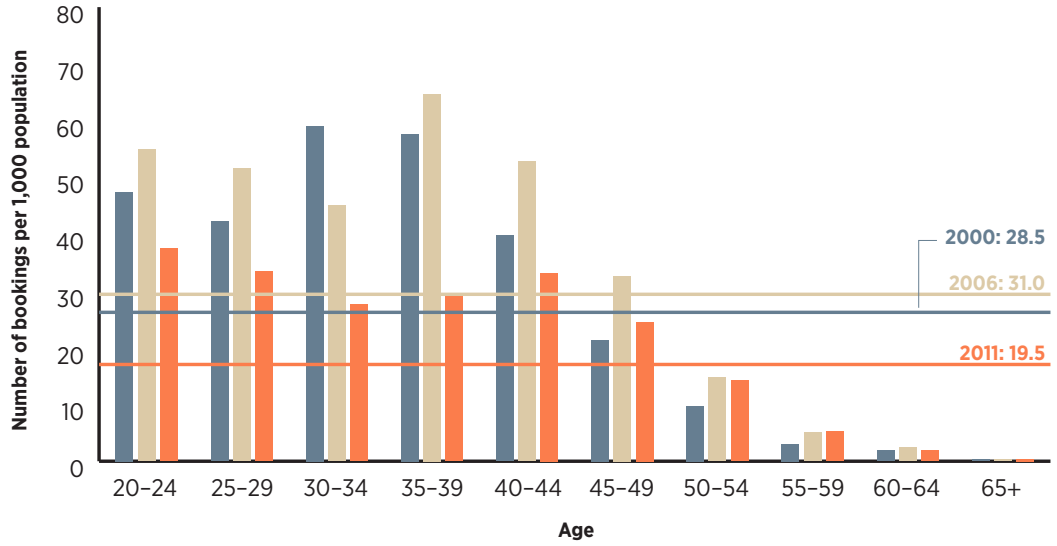


White Males

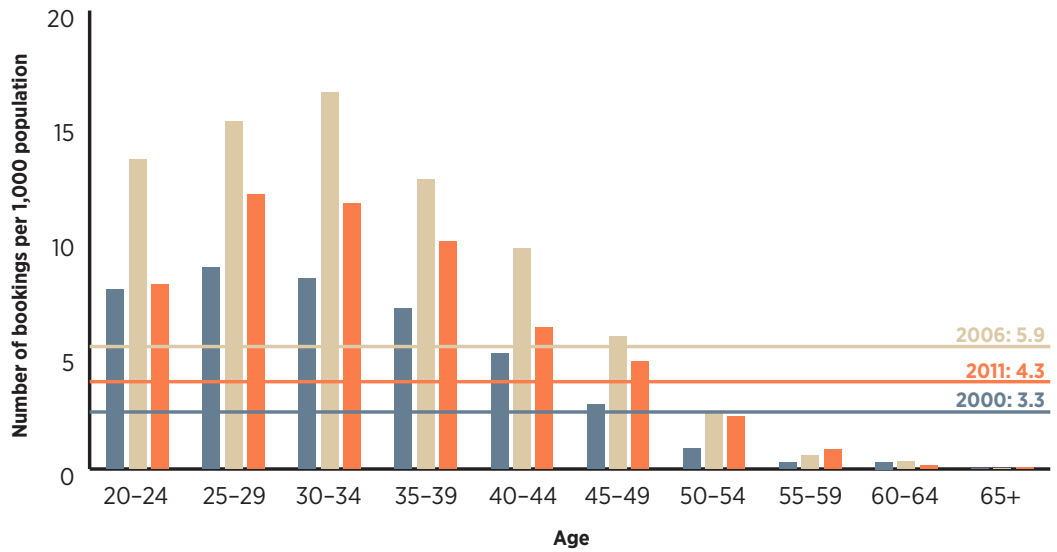


■ 2000 ■ 2006 ■ 2011

African American Females



White Females



African American Males

- **Overall, booking rates are highest for African American men.** Their booking rates are more than six times those for African American females, more than 10 times those for white males, and about 40 times those for white females.
- **Booking rates for African American men ages 20 through 34 have consistently exceeded 200 per 1,000 population;** within that group, the highest rates are for those ages 20 through 24.
- **Between 2000 and 2006, booking rates for African American men 25 through 64 increased nearly one-third.**
- **From 2006 through 2011, rates for all age groups decreased, particularly for younger groups.** The decrease is most likely due to changes in criminal justice system policy.
- **Booking rates dropped nearly 50 percent for African American men ages 20 through 29, 40 percent for those 30 through 49, and 20 percent for those 50 and older.** By 2011, the rate for African American men ages 20 through 24 had dropped to less than twice the rate for all ages (in 2000, the rate was 2.5 times that of all ages).

White Males

- **For white males, booking rates are highest for those in their 20s and early 30s.**
- **Between 2000 and 2006, booking rates increased for white men in most age groups,** especially for those ages 25 through 29.
- **Between 2006 and 2011, booking rates decreased, particularly for white men in their 20s.** By 2011, booking rates were highest for white men ages 30 through 34.

African American Females

- **Booking rates for African American women are highest for those in their 30s and early 40s.**
- **Booking rates for African American women increased for all but one age group from 2000 through 2006, and decreased for all age groups but two from 2006 through 2011.**

White Females

- In contrast to trends identified for all other groups, **booking rates for white women were lowest in 2000.**
- **From 2000 through 2006, their booking rates doubled or nearly doubled for most age groups.**
- For all three comparison years (2000, 2006 and 2011), **booking rates were highest for white women ages 25 through 34.**

LENGTH OF STAY AND BED USE

Number of bookings is a key indicator of the volume of admissions and releases processed by the jail, but to get a full picture of jail use, it is also important to look at jail-bed use, which is a product of bookings and length of stay (LOS) for each booking. For example, if a jail were to book two offenders in a year, one staying 10 days and the other staying 100 days, the resulting total jail-bed use would be 10 days plus 100 days, or 110 days. (Offenders booked and released on the same day use one jail-bed day, so each booking results in at least one jail-bed day used.) Jail-bed days are also the product of the average LOS and the number of (released) bookings for a year — or, as in the example above, an average of 55 days multiplied by two offenders for 110 jail-bed days total.

While the number of bookings has decreased over time, LOS has increased, with jail use (as measured in bed days) increasing in several years as well. **Table 3** shows mean and median length of stay for released bookings from 2000 through 2011, as well as number of total jail-bed days used that year.⁷ From 2000 through 2011, the median LOS increased from three to 10 days, while the average LOS increased roughly from 40 to 60 days.

⁷ We limit our LOS and jail-bed day analyses to released inmates. At the time we extracted data for this analysis, there were 59 inmates booked from 2000 to 2011 who had not been released from the ACJ (one from 2008, two from 2009, 10 from 2010, and 46 from 2011).

TABLE 3: ACJ Median and Mean Length of Stay and Jail-Bed Days, 2000 through 2011

YEAR	RELEASED BOOKINGS	LENGTH OF STAY IN DAYS		JAIL-BED DAYS
		MEDIAN	MEAN	
2000	21,074	3	38.1	803,883
2001	22,985	3	38.6	886,313
2002	23,934	3	38.0	909,508
2003	23,401	4	38.0	888,795
2004	23,965	5	41.9	1,005,045
2005	25,013	6	44.5	1,113,708
2006	25,537	5	46.6	1,190,383
2007	24,145	5	45.6	1,102,186
2008	20,372	7	55.0	1,119,523
2009	18,123	9	61.8	1,119,757
2010	17,296	10	62.8	1,086,239
2011	16,390	10	58.3	955,102

Figures 3 and 4 show another perspective of changing LOS. From 2000 to 2011, the number of bookings released within two days decreased by 70 percent (from 9,841 to 2,883 bookings). By contrast, the number of bookings for all other Length of Stay categories increased. Figure 4 shows that the increase in jail-bed days used was impacted most significantly by bookings remaining in the jail for one to six months and greater than six months. Note that the jail-bed days used for bookings greater than six months in 2011 is an underestimate since 46 offenders were still incarcerated at the time of the analysis. This number will increase but will likely still be less than what was observed for bookings in 2006.

FIGURE 3: Number of Bookings in a Year by Length of Stay

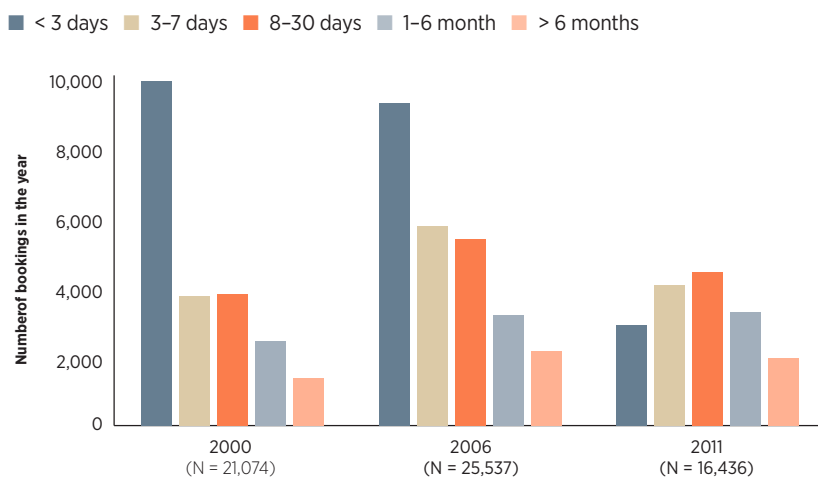
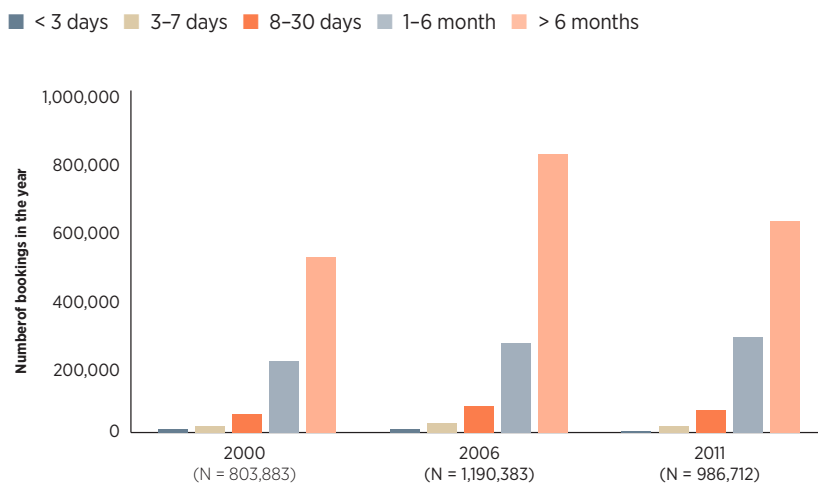


FIGURE 4: Number of Jail-Bed Days in a Year by Length of Stay



Average LOS and the number of jail-bed days used also varied by demographic group.

Table 4 presents average length of stay and jail-bed days used in 2000, 2005 and 2010 by gender, race and age. Altogether, these data show that longer LOS has largely offset the lower number of bookings to result in more than one million jail-bed days used each year.

TABLE 4: Average Length of Stay and Jail-Bed Days Used by Gender, Race and Age: 2000, 2006 and 2011

	MEAN LENGTH OF STAY				JAIL-BED DAYS USED			
	2000	2006	2011	2000-2011	2000	2006	2011	2000-2011
Sex								
Female	26.1	28.7	37.5	29.9	88,377	132,656	119,891	1,408,748
Male	40.4	50.6	65.5	50.3	715,506	1,057,727	866,841	10,819,153
Race								
White	29.8	37.2	53.5	38.2	282,689	441,510	420,876	4,652,545
Black	46.6	57.3	68.8	56.2	512,966	725,035	556,519	7,375,246
Other	14.2	23.4	19.8	21.8	8,228	23,838	9,339	200,112
Age								
<18	112.5	107.0	128.5	112.4	11,699	16,012	12,087	158,030
18-24	37.0	46.3	66.5	47.1	215,830	304,949	317,243	3,379,830
25-34	37.6	45.5	59.1	47.1	243,215	343,115	357,699	3,824,613
35-44	38.0	48.9	56.0	45.9	227,092	280,029	318,024	3,001,581
45-54	40.4	44.9	55.0	44.2	88,442	140,178	157,345	1,526,385
55-65	31.0	39.3	56.6	43.1	12,116	24,762	23,947	287,096
>65	50.8	45.8	75.3	43.4	5,489	4,663	4,032	49,871

Average LOS for males has been consistently longer than that for females, with the difference increasing over time. Yet because females increased their share of bookings, their share of jail-bed days increased as well. African American offenders have had an average LOS greater than that for other groups, resulting in more jail-bed days as well. This is most likely because African American offenders committed offenses of higher grade, although verification of this assumption was outside the scope of this report. People ages 18 through 34 accounted for about three in five jail-bed days. There was little difference in LOS by age except for offenders younger than 18, who had an average LOS of more than 100 days.

Court processing, particularly the timeliness of dispositions and sentencing trends, affects LOS. For the detained pretrial population, LOS depends on how soon the court processed charges. For those sentenced to the jail, length of sentence and parole policies determine LOS. **Table 5** shows admission and release category for ACJ inmates booked and released from 2006 through 2011.

TABLE 5: Distribution of Bookings by Admission and Release Type, 2006 through 2011

ADMISSION CATEGORY	RELEASE CATEGORY							TOTAL
	PRETRIAL RELEASE	COURT-ORDERED RELEASE	SERVED TERM	PROBATION	DETAINER LIFTED	TRANSFER	OTHER	
Pretrial	44,892	16,514	3,828	2,348	—	5,842	2,763	76,187
	37.4%	13.8%	3.2%	2.0%		4.9%	2.3%	63.5%
Sentenced	608	2,552	1,350	1,283	—	1,259	327	7,379
	0.5%	2.1%	1.1%	1.1%		1.0%	0.3%	6.2%
Probation / Parole	160	743	173	506	11,248	666	397	13,893
	0.1%	0.6%	0.1%	0.4%	9.4%	0.6%	0.3%	11.6%
Hold	99	1,690	19	99	382	5,642	83	8,014
	0.1%	1.4%	0.0%	0.1%	0.3%	4.7%	0.1%	6.7%
Other	376	5,381	561	542	376	6,693	524	14,453
	0.3%	4.5%	0.5%	0.5%	0.3%	5.6%	0.4%	12.1%
Total	46,135	26,880	5,931	4,778	12,006	20,102	4,094	119,926
	38.5%	22.4%	4.9%	4.0%	10.0%	16.8%	3.4%	100.0%

About 64 percent of all admissions were pre-trial admissions. Nearly half of these, and one-third of the total, had pre-trial releases as well. In other words, the most common ACJ booking is the result of a new arrest, prior to disposition of the arrest. Of the 44,892 pre-trial admissions and releases, 38,343 releases are through bail, 5,727 are on recognizance, and 822 are to pre-trial electronic monitoring.

About 12 percent of all admissions are through probation or parole. These offenders were detained because of probation or parole violations.

Table 6 presents average LOS for subgroups of individuals in the jail. It shows that arrestees released on bail or recognizance had relatively short stays, with the LOS for those released dropping by half in recent years. Those released on pretrial electronic monitoring also saw their LOS diminish by half, although they had longer stays. LOS for those released by court order also diminished by half during this time.

TABLE 6: Average Length of Stay by Admission and Release Type, 2006 through 2011

ADMISSION TYPE	RELEASE TYPE	COUNT	AVERAGE LOS						TOTAL
			2006	2007	2008	2009	2010	2011	
Pretrial / Warrant	Bail	38,343	7	7	9	9	10	10	8
	Recognizance ⁸	5,727	15	10	11	12	8	8	12
	Pre-Trial Electronic Monitoring ⁹	822	115	74	58	45	33	66	56
	Court-Ordered Release	16,514	95	61	41	38	38	29	49
	Served Term ¹⁰	3,828	78	74	68	79	73	53	71
Sentenced	Served Term	1,350	47	32	43	69	72	76	49
	Probation / Parole	1,283	186	289	106	91	124	105	115
Probation / Parole	All	13,893	91	86	88	107	108	74	92
All	Transfer	20,102	84	85	105	100	87	56	86
All	All	119,926	47	45	54	61	60	47	52

⁸ These are arrestees who failed to post bond initially and were detained at the jail but were later released through recognizance upon modification of bond condition by the court.

⁹ These are usually arrestees who failed to post bond initially and were subsequently detained at the jail but were later released through Pre-Trial Electronic Monitoring upon modification of bond condition by the court. The average LOS for this group is longer because it includes the jail stay prior to the modification of bond condition.

¹⁰ These are offenders who were released temporarily for court hearings and were then found guilty and returned to the jail to serve the sentence.

Among those entering as pre-trial and exiting by having served a sentence term, average LOS decreased by nearly half in recent years. For those admitted directly after sentencing and released by term served, average LOS nearly doubled. Together, these results suggest that the timeliness of court dispositions improved, while average jail sentence increased.

While offenders sentenced to the jail and released to probation or parole had the highest average LOS (115 days), LOS has dropped sharply. For those admitted after probation or parole violations, average LOS was the second-highest, at 92 days, also with a sharp decrease from 2010 through 2011. For the 17 percent that transferred from the ACJ to another facility, average LOS was 86 days, again with a sharp drop from 2010 to 2011.

RE-BOOKINGS

Bookings are not a one-time event for some individuals. Indeed, rates of recidivism have always been a key measure for criminal justice systems. Recidivism is usually measured by re-arrest, re-booking, re-conviction or re-incarceration, depending on how conservatively one defines the new crime. Each measure has its pros and cons. Re-arrest is the broadest indicator, but it includes charges that were dropped or dismissed. Re-incarceration implies that a serious new crime occurred, but it overlooks other crimes that might have also impacted the criminal justice system.

In this analysis of re-bookings to the ACJ, we use entry cohorts, offenders first committed to the jail during a given year, to identify re-bookings for each set of individuals as they move forward in time. As **Table 7** shows, most ACJ bookings are re-bookings. Offenders first committed to the jail during a given year account for only one in four bookings. First-entry bookings dropped from nearly 7,000 in 2007 to just over 5,000 in 2008 and were just over 4,000 from 2009 through 2011.

TABLE 7: Entry Cohort Size Total Bookings, 2000 through 2011

BOOKING YEAR	SIZE OF ENTRY COHORTS	NUMBER OF TOTAL BOOKINGS	% OF BOOKINGS FOR ENTRY COHORT
2000	6,386	21,074	30%
2001	6,737	22,935	29%
2002	7,188	23,934	30%
2003	6,654	23,401	28%
2004	6,298	23,965	26%
2005	6,641	25,013	27%
2006	6,800	25,537	27%
2007	6,846	24,145	28%
2008	5,149	20,373	25%
2009	4,497	18,125	25%
2010	4,163	17,306	24%
2011	4,113	16,436	25%
Total	71,472	262,244	27%

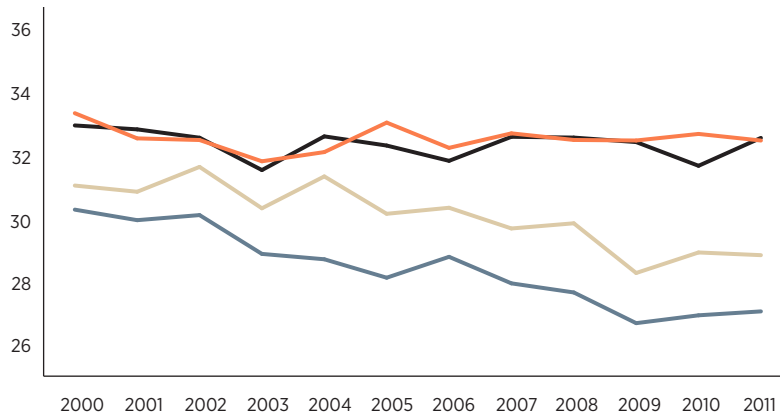
Figure 5 compares mean age at entry among demographic groups for both the first-entry population and the overall booked population. The mean age for first-entry African American offenders decreased by two to three years, indicating that the African American entry cohorts became younger. Mean age for first-entry white offenders fluctuated between 32 and 33 years. By contrast, the mean age for all bookings remained relatively steady for all groups.¹¹

¹¹ Only 27 percent of all bookings are for first-entry offenders. Mean age for the 73 percent “re-booking” entries has been increasing, thus pulling up mean age for all bookings.

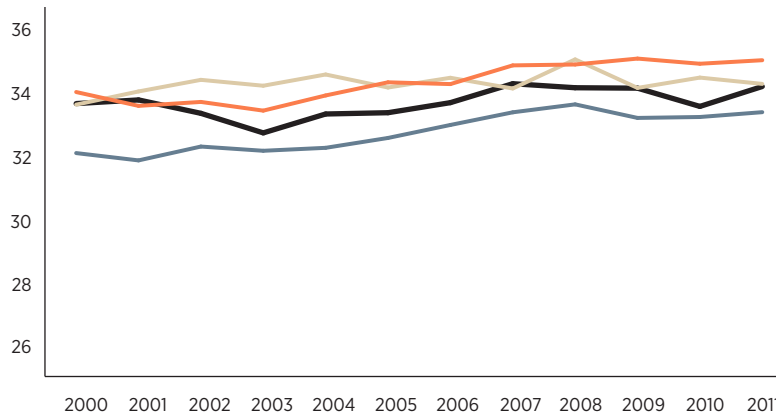
FIGURE 5: Mean Age by Race and Sex for First-Time Entries and All Bookings, 2000 through 2011

— African American male — African American female — White male — White female

Mean age for first entries



Mean age for all bookings



To gauge recidivism, we calculated re-booking rates following release for first-time entry (Figure 6). Shorter “exposure” categories have longer trend lines. For example, we can show the proportion of offenders re-booked within three months for all years from 2000 through 2011, but can show 10-year recidivism rates only for the 2000 and 2001 cohorts.

FIGURE 6: Re-Booking Rates by Cohort and Time Since First Release, 2000 through 2011

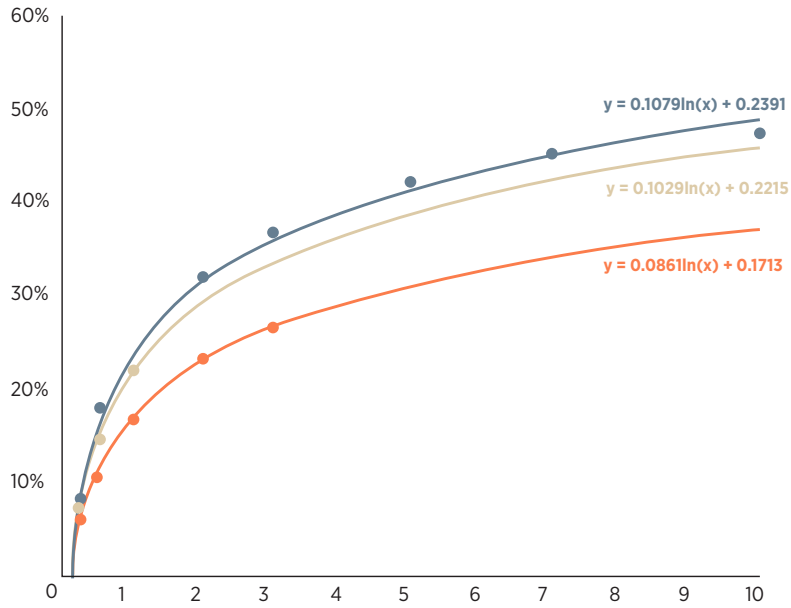


Across all entry cohorts, the average three-month re-booking rate was eight percent, meaning that eight of 100 first-booked offenders returned within three months. After six months, average re-booking rates rose to 15 percent, meaning that another seven offenders returned within six months of release. Re-booking rates rose to 47 percent of the 2000 and 2001 cohorts 10 years after release, meaning that nearly half had returned to ACJ in that time — and that a little more than half had not.

The data also appear to indicate that recidivism rates remained stable through 2005, decreased from 2005 through 2007, and increased somewhat since then. Figure 7 summarizes the changes in re-booking rates by plotting the available observed rates and the corresponding trends for three years: 2000 (the beginning year), 2007 (the year with the lowest re-booking rates observed), and 2010 (the most recent year with sufficient data points for adding a trend line). The horizontal line of the graph represents the time to re-booking. For example, at one year on the horizontal axis, the trend line for 2000 is 22.8 percent (the proportion of that entry cohort rebooked in that time) on the vertical axis, that for 2007 is at 16.6 percent, and that for 2010 is at 22.3 percent. A logistic regression for all three years indicates the 10-year re-booking rate for 2007 is likely to be 10 percent lower than that for 2000, but that re-booking rates for the 2010 first-entry cohort are likely to return close to earlier levels.

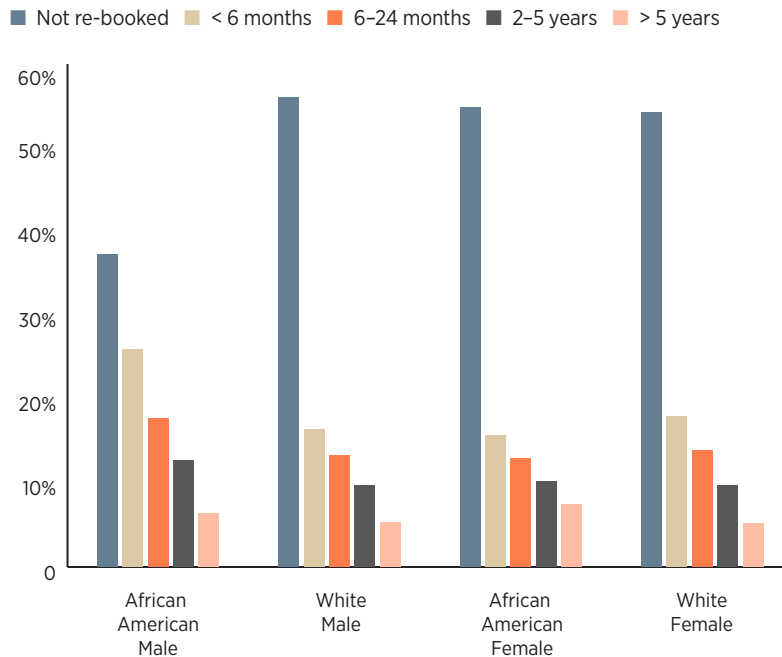
FIGURE 7: Projected Trendline of Re-Booking Rates for 2000, 2007 and 2010 First-Entry Cohorts

● 2000 rates ● 2007 rates ● 2010 rates — Log. (2000 rates) — Log. (2007 rates) — Log. (2010 rates)



Recidivism also varies by race and gender. As **Figure 8** shows, most African American males booked into ACJ in 2000 and 2001 were re-booked, while most white males and most females were not (at least within 10 years). About one in four African American males booked into the ACJ were re-booked within six months of release, and nearly half were re-booked within two years of release. In the future, we will be able to add risk level to the analysis.

FIGURE 8: Time to Re-Booking After First Release by Race and Gender for 2000 and 2001 Cohorts



HUMAN SERVICES INVOLVEMENT

Entry and re-entry rates can indicate a variety of human services needs, as well as where they should be targeted. On average, 55 percent of offenders from 2003 (earliest year for which human services data are available) through 2012 were involved in at least one human service from the county before or after their booking. Among the most frequently used human services over time are:

- Mental health services
- Drug and alcohol services
- Child welfare involved (as a parent)

Figure 9 shows human services involvement of ACJ entry cohorts over time. Mental health services had the highest use over time (34 percent), followed by drug and alcohol services (24 percent), with little variation by time examined. Involvement with child welfare services as a parent was 18 percent over time, with higher rates for older entry cohorts, probably because offenders are more likely to become parents as they age. (Note that people booked into ACJ may receive more than one service before, during or after booking.)

FIGURE 9: Human Services Involvement by Type and ACJ Entry Cohort, 2003 through 2011

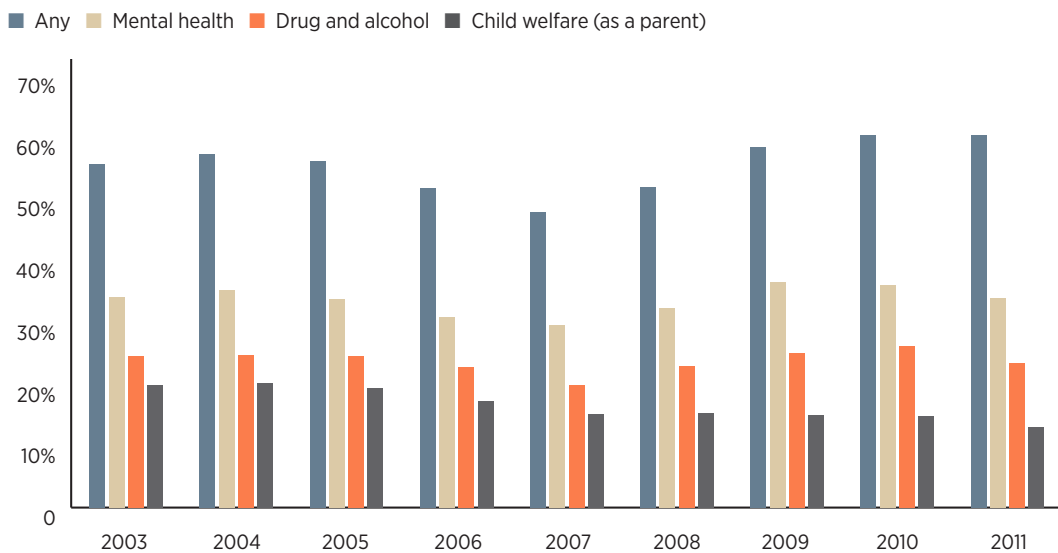


Table 8 shows the period of time in which mental health, drug and alcohol, or child welfare/parent services were used relative to time of booking. To analyze when offenders received services relative to their incarceration, we used data from the 2007 and 2008 entry cohorts. Both of these cohorts had at least four years of service data before and after first booking.

TABLE 8: First Point of Access for Human Services for ACJ Entry Cohorts of 2007 and 2008

	MENTAL HEALTH	DRUG & ALCOHOL	CHILD WELFARE/PARENT
More than 3 years before	24%	17%	0%
2 to 3 years before	5%	9%	1%
1 to 2 years before	5%	9%	8%
Within 1 year before	5%	13%	22%
Total Before	38%	48%	32%
Total During	5%	1%	2%
Within 1 year after	18%	19%	16%
1 to 2 years after	13%	11%	11%
2 to 3 years after	11%	8%	10%
More than 3 years after	16%	13%	30%
Total After	57%	51%	66%

Of ACJ inmates receiving mental health services, 38 percent first did so before their jail stay, with 24 percent doing so more than three years before booking. Altogether, 12 percent of an entry cohort had received some type of mental health service before booking (not shown). Of clients receiving drug and alcohol services, nearly half accessed such services before their first booking. Of those receiving child welfare/parent services, most did so after booking, with nearly one in three doing so more than three years after release.

GEOGRAPHIC DISTRIBUTION OF INMATE RESIDENCE PRIOR TO BOOKING

Figure 9 shows the residence of offenders prior to their booking. Darker shadings indicate areas of greater concentration. Most are in the City of Pittsburgh and surrounding neighborhoods. In the east part of the county, the map shows a band of concentration that spans Clairton through McKeesport, Duquesne and Wilmerding, to Penn Hills and Monroeville. A relatively isolated high-density area also appears in Harrison, in the northeastern area of the county.¹²

¹²In addition to the ACJ booking data, we used two sources to map offender concentrations. These were the American Community Survey (ACS) 2011 DEMOGRAPHIC AND HOUSING ESTIMATES for neighborhood population estimates within Allegheny County and the 2010 Census Block Map, displaying boundaries and numbers for all census blocks within Allegheny County.

Another way to assess the distribution of offenders is by comparing booking rates by municipality. **Table 9** lists the 20 municipalities with the highest booking rates from 2000 through 2012. For municipalities that are only partly in Allegheny County, we use only the population in the county to calculate booking rates. Rates in some municipalities may be higher because of mismatches between offender addresses and Census blocks.

FIGURE 10: Residence of Offenders Booked into Allegheny County Jail, 2010 through 2012

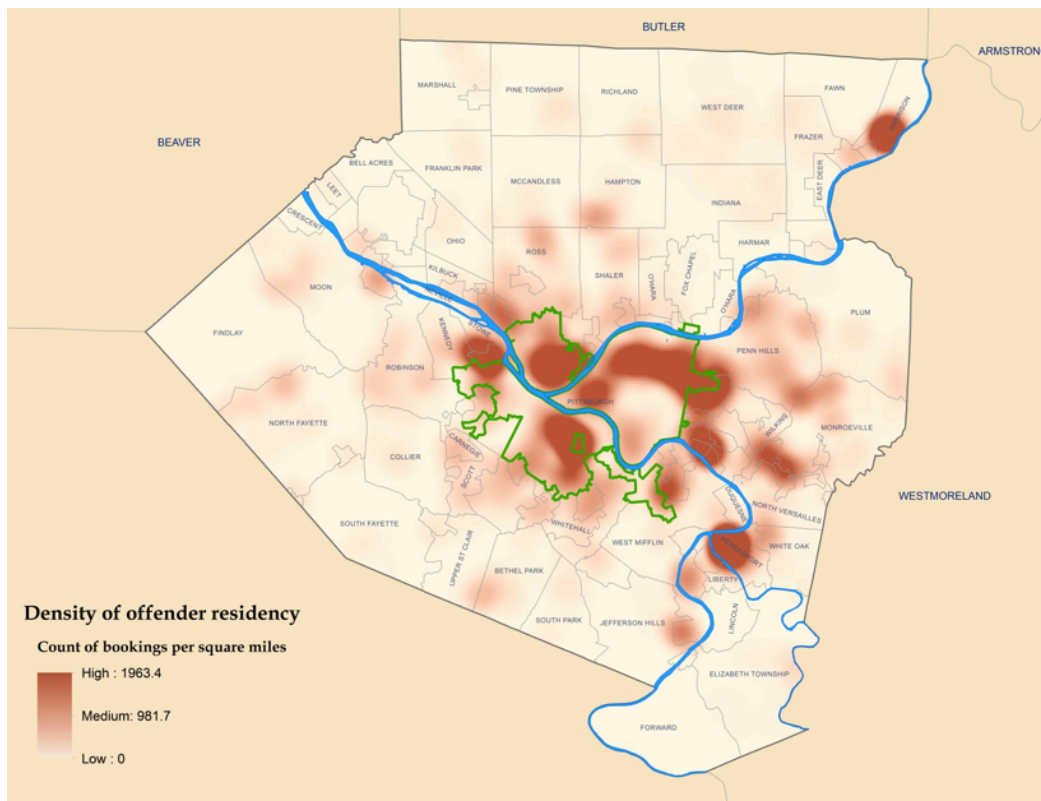


TABLE 9: Allegheny County Municipalities (excluding City of Pittsburgh) with Highest ACJ Booking Rates, 2010 through 2012

MUNICIPALITIES	POPULATION 16 AND OLDER	ANNUAL JAIL BOOKING RATES PER 1,000 POPULATION
Rankin	1,611	176
Mount Oliver	2,699	108
Wilmerding	1,632	106
McKees Rocks	4,787	80
McKeesport	15,918	71
Braddock	1,701	71
Harrison	8,834	65
Frazer	942	59
McDonald	372	54
Stowe	5,201	41
Turtle Creek	4,762	40
Verona	2,002	39
Ingram	2,625	35
Glassport	3,879	33
Wilkinsburg	13,534	32
Munhall	9,586	27
Swissvale	7,803	26
East Pittsburgh	1,446	25
Clairton	5,882	23
Reserve	2,838	23

Figure 11 shows variation in ACJ booking rates by neighborhood in the City of Pittsburgh. Four neighborhoods — Allegheny West, Allegheny Center, Bon Air and Glen Hazel — had an annual ACJ booking rate of more than 100 per 1,000 population. Three neighborhoods — Beltzhoover, Knoxville and Garfield — had booking rates from 51 to 100.

FIGURE 11: Jail Booking Rates by Neighborhood, City of Pittsburgh, 2010 through 2012

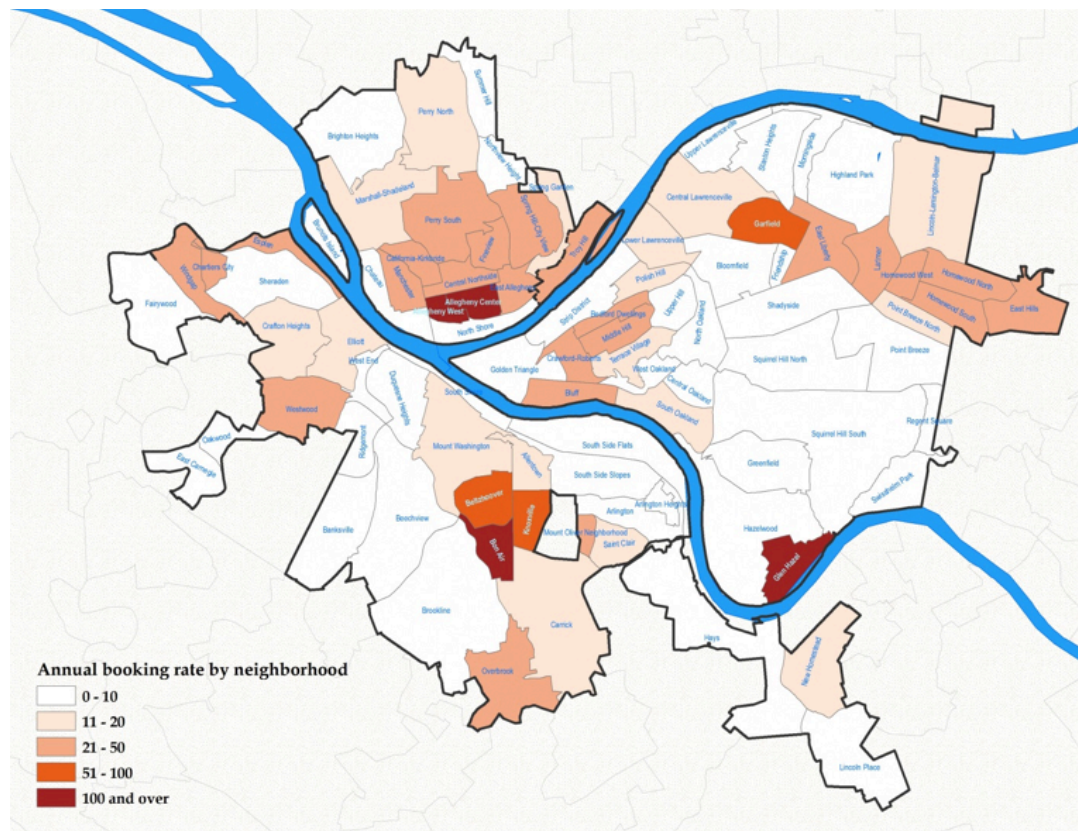


TABLE 10: Pittsburgh Neighborhoods with Highest ACJ Booking Rates, 2010 through 2012

NEIGHBORHOODS	POPULATION 16 AND OLDER	ANNUAL JAIL BOOKING RATES PER 1,000 POPULATION
Allegheny Center	752	183
Glen Hazel	352	167
Bon Air	670	143
Allegheny West	397	136
Knoxville	2,637	81
Garfield	2,636	64
Beltzhoover	1,389	51
Westwood	2,500	46
East Allegheny	1,843	44
Crawford–Roberts	1,677	43
Fineview	975	43
Larimer	1,163	42
Bluff	507	41
Esplen	227	41
Windgap	1,133	40
Central Northside	2,383	36
Homewood North	2,316	36
Perry South	2,977	34
Spring Hill–City View	1,934	32
Mount Oliver Neighborhood	376	32

CONCLUSION

ACJ bookings have changed in number and, we surmise, in character over time. After increasing through much of last decade, they decreased by about a third in the five most recent years for which we analyzed data. Much of this decrease, as we noted, is likely a result of changes in booking policies, particularly regarding misdemeanor arrests, such as those for DUI, which no longer result in a jail booking.

At the same time, the length of stay in jail has increased sharply, with the median stay doubling in recent years, and the average stay increasing by nearly half. Coupled with the decrease in the number of bookings, and assuming longer jail stays stem from more serious offenses, we conclude that bookings are now for fewer but more serious offenses.

Some characteristics of the booking population have not changed much. The booking population is predominantly young, male or African American. Recidivism — as measured by re-booking rates — has changed little over time as well, with nearly one in three people being re-booked within two years of their first-time booking.

Perhaps not surprisingly, this population has relatively high human services needs. About one in three receive mental health services, with most receiving such services after booking — possibly suggesting some unmet needs before booking. About one in four receive drug and alcohol treatment, including nearly half who did so before booking — possibly suggesting some indicator of risk for criminal behavior. Offenders' residences are concentrated in relatively few areas — possibly suggesting some indicator of where to target interventions.

This research illustrates many characteristics of the ACJ population for the first time, and also points to directions for future research. Examining the seriousness of offenses for the booking population over time would help us better understand reasons for differences in booking rates by age, race and gender, as well as whether bookings, and re-bookings, now truly are for more serious offenses. Further examination of human services involvement by this population would also help us better identify unmet needs and possible points for more effective interventions.