Analysis of the Dane County Jail Population

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August 2019

Introduction

The JFA Institute was contracted by the Dane County Criminal Justice Council to conduct an analysis the current Dane County jail population to better understand the external and internal factors that are driving the size and attributes of that population. In order to complete such a study, JFA requested two data files be prepared for statistical analysis. The first was a data files that represents all people released from the jail between January 1, 2018 and December 31, 2018. This file is essential for determining 1) the length of stay (LOS) of each released person, 2) the reason(s) why they were admitted to jail and 3) the reason(s) why they were released from custody. Since all jail populations are the product of a simple formula (admissions x LOS – jail population) understanding these policy factors will explains the basis for the current size and attributes of the Dane County jail. Similarly, any efforts to lower or increase the jail population would reflect changes in these same policies.

The second data file was a snapshot of the current jail population on April 25, 2019. It shows in greater detail the results of the admissions and LOS factors. But more importantly, it also shows the attributes of the jail population that must be housed and cared for on a daily population. The daily population analysis is useful to jail administrators who must staff and manage the jail and architects who must plan for future jail facilities.

Based on these data, JFA was asked to conduct what is referred to as a stress test. Such a test utilizes analysis of the jail release data file discussed above. That analysis, which is presented in this report, shows that certain methods of jail release have a disproportionate impact on the size and attribute of the current jail population. Once these release methods are identified, a case based review of a representative sample of people from those key release categories is conducted with key criminal justice officials. The goal is to see if changes in criminal justice policies (e.g., diversion of jail bookings, case processing, etc.) could be enacted that would have a major impact on the current size of the jail population without endangering public safety.

Finally, JFA also reviewed two recent reports conducted by the Mead & Hunt consulting firm.[1] Those two reports provided detailed historic data on inmate population trends and a jail population projection. The report also includes detailed costs estimates for the County to consider in terms of either renovating existing jail facilities and/or constructing new jail facilities.

County Demographic Population Trends.

The first task was to put the current size of the Dane County jail population in context with several macro-level factors can have an impact on the current and future size of the jail population. We begin with the demographic projections for Dane County. Whether a county is projected to grow or not can have an external impact on the size of a jail population. More precisely, we need a

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[1] Mead & Hunt. December 2016. *Dane County Jail Update Study Final Report.*

careful review and analysis of the "at risk" population. The "at risk" population is categorized as those groups most likely to be arrested and booked into jail.

The Wisconsin state demographer makes county-level population projections through 2040 that are disaggregated by gender and age group. For our purposes, we are most interested in the younger male population most likely to be arrested and incarcerated. As shown in Table 1, while the county is expected to growth by 14% between 2020 and 2040, the two at-risk age groups of males age 15-39 and males age 20 – 44 grow very slowly if at all (3% and 4%).[2] Like many Wisconsin and national counties, future population growth is being driven by the age group of 55 and older whom have very low arrest and jail incarceration rates. So there will be minimal if any demographic pressure on jail population growth.

The Mead & Hunt population projection shows no projected growth in the jail population but also suggests that there might be an increase in the jail population since the overall county population was estimated to grow as shown here. But they did not perform an at-risk population forecast which would have shown little if any growth for that population (Mead & Hunt, 2016:34).

Table 1. Dane County

Population Group	2020	2025	2030	2035	2040	% Change
Total Population	530,620	555,100	577,300	593,440	606,620	14%
Males 15-39	99,600	100,300	101,750	102,700	103,950	4%
Males 20-44	101,000	103,050	103,550	103,950	104,400	3%

Source: Wisconsin Department of Administration Demographic Services Center's web site at: https://doa.wi.gov/Pages/LocalGovtsGrants/Population_Projections.aspx

Jail Population Trends

As noted earlier, the comprehensive Mead & Hunt study provided historical data on the number of bookings, the average daily population and the average LOS since 2010. Copies of these three trend-line charts are displayed on the following two pages. Both bookings and LOS show a relative degree of stability since 2010 which produces a stable jail population. Based on these trends, the Mead & Hunt study suggested no future change in the jail population which continues to be the case. As of April 25, 2019, the total jail population was 825.

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[2] There are no projections for the more precise group of males age 18 – 44 so these two alternative groups were employed.
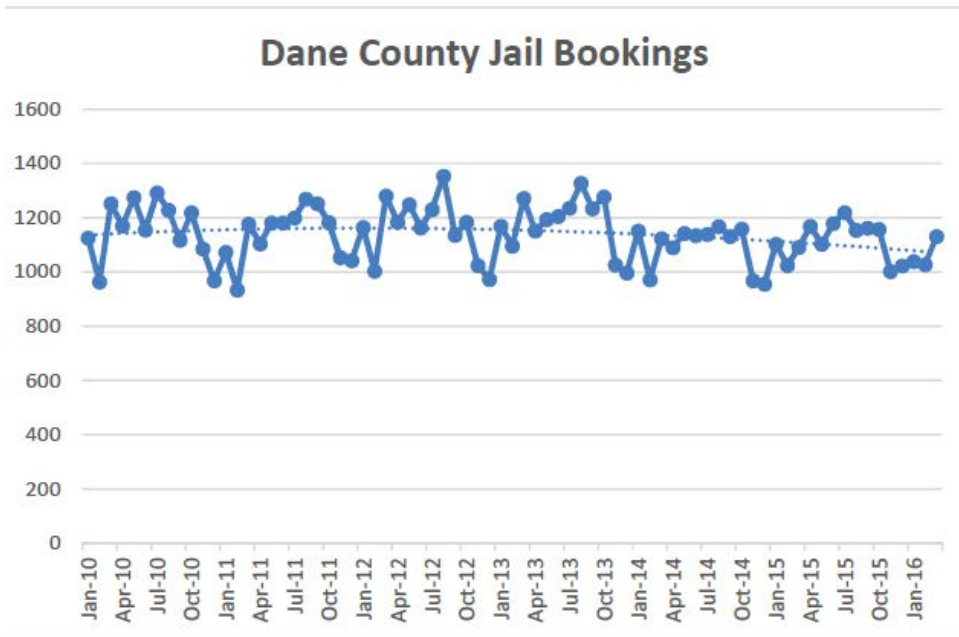
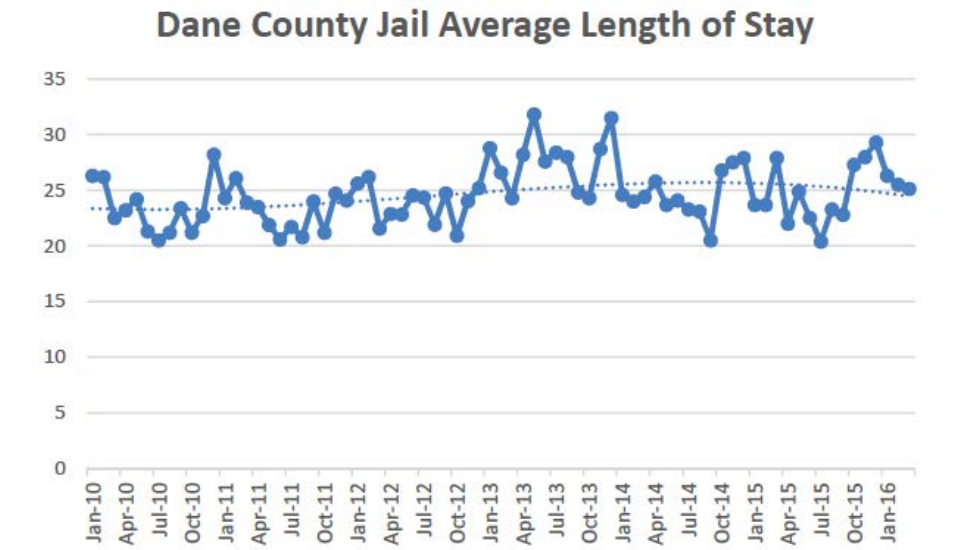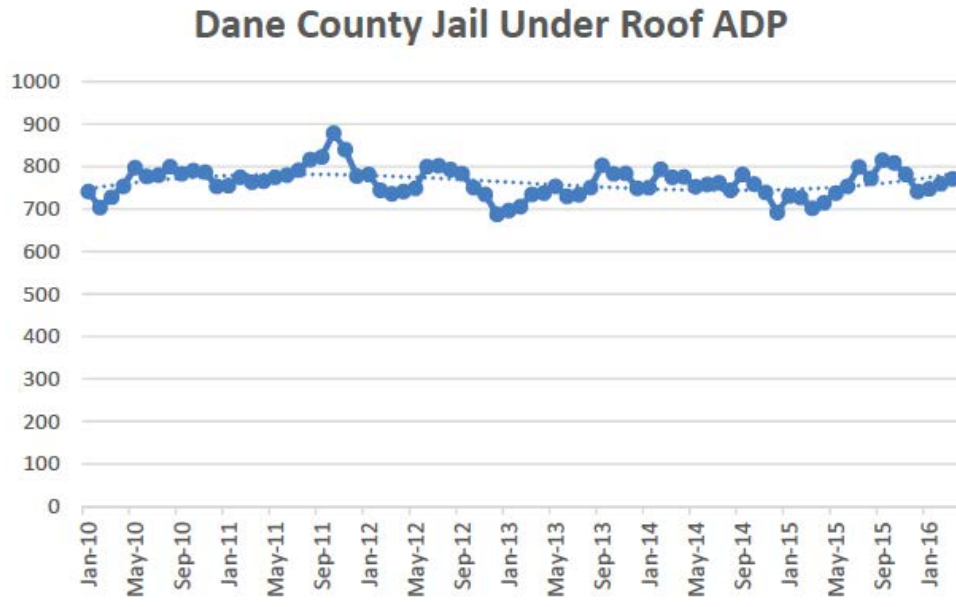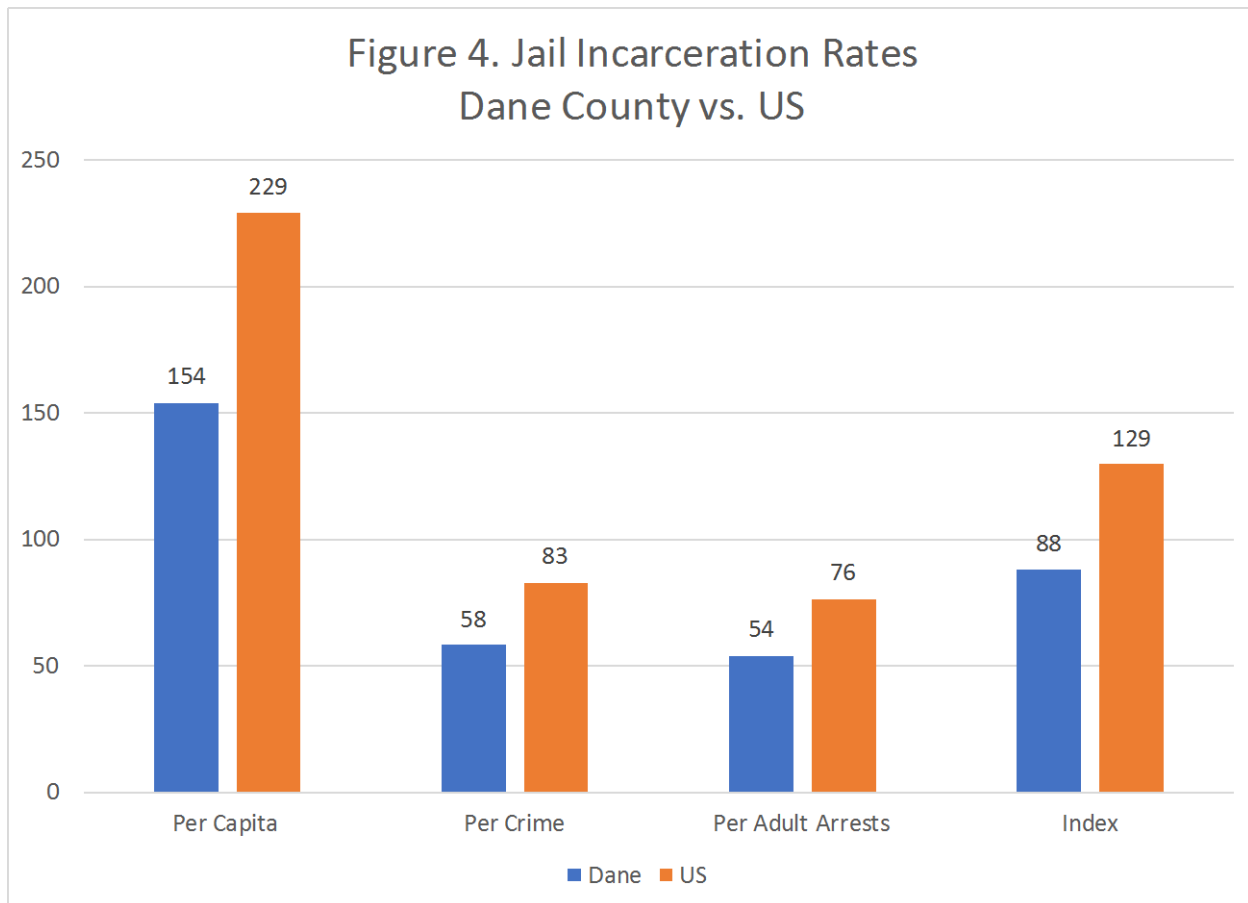Figure 1.

Figure 2.

Figure 3

Dane County Jail Under Roof ADP

Another way to look at the trends in the use of jail for Dane County is to compute four types of incarceration rates all of which are shown in Figure 4. The first measure is a rate per 100,000 population. The current per capita rate for Dane County is 154 per 100,000 population which is well below the 2017 US rate of 229 per 100,000. One can also compute similar rates based on the total amount of UCR Part 1 crimes reported to law enforcement (murder, rape, robbery, aggravated assault, burglary, larceny-theft motor vehicle theft and arson). This is to see if Dane County's lower per capita incarceration is related to its lower crime rate. Dane County's 2017 crime rate is 2,673 which is slightly below the U.S. rate of 2,745 but above the Wisconsin rate of 2,302.[3]

Based on the number of Part 1 UCR reported crimes, Dane County's incarceration rate per 1,000 reported crimes is 58 versus the US rate of 83. We also computed a rate per 1,000 adult arrests. As with the other two measures, Dane County's incarceration rate per 1,000 adult arrests is 54 versus the US rate of 76. Finally, we can compute an overall "index" incarceration score by averaging the three independent measures. Here again, Dane County's index rate of 88 is well below the US rate of 129.

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[3] Wisconsin Department of Justice website accessed at https://www.doj.state.wi.us/dles/bjia/ucr-offense-and-arrest-data-agency

Figure 4. Jail Incarceration Rates
Dane County vs. US

This analysis suggests that Dane County is performing better than many jurisdictions in limiting its use of jail incarceration. It also suggests that making further reductions in the jail population will require different strategies than have been employed and will have to focus on people charged and/or convicted of more serious crimes.

Analysis of the Current Jail Population

The next level of analysis focused on the current jail population based on a snapshot taken on April 25, 2019. The key demographic, criminal charge, and length of stay (LOS) to date attributes shown in Tables 2 and 3 are as follows:

1. Primarily male (84%);
2. Primarily white (52 % and Black (46%) with 6% Hispanic ethnicity;
3. Average age of 37 years;
4. Relative to criminal charges, most (65%) of the people have multiple charges with an average of four charged per inmate;
5. The population has served an average of 90 days thus far in custody; and,
6. 124 have served over six months and 31 have been incarcerated for more than a year (Table 2).

7. In terms of charges, inmates have an average of 4.1 charges with whites averaging over one less charge than Blacks

Table 2
Demographics of Current Dane County Jail Population
April 25, 2019

Attribute	Number	Percent of Total	Average Length of Stay to Date (days)
Total	**825**	**100.0%**	**91.4**
Gender			
Female	129	15.6%	66.3
Male	696	84.4%	96.1
Race			
Asian	12	1.5%	106.9
Black	379	45.9%	100.0
American Indian	4	0.5%	16.0
White	430	52.1%	83.7
Ethnicity is Hispanic	**53**	**6.4%**	**127.7**
Current Age			
17 - 24	122	14.8%	94.0
25 - 34	309	37.5%	79.2
35 - 44	202	24.5%	110.0
45 and older	192	23.3%	90.1
Average age	36.6		
Median age	34.3		
Number of Criminal Charges			
One	290	35.2%	60.0
Two	125	15.2%	72.1
Three	102	12.4%	110.7
Four	53	6.4%	104.2
Five or more	255	30.9%	127.2
Average number of charges	4.1		
Median number of charges	2.0		
White	3.5		
Black	4.7		

Table 3

Summary LOS to Date for Current Dane County Jail Population
April 25, 2019

Attribute	
Total Jail Population	825 persons
Length of Stay to Date	
Average (Mean)	91.4 days
Median (Midpoint of the range)	51.3 days
Greater than Six Months	124 persons
Greater than One Year	31 persons

In terms of the inmate population's legal status, there numerous categories that can be applied to the current population. The largest overall category is those in pretrial status. As shown in Table 4, over half are in some type of pretrial status. However, a significant number (238) of the pretrial inmates have holds on them from other jurisdictions and/or for probation violations. In general, these people cannot be released until the "hold" from another court or agency has been resolved.

The next largest (229) legal status are people who are serving some type of jail sentence. These sentences cannot be reduced beyond the amount of good-time an inmate can legally receive. By law the amount of the reduction is set by law and equals one-quarter of the sentence. There is also a large number of people who have jail sentences with Huber privileges. According to the Dane County District Attorney, these people are permitted to be outside of the jail for up to 12 hours for purposes of work, seeking employment, attending school, child care, medical or other treatment. The inmate must return to the jail each day.

The other major legal status are those people who have been sentenced to Wisconsin's state prison, are under the jurisdiction of the US Bureau of Prisons or some other correctional agency. A total of 110 people is in this category.

The last analysis looks at the primary charge that the person has been arrested or convicted. Table 5 shows that the current jail population has been largely charged with felony level charges (72%) and have been incarcerated for an average of 92 days. The largest offense category is felony-non-violent with the largest offense be a probation/parole violation. As expected the felony violent crimes has the longest LOS to date (140 days) while the misdemeanor level charged/convicted inmates have the shortest LOS to date (41 days).

The overall picture of the daily jail population is that it consists largely of people with multiple felony level charges who have already served about 90 days in the jail. While the largest number are in pretrial status, the vast majority of the inmates are either sentenced to the jail or have a hold against them which restricts their release from custody. All of these facts point to the importance of case processing by the Circuit Courts, the State Department of Corrections

Table 4
Current Judicial Status for Dane County Jail Population
April 25, 2019

Judicial Status	Number	Percent of Total	Average Length of Stay to Date (days)
Total Jail Population	825	100.0%	91.4
None	4	0.5%	0.0
CO Pre-arraignment	26	3.2%	15.0
CO Pre-arraignment/Hold	6	0.7%	27.2
CO Pre-arraignment/Probation	40	4.8%	23.6
CO Pretrial	94	11.4%	102.7
CO Pretrial/Hold	23	2.8%	132.8
CO Pretrial/Prob Hold	62	7.5%	97.3
P/P Violation (Hold)	137	16.6%	43.7
P/P Viol/Outside Hold	3	0.4%	38.3
Presentence Invest	45	5.5%	164.7
Presentence Invest/Hold	7	0.8%	193.5
Sub-Total Pre-Trial	447	54.2%	
With Holds	238	28.8%	
Sentenced W/O Huber	2	0.2%	7.0
Sentenced W/O Huber/PO hold	1	0.1%	16.0
Sentenced with Huber Privileges	127	15.4%	64.9
Sentenced Huber Revoked	8	1.0%	211.9
Prob Sentence/No Work Release	1	0.1%	207.7
Prob Sent/Work Rel Revoked	7	0.8%	142.9
Prob Sentence/Work Release	74	9.0%	142.9
Sentenced/Outside Hold	5	0.6%	151.7
Sentenced/Outside Hold - Huber	4	0.5%	339.2
Sub-Total Local Sentenced	229	27.70%	
State Prisoner Writ	8	1.0%	63.4
State Prisoner Intransit	24	2.9%	169.0
Non Fed Prisoner Intransit	12	1.5%	107.9
Federal Prisoner Intransit	66	8.0%	123.7
Sub-Total State and Federal Sentenced	110	13.40%	
E.S. Sanction w/out work release	35	4.2%	37.2
E.S. w/o work release-Outside hold	1	0.1%	40.9
E.S. Sanction w/work release	3	0.4%	52.6
Sub-Total Extended Supervision	39	4.70%	

and the State Division of Hearings and Appeals as the biggest contributors to the person's LOS and thus the size of the jail population.

Table 5
Most Serious Charge Level
Dane County Jail
Snapshot April 25, 2019

Offense	Number	Percent	Average Length of Stay to Date (days)
Total	**825**	**100.0%**	**91.4**
Total Felony	**594**	**72.0%**	**91.7**
Felony Violent	**197**	**23.9%**	**139.6**
Murder	22	2.7%	353.9
Sex	38	4.6%	201.5
Assault/battery/manslaughter	32	3.9%	116.7
Robbery	16	1.9%	157.3
Other Violent	89	10.8%	98.2
Felony Drug	**61**	**7.4%**	**95.2**
Drug Sale	36	4.4%	110.4
Drug Possession	25	3.0%	73.4
Felony Non-Violent	**336**	**40.7%**	**62.9**
Burglary	17	2.1%	89.4
Fraud/forgery	16	1.9%	149.0
Theft	30	3.6%	88.2
DUI	64	7.8%	114.2
Weapons	4	0.5%	142.9
Other Non-Violent	73	8.8%	59.1
Other Property	29	3.5%	82.3
Probation/parole violation	103	12.5%	47.9
Total Misdemeanor	**150**	**18.2%**	**40.6**
Violent	32	3.9%	44.2
Drug	3	0.4%	2.2
Property	21	2.5%	37.7
Other Non-Violent	94	11.4%	41.3
Civil-State	**81**	**9.8%**	**81.6**

Table 6.
Release Counts and LOS CY2018
Dane County Jail

Attribute	
Total Jail Releases	12,383
Total Number of Persons Released	8,543
Persons with one release	6,313
Persons with two releases	1,351
Persons with three releases	521
Persons with four releases	188
Persons with five or more releases	170
Length of Stay	
Average LOS	24 days
Median LOS	2.6 days
Number releases within 24 hours	3,909
Number released between 1 and 3 days	2,754
Number released between 3 and 10 days	2,312
Number released between 10 and 30 days	1,147
Number released between 30 and 90 days	1,222
Number released over 90 days	1,037
Unknown	2
Charge Level at Release	
% Felony	30%
% Misdemeanor/Court Violations	70%
Most Frequent Crimes	
Disorderly Conduct	1,487
Operating While Intoxicated	1,032
Probation Violation	987
Battery	784
Parole Violation	581
Resisting or Obstructing Arrest	397
Theft	393
Possession of Narcotics	376
Bail Jumping	205

Analysis of Jail Releases

The profile the releases from any jail present a very different picture but helps identify the major drivers of the jail population. The two most striking differences are the number of people experiencing the jail and the LOS. In Dane County in 2018, there were over 12,000 releases that were produced by 8,543 people. The difference between these two numbers reflect those people booked and released several times in a 12 month period. Further while the average LOS is 24 days the median is only 2.6 days which reflects the huge volume of people who are booked and released within three days (over 50%). Unlike the snapshot jail population that was largely charge with felony level crimes, the vast majority (70%) of the releases were for misdemeanor or civil level offenses. The most frequent charges are all non-violent with the exception of battery.

The last table on jail releases is Table 7 which documents the legal basis for release. By knowing the number of releases for each release group and the attending LOS for each group, one can also calculate the size of the jail population that is being generated by that release group.

Table 7 shows the results of this analysis. In terms of volume of releases the greatest numbers are people who are 1) bailed out, 2) transferred to another correctional agency, 3) released on a personal recognizance and 4) who complete a local sentence are the highest numbers. But in terms of having the longest LOS and thus occupying the greatest number of jail beds, only the sentenced completers and the transfers to another facility are significant.

Stress Test

Based on these results stress test was organized that took place on May 20, 2019. In advance of the exercise, 35 cases were randomly selected by JFA from the two major release groups of "sentence completed" and "TOT to another agency". For the cases selected, detailed information about the processing of the released person was collected by the county and synthesized into a single document.

The attendees for the session included representatives from the Courts, Public Defender, Sheriff, Clerk of Courts, Department of Corrections, Law Enforcement, CJC staff, and the District Attorney offices. Information was presented for each case that was reviewed with the central question being whether it could have been processed faster or have a different outcome/disposition.

In general, the exercise showed there were some cases that could not have been handled differently, but there were others where the time it took to reach a disposition could have been moderately reduced. In particular, issues around the number and length of continuances for people in custody prior to sentencing and the review process for people incarcerated on a probation violation received the greatest amount of attention by the participants.

Table 7.
Releases by Release Reason 2018
Dane County Jail

Release Reason	Number	Average Length of Stay (LOS) (days)	Percent of Total	Calculated Average Daily Jail Population (ADP)
Total	**12,383**	**24.2**	**100.0%**	**820**
Bail	2,480	3.6	20.0%	**24**
Charge dismissed/dropped	743	7.5	6.0%	**15**
Court order	88	9.3	0.7%	**2**
Credit time served	111	80.1	0.9%	**24**
Fine payed/stayed	229	3.0	1.8%	**2**
Hold dropped	848	10.7	6.8%	**25**
Other	77	9.8	0.6%	**2**
Probation	79	75.2	0.6%	**16**
Personal Recognizance	2,616	3.9	21.1%	**28**
Released to appear	1,076	1.8	8.7%	**5**
Sentence completed	1,548	73.4	12.5%	**311**
Temporary release	39	60.5	0.3%	**6**
Transfer to another agency	2,449	53.5	19.8%	**359**

Policy Implications

Ultimately, the most effective way to further reduce the Dane County jail population would require changes in criminal court processing for people who are in these two release categories ("sentence completed" and "transfer to another agency") which would not change the ultimate court disposition but would moderately reduce their LOS by an average of 7-14 days. Such reforms could take the form of restricting the use of and the length of criminal cases and/or instituting expedited case processing policies for people in custody.

Further reforms would take the form of reducing sentence lengths for people sentenced to the jail. Here again modest reductions in the typical jail sentence imposed on offenders in the range of 30 to 60 days (which are at the discretion of the courts would have a significant impact on the jail population without jeopardizing public safety. The stress test showed that jail sentences were typically in the 90 to 180 day range. There has been considerable research conducted that shows longer periods of pretrial detention and post-conviction incarceration either has a negative or no impact on recidivism rates.[4] Reducing the typical sentence from 180 days to 120 days (with some

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[4] Lowenkamp, Christopher T., Marie Van Nostrand and Alexander Holsinger. November 2013.

portion already served in pretrial status) would significantly reduce the sentenced to jail population.

Major Findings

1. The incarceration rates for Dane County are well below the national rates whether based on its population, crime rate or number of adults arrested.

2. The number of jail admissions and the average length of stay (LOS) has been relatively stable since 2010 as has the overall jail population.

3. Although the size of the county's population is projected to increase by about 14%, the size of the male population with the highest risk of being arrested and incarcerated is not projected to grow by more than 3-4 percent.

4. The vast majority of the current jail population are people who have been sentenced or are in pretrial status with a hold/warrant that is restricting their release from custody.

5. There are over 12,000 admissions and releases from the jail with an overall LOS of 24 days. However, the vast majority of jail admissions are released within a few days, are mostly charged for a misdemeanor level crime and who post a bond or are released on their own recognizance.

6. The two largest drivers of the jail population are people who have been sentenced to the jail (after a period of pretrial detention) and people being transferred to other correctional systems including people sentenced to state prison or probation violators.

7. The most effective way to further reduce the Dane County jail population would require changes in criminal court processing for people in these two release categories (sentenced and transferred out to) which would not change the ultimate court disposition but would moderately reduce their LOS by an average of 7-14 days

8. Further reforms would take the form of reducing sentence lengths for people sentenced to the jail. Here again modest reductions in sentence lengths (30 to 60 days) which are at the discretion of the circuit courts would have a significant impact on the jail population.

The Hidden Costs of Pretrial Detention. Houston, TX. The Laura and John Arnold Foundation. Rhodes, William, Gerald G. Gaes, Ryan King, and Christopher Cutler. August 2018. *Relationship Between Prison Length of Stay and Recidivism: A Study Using Regression Discontinuity and Instrumental Variables with Multiple Break Points.* Criminology and Public Policy. 17(3):731-777.

9. Both expediting case processing of felony cases who are in pretrial status and moderately reducing the sentence lengths by 30 days that are typically in the 90 -180 range would reduce the current jail population by at least 20%.

The next steps for the County to undertake would be to further discuss and examine these findings and recommendations. A strategic plan for modifying current criminal justice policies with a specific focus on court processing policies that would reduce jail admissions and LOS, a revised jail population projection should then be developed. Based on that plan estimates can be developed to assess impact of such reforms on the current jail population and the associated cost savings.