Dane County Jail
Race and Ethnicity Disparity Analysis

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April 2021

Major Findings

1. By any measure, Dane County has a low jail incarceration rate as compared to national rates.

2. However, the Dane County black jail incarceration rate is more than twice the national black jail incarceration rate.

3. The Dane County black arrest rate is eleven times higher than the white rate and also twice as high as the U.S. black arrest rate.

4. About 10% of all blacks are arrested at least once a year in Dane County as opposed to 1% for all other racial and ethnic groups.

5. The higher arrest rate for blacks persists for all types of crimes (violent, property, drug, and other non-violent crimes).

6. There are no differences in the average number of charges made at arrest by race or ethnicity.

7. When based on the number of people arrested by race, the different percentages between blacks and other racial/ethnic groups drops significantly.

8. The percentage distribution of the current jail population is virtually identical to the arrest distribution which again shows the primary source of disparity occurs at the point of arrest.

9. However, blacks have a slightly longer length of stay (LOS), especially for violent charges, which contributes to their higher incarceration rate.

10. To reduce disparity in Dane's county jail incarceration rate, attention should focus on the arrest decision where the vast majority of disparity occurs.

11. To that end, the Madison Police Department participated in a review of a random sample of 70 police encounters with members of the community and other policy stakeholders which found little evidence of obvious racial bias in the decision to arrest and/or to assign criminal charges.

12. Such studies with the community members included, should be conducted on a regular basis to ensure racial bias in criminal justice decision-making is reduced to its lowest levels.

Introduction

Since 2008, Dane County stakeholders have been researching and reporting on racial inequities in the criminal justice system. Consistent with the Dane County Criminal Justice Council (CJC) values of justice, equity and safety, the Criminal Justice Council (cjc.countyofdane.com) contracted with JFA Institute to complete an analysis of key drivers of the Dane County Jail population. Upon review of the report, the CJC then requested a more detailed analysis of jail population drivers—specifically focusing on disaggregation by race. Improving racial equity is a guiding principle of the CJC, and therefore further disaggregation of race, ethnicity and gender data was a critical step in developing policy and procedural shifts in practice.

Dane County requested that the JFA Institute conduct such an analysis using available demographic, arrest, jail booking, release, and current jail population data. The Dane County Criminal Justice Council has developed a data sharing agreement that allows the CJC Research and Innovation team to collect, clean, and integrate critical data sets. Due to the data sharing agreement, the data has been de-duplicated and represents the "person" level data at arrest and booking.

There is no doubt that the criminal justice population is skewed by three key demographic groups: Age (disproportionately younger), Gender (disproportionately male), and Race/Ethnicity (disproportionately Black and Hispanic). Of the three groups, the one that has drawn the greatest public attention is the disparity in race and ethnicity.

Disparity in criminal justice (and other social institutions) is, among other factors, the product of behavior and bias. The former recognizes that a person's criminal behavior is brought to the attention of the criminal justice system either by a victim or detection is a major factor. The criminal behavior factor is closely associated with structural and systemic conditions that elevate one population over another in terms of their socio-economic status (SES).

Based on the National Crime Victimization Survey (NCVS), a higher proportion of Blacks and Hispanics are reported by victims to be involved in violent crimes compared to whites. That same survey also found a strong association between one's socio-economic status (SES) and violent and property crime rates.[1] There is a strong association between race/ethnicity and SES status (Table 1). In this sense, it is not race but SES that produces much of the differential offender rates. In the United States, economics, education, and other pathways to success are limited in some social-economic statuses, and the statistics in those areas demonstrate more violent and property crime.

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[1] Berzofsky, Marcus, Hope Smiley-McDonald, Andrew Moore, and Chris Krebs. January, 2014. Measuring Socioeconomic Status (SES) in the NCVS: Background, Options, and Recommendations. Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice.

Table 1. National Socio-Economic Status Indicators by Race/Ethnicity

SES Measure	White	Black	Hispanic	Black to White	Hispanic to White
% Poverty	7%	19%	16%	+12%	+9%
Median Income	$65,902	$41,511	$51,404	-37%	-22%
% College	35%	25%	18%	-10%	-17%
% Home Ownership	73%	42%	48%	-31%	-25%
% Married	59%	39%	54%	-20%	-5%
Teenage Births per 1,000	13	29	28	2.2	2.2
Household Mother Alone	6%	19%	13%	+13%	+7%

At the same time, the various decisions by criminal justice system (law enforcement, prosecutors, judges, and correctional agencies) can add to the level of disparity. There are specific charges that require law enforcement to arrest and book into jail (i.e. domestic violence).

Table 2 uses national data to assesses the level of disparity that currently exists at different components of the criminal justice system. The greatest amount of disparity exists for Blacks. Blacks represent 13% of the national population but comprise 28% of the people arrested and about one third of the various correctional populations.

This report analyzes the level of disparity in local jail incarceration rates within Dane County. It narrowly focuses on the extent to which such disparities can be explained by differential arrest, booking, and length of stay (LOS) rates.

In addition to statistical results, this report also presents the results of a unique exercise in which Madison Police officials, Dane County officials, and community leaders participated in a review of 70 arrest reports to examine the level of bias that may be occurring in police arrests. This exercise led community and city/county officials to look for deflections in the arrest decision— and moreover—better options for root cause(s) of incident.

Dane County has historically measured relative rate index (RRI), or relative rate ratio (RRR), as described in this report. The disparity gap rate is calculated by dividing the number of residents involved in the criminal justice system (arrest and booking, in this case) by the number of residents in that specific population. The quotient is then multiplied by a number to give a rate per 100, or rate per 100,000.

Table 2. National Criminal Justice System Rates by Race/Ethnicity

Key Indicators	White	Black	Hispanic	White Ratio	Black Ratio	Hispanic Ratio
% Population	60%	13%	18%			
Crime and Arrests						
NCVS - Violent Crimes	50%	22%	14%	0.8	1.7	0.8
Arrested	55%	27%	18%	0.9	2.1	1.0
Arrested Violent	46%	33%	18%	0.8	2.5	1.0
Corrections						
% Jail	50%	33%	15%	0.8	2.5	0.8
% Prison	31%	33%	22%	0.5	2.5	1.2
% Prison Violent Crimes	48%	62%	62%	0.8	4.8	3.4
% Probation	55%	30%	13%	0.9	2.3	0.7
% Parole	46%	37%	15%	0.8	2.8	0.8

Dane County Jail Incarceration Rates

The national average jail population is about 750,000, which produces a jail incarceration rate of 229 per 100,000 population (Figure 1). Dane County has a much lower rate, with a jail population of about 825 inmates and a rate of 154 per 100,000.

One could argue that the Dane's lower incarceration rate is due to its lower crime rate. As shown in Table 3, Dane County and Wisconsin both have crime rates below the U.S. rate. But as shown in Figure 1, Dane County still has a lower jail incarceration rate per number of arrests compared to the national jail incarceration rate per UCR crimes reported in a year or per the number of adult arrests per year. If one combines the three incarceration measures (per capita, per crime reported, and per arrest), the Dane County composite jail incarceration rate is well below the US rate.

Additionally, Dane County's arrest rate per 100 population is about the same as for Wisconsin and the U.S. (3 per 100 population). But with regard to jail incarceration rates by race and ethnicity, a very different picture emerges. While the white and Hispanic rates are below the national jail incarceration rates (especially the white rate), the Dane County Black jail incarceration rate is twice the U.S. rate, which is also several times higher than the white or Hispanic rates (Figure 2). This analysis is designed to understand the data and review 70 specific police interactions to undercover why this dramatic disparity exists between white, Hispanic, and Black incarceration rates exist and develop potential policy and procedural shifts to attain greater racial equity.

Figure 1. Jail Incarceration Rates
Dane County vs. US
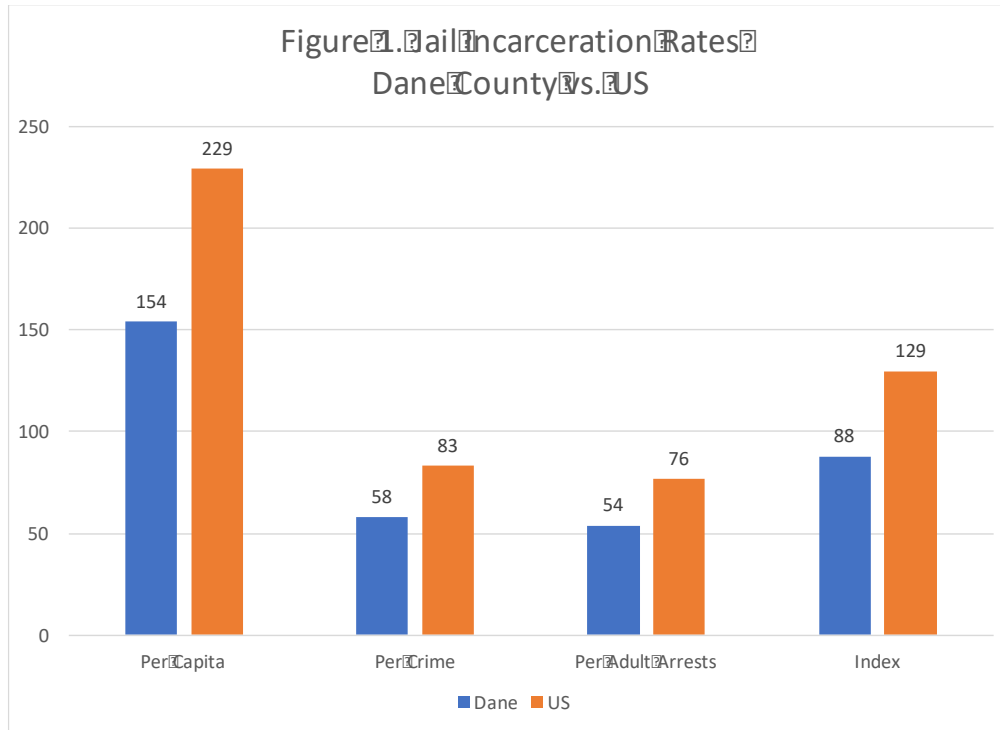
Table 3. 2018 Crime and Arrest Rates
U.S., Wisconsin and Dane County

Indicators	US	Wisconsin	Dane
Population	327,167,434	5,822,434	542,364
Crime rate per 100,000	2,569	2,299	2,259
Violent Crime Rate	369	295	273
Property Crime Rate	2,200	1,560	1,986
Total Arrests	10,310,960	247,032	18,055
Rate Per 100	3	4	3

Sources: UCR, Wisconsin DOJ, and U.S. Census

Figure 2. Jail Incarcerartion Rates by Race/Ethnicty Dane County vs. U.S.
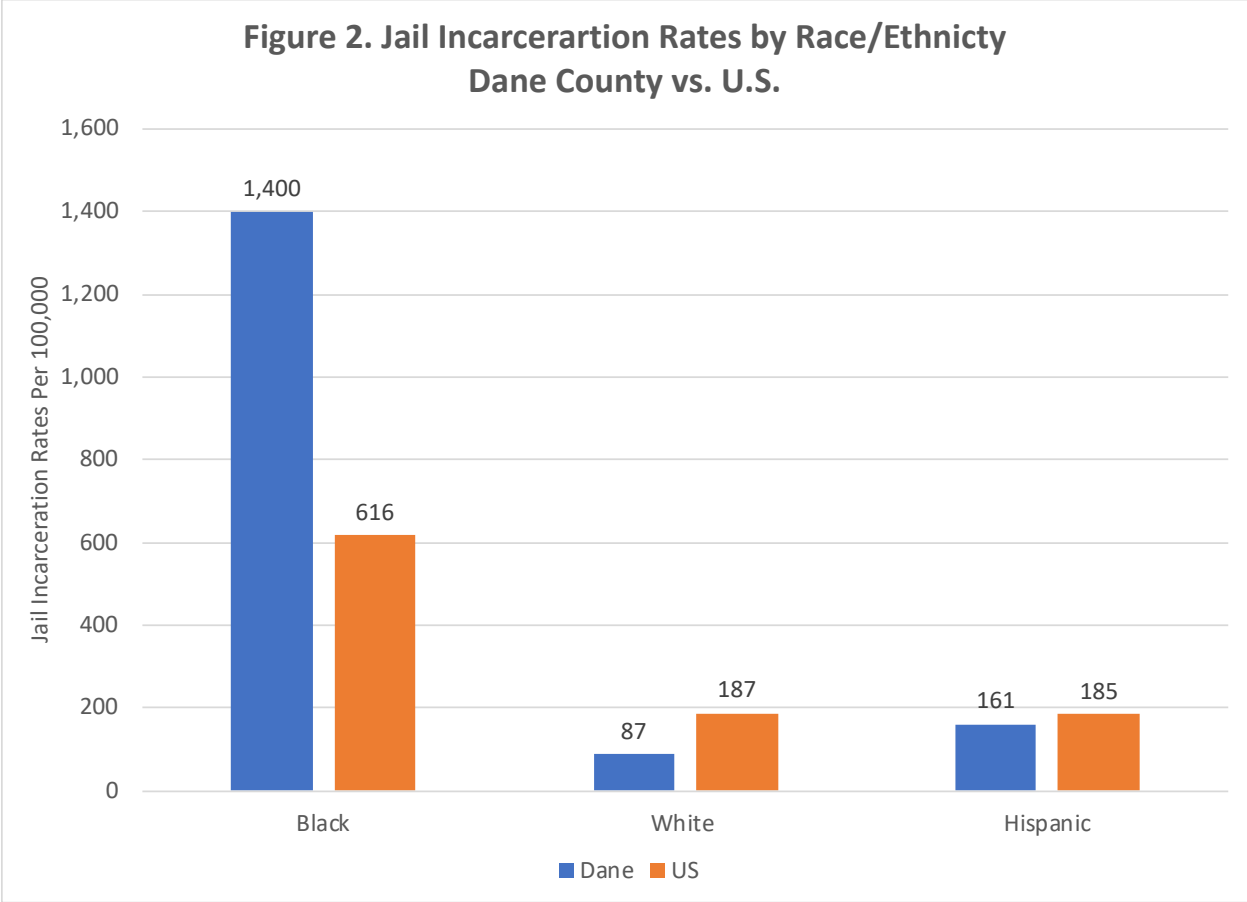
Data Collection

To pinpoint the basis for the disparity between Black and white/Hispanic jail incarceration rates, several individual-level data sets were assembled by the CJC Research and Innovation team. The first was a file that consisted of all people who were arrested in 2018 for six Dane County law enforcement jurisdictions (Madison, Fitchburg, Middleton, Monona, Sun Prairie, and Verona). These six law enforcement jurisdictions were selected due their participation in the CJC data sharing initiative, and therefore a data file already existed.

As shown in Table 4, they collectively reflect 69% of the total Dane County population. The proportions of the total six jurisdictions are generally representative of the total Dane County population. Madison has by far the largest proportion of the county's Black population (60%) and is by far the largest jurisdiction in the County.

In addition to the arrest data, the Dane County CJC provided associated booking data for the arrests. The booking data was sent in three data files, 1) all bookings in 2018 with associated first and second (if any) court disposition (12,235 bookings made for 8,214 persons), 2) a data file

containing the institutional classification for these bookings and 3) a data file of the Public Safety Assessment (PSA) pretrial risk assessment instrument for associated bookings in the first file.

Table 4. Dane County Population by Race by Jurisdiction

Jurisdiction	Total	Hispanic	White	Black
Fitchburg	27,914	4,829	18,289	2,684
Madison	248,856	17,473	185,297	16,024
Middleton	18,951	854	15,282	1,263
Monona	7,989	440	7,121	140
Sun Prairie	32,112	1,588	25,458	2,455
Verona	27,914	4,829	18,289	2,684
Grand Totals	363,736	30,013	269,736	25,250
%	69%	8%	74%	7%
Dane County	529,638	32,985	438,930	26,715
%	100%	6%	83%	5%

Because the arrest data and booking data were drawn from different sources, there was no standardized variable available to match the arrests to a corresponding booking other than person's name. Further, to assure that persons with multiple arrests had the correct associated booking matched, only cases where the arrest date and booking date were the same were able to be matched. Using this strategy 3,402 arrest incidents were matched to a subsequent booking. Dane County utilizes the PSA for in-custody individuals only. Of these 3,402 bookings, 1,681 had scored PSA records.

Analysis

The first step was to compute arrest rates for each race and ethnic group for the six cities. The overall rate for the six cities is 2.4 arrests each year per 100 population, which is slightly lower than the rate of 3 arrests per 100 for all of Dane County (Table 5). Blacks and whites constitute the largest proportions of all arrests, at 46% each. But if one computes a rate per population for each group, the Black arrest rate (16.0) far exceeds—at about ten times higher—the White and Hispanic populations (1.5). One can also compute a Black, Hispanic and "other"[2] to White relative rate ratio (RRR). Here again the Black to White and Hispanic RRR is over ten times higher than Whites and Hispanics. In comparison to national data, the Dane County arrest rate for Blacks is nearly twice the U.S rate (Figure 3), which mirrors the Black jail incarceration rate previously shown in Figure 2.

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[2] ("Others" represent Native Americans, Asians, and those that did not self-identify or were not positively identified by race/ethnicity.)

Table 5. Arrest Rates by Race and Ethnicity – 2018
Selected Cities

	Population		Total Arrests				
	Population	%	N	%	Rate Per 100 Population	Relative Rate Ratio	Ave Charges Per Arrest
Total	363,736	100%	8,819	100%	2.4		
Hispanic	30,013	8%	441	5%	1.5	1.0	1.0
White	269,736	74%	4,051	46%	1.5	1.0	1.0
Black	25,250	7%	4,043	46%	16.0	10.7	1.1
Other	38,737	11%	284	3%	0.7	-0.5	1.1

*The RRR is ratio of the percentage of arrests for blacks, Hispanics and other racial groups as compared to the white percentage.

Figure 3. Total Arrest Rates Per 100 Population U.S. vs. Dane County
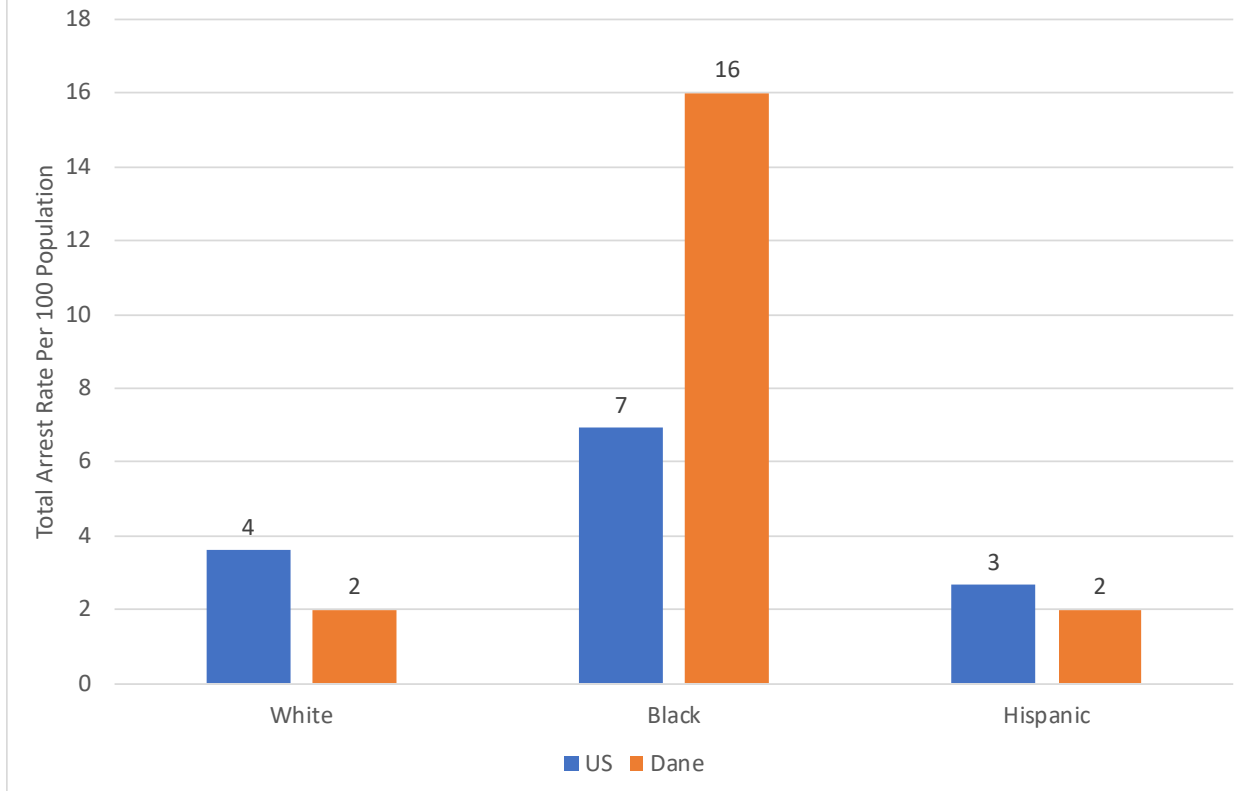
Since a person can be arrested multiple times in a 12-month period, this analysis was performed again by only counting the number of people arrested at least once in 2018. This analysis more closely reflects how many individual people are arrested at least one time in a single year.

As shown in Table 6, there were 5,997 people arrested at least once in 2018 (as opposed to the 8,819 total arrests). This analysis lowers the overall rate from 2.4 to 1.6, but the arrest rate for Blacks remains about 8 times higher than the White and Hispanic rates. Using Black, Hispanic, and "other" to White ratios the disparity for Blacks remains very high.

Table 6. Person Based Arrest Rates by Race and Ethnicity – 2018
Selected Cities

	Population		Total Arrests			RRR
Race/Ethnicity	City Population	%	Arrests	%	Rate Per 100 Population	
Total	363,736	100%	5,997	100%	1.6	
Hispanic	30,013	8%	358	4%	1.2	1.1
White	269,736	74%	2,937	49%	1.1	1.0
Black	25,250	7%	2,482	41%	9.8	8.9
Other*	38,737	11%	220	4%	0.6	-0.5

*Includes other racial/ethnic groups or those who declined to report

We then looked at the total arrest rates by the major crime types of violent, property, drug, and other crimes. Table 7 repeats the analysis shown in Table 6 but controls for the type of crime for which the person was arrested. Here the Black residents have a significantly higher arrest rate as compared to Whites and Hispanic for each of these crime groups (Table 8). The same pattern appears using the RRR calculations. Thus, the higher arrest rates for Blacks are not being driven by a specific arrest crime type.

Next, we calculated based upon the number of arrests rather than the county population attributes and per capita arrest rates. This analysis takes into account the higher proportion of all arrests being attributed to Blacks as compared to other racial and ethnic groups.

In general, the percentage distributions by crime type are fairly equivalent for all groups with the exception of violent crimes where Blacks, Hispanics, and "others" have a higher percentage of arrests and Whites have a lower percentage for non-violent crimes. However, when based on the proportion of arrests rather than the county population, the RRRs drop significantly for Blacks. This suggests that the much of the disparity between Blacks and other populations in Dane County occurs at the point of arrest.

Table 7. Total Arrest Rates x Per 100 Population and Hispanic & Black
to White Ratios by Race and Ethnicity – 2018
By Crime Type for Selected Cities

Race/Ethnicity	Violent		Property		Drug		Disorderly Conduct		Other	
	Rate	RRR	Rate	RRR	Rate	RRR	Rate	RRR	Rate	RRR
Total	0.8	N/A	0.7	N/A	0.2	N/A	0.3	N/A	0.3	N/A
Hispanic	0.6	1.5	0.2	-0.5	0.1	-0.5	0.1	1.0	0.3	1.0
White	0.4	1.0	0.4	1.0	0.2	1.0	0.1	1.0	0.3	1.0
Black	6.1	15.3	4.4	11.0	1.3	6.5	1.9	19.0	1.3	4.3

Table 8. Arrests by Race by Crime Category – 2018
Selected Cities

	Total Arrests		Violent		Property		Drug		Disorderly		Other	
	N	%	%	RRR	%	RRR	%	RRR	%	RRR	%	RRR
Hispanic	441	5%	44%	1.8	16%	-0.6	9%	-0.8	16%	1.6	15%	-0.6
White	4,051	46%	25%	1.0	29%	1.0	11%	1.0	10%	1.0	25%	1.0
Black	4,043	46%	38%	1.5	27%	-0.9	8%	-0.7	12%	1.2	15%	-0.6
Other	284	3%	41%	1.6	23%	-0.8	8%	-0.7	10%	1.0	18%	-0.7

The next phase of analysis looks at the current jail population, jail releases, and the length of stay LOS) by the key racial and ethnic groups. Unlike the arrest data, we are not able to control for just the six communities. However, the county-wide jail data (both jail releases and the current jail population) show a similar distribution by race and ethnicity.

As shown previously in Figure 2, the rate of incarceration for Blacks is approximately 16 times higher than the white population and 8 times higher than the Hispanic incarceration rate. The percentage distribution of the current jail population is virtually identical to the arrest distribution, which again shows the primary source of disparity occurs at the point of arrest.

However, the LOS to date is higher for both Blacks and Hispanics. The higher LOS for Hispanics may explain why they have a higher incarceration rate as compared to whites even though their arrest rate is similar to whites (Table 9).

Using the jail release data for 2018, it is possible to measure the average LOS by race and ethnicity while controlling for the most serious charge/offense at release. Blacks and Hispanics have a longer LOS than whites for violent and drug crimes. Blacks also have a longer LOS for the crime of disorderly conduct, although the LOS for disorderly conduct is comparatively low (Table 10).

Finally, we can compute person-based arrest, current jail incarceration, and person-level jail release rates for the three demographic groups. In doing so, we have modified the metric for the rates to standardize the comparisons. Whether using the arrest, jail incarceration, or jail release rates, the results are the same. Blacks have significantly higher rates (arrest, jail incarceration, or jail release) as compared to whites and Hispanics (Table 11).

Table 9. Dane County Population, Arrests, Jail Bookings, Jail Population and Length of Stay by Race/Ethnicity - 2018

Race/Ethnicity	Population	Arrests	Jail	Jail Releases	Average LOS	Median LOS
Hispanic	8%	5%	6%	9%	26 days	2 days
White	74%	46%	46%	51%	24 days	2 days
Black	7%	46%	45%	37%	28 days	3 days

Table 10. Dane County Length of Stay (days) by Race/Ethnicity by Primary Offense - 2018

	Total	Violent	Property	Drug	Disorderly	Other
Hispanic	26	38	17	35	2	25
White	24	29	27	19	3	22
Black	28	47	27	29	6	20

Table 11. Arrest, ADP and jail Releases Rates and RRR by Race and Ethnicity

Race/Ethnicity	Arrest		Current Jail Population		Jail Releases	
	Per 100 Population	RRR	Per 1,000 Population	RRR	Per 100 Population	RRR
Hispanic	1.2	1.1	1.6	1.8	2.8	2.5
White	1.1	1.0	0.9	1.0	1.0	1.0
Black	9.8	8.9	14.0	15.6	9.7	9.7

A Stress Test of Arrest Disparity

Upon completion of the above analysis, the Dane County Criminal Justice Council (CJC) requested the CJC Research and Innovation Team work further with JFA Institute to break down the stress test according to race, gender, and ethnicity. This additional analysis focuses on the point of arrest, which is consistent with the finding of the statistical analysis. The Madison Police Department (MPD), which is the largest arresting agency contributing to Dane County jail population, volunteered to be the first agency to undergo this stress test.

Specifically, the stress test analyzed a representative sample of 70 people arrested for crimes in which there appeared to be the greatest amount of racial disparity (disproportionality) during the arrest stage. The analysis was limited to arrests made by the Madison Police Department. An analysis that reviews arrest, booking, and police report data with multiple agencies and the community is highly unusual. We believe this analysis to be the first of its kind. The desire of the MPD to conduct such a study is a tribute to the MPD leadership and the department's commitment to eliminate undue bias in the arrest decision.

The need for the test is rooted in the inability of the statistical data presented above to capture all of the nuances in how police respond to either a call for service or the detection of a possible crime.

Table 12. Summary of Cases Selected for Stress Test

Attribute	Number	Percent
Total	70	100%
Gender		
Female	24	34%
Male	46	66%
Race		
Black	35	50%
White	35	50%
Age Category		
17-24	28	40%
25-34	16	23%
35-44	14	20%
45 and older	12	17%
Number of Charges		
One	37	53%
Two	14	20%
Three	13	19%
Four	2	3%
Five or more	4	6%
Top Charge		
Simple battery	10	14%
Disorderly conduct	10	14%
Domestic violent	10	14%
Probation violator	10	14%
Resisting arrest	10	14%
Retail theft	10	14%
Trespassing	10	14%
Arrest Type		
On-view arrest	50	71%

Summoned/cited	20	29%

The need for this analysis is rooted in the inability of statistical data to capture all of the nuances in how police respond to a call for service. The decision to issue a warning, citation, or custodial arrest is often complicated and requires understanding of entire interaction.

To address that issue, one must review the arrest report. The arrest report captures the officer's perspective on the nature of the crime and the decision to either arrest or cite the defendant at the scene. Equally important is the decision to list which charge(s) the officer feels are justified.

This innovative grouping—researchers, practitioner, and community members—is one that the Dane County CJC has found most impactful in moving policy and procedure improvements forward. Participating in the Stress Test were the following agencies:

> **CJC Research and Innovation Team:** Colleen Clark-Bernhardt (Coordinator), Noemi (Reyes, Analyst);
> **Madison Police Department**: Assistant Chief John Patterson, Captain Matt Tye (Capt. of the Mental Health Team), Captain Tim Patton (West District), and Officer Casey Amoroso (Mental Health Officer);
> **Madison/Dane County Public Health:** Aurielle Smith (Director of Policy, Planning and Evaluation); and,
> **Community Residents:** Sheray Wallace and Mike Alston.

For each sampled case, the police report provided a narrative that was read out loud to all attendees. Once summary reading was completed, group discussion centered around three core issues:

1. Were the charges contained in the summary report justified and consistent with MPD policies?
2. Was the decision to cite versus arrest appropriate?
3. Was there any indication of racial bias in those two decisions? That is, for similarly situated alleged crime, did the arrest decision differ between Black and white residents.

Based on this process, findings can be summarized as follows:

1. Most of the crimes addressed by the MPD were calls for service where the MPD was responding to a victim's need for services. Very few were actions taken alone by the MPD in response to a crime in progress.
2. The vast majority of the incidents were handled properly by the MPD in terms of the charges listed in the report and the decision to arrest or cite.
3. There were very few incidents where the decision to arrest or not, or the charges listed in the report, were judged by the participants as biased toward Blacks.

4. The multi-agency and community review group's review was limited to ascertaining if the charge associated with the crime appeared appropriate and if the decision to arrest versus citation seemed appropriate.
5. Community members, MPD, and the CJC team indicated a number of incidents where wraparound services (other than arrest) seemed appropriate. The root cause of the activity, and possible non law enforcement interventions, was discussed. This discussion reviewed whether the offense was motivated by a lack of necessary services necessary (e.g., food, housing, mental health supports).

Importantly, the involvement of the community groups in this stress test greatly increased their perceptions of everyday police work, as well as the types of situations police are faced with on a daily basis.

Summary

The major source for the disparity in the jail population occurs at the point of arrest. As shown earlier, this level of disparity persists at arrest even when one controls for the type of crime. This finding is consistent with other studies of racial and ethnic disparities within the juvenile and adult criminal justice system.[3] These studies have shown that defendant behavior and police bias are the two primary sources of such disparity.

However, it is also true that a longer length of stay for Blacks and Hispanics, especially for violent crimes, further contributes to the racial and ethnic disparities in the jail population. This disparity persists when controlling for the type of crime for which the person is charged and/or convicted.

The detailed qualitative study of a random sample of police encounters with its residents found little evidence of systemic racial bias in the how police use their discretion to arrest or not, and, what crime(s) to charge the defendant(s) with. This finding is consistent with prior studies that concluded much of the racial disparity at the point of arrest is explained by differential criminal behavior participation rates which are more strongly associated with SES (social economic status) status and not race.[4] A limitation of this study was that it did not study bias in traffic stops, which other studies have found to be racially biased.[5]

Nonetheless, the Madison Police Department and the community it serves should continue to conduct such joint studies on a regular basis to ensure racial bias at the point of arrest is reduced

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[3] McCord, Joan, Ed.; Widom, Cathy Spatz, Ed.; Crowell, Nancy A., Ed.. 2001. **Juvenile Crime, Juvenile Justice. Panel on Juvenile Crime: Prevention, Treatment, and Control.** Washington, DC: National Academy Press**.** Krivo, Lauren J. and Ruth D. Peteron. 1996. *Extremely Disadvantaged Neighborhoods and Urban Crime.* **Social Forces.** Volume 75, Issue 2, , Pages 619–648, https://doi.org/10.1093/sf/75.2.619

[4] Fernandes, A.D. and Crutchfield, R.D. (2018), Race, Crime, and Criminal Justice. Criminology & Public Policy, 17: 397-417. https://doi.org/10.1111/1745-9133.12361

[5] Ross, MB, Kalinowski, JJ, Barone, K. Testing for disparities in traffic stops: Best practices from the Connecticut model. *Criminol Public Policy*. 2020; 19: 1289– 1303. https://doi.org/10.1111/1745-9133.12528

to its lowest levels. This unique analysis may better inform police, residents, and policymakers around potential deflection and diversion opportunities which are designed and developed to increase racial equity in the City of Madison and Dane County.