

Spring 2018

# Reincarceration Rates for DWI and Domestic Violence Offenders

Torrence Savage

Brittany Wittrock

Joseph Brough

Follow this and additional works at: [http://repository.stcloudstate.edu/criminal\\_justice\\_data](http://repository.stcloudstate.edu/criminal_justice_data)



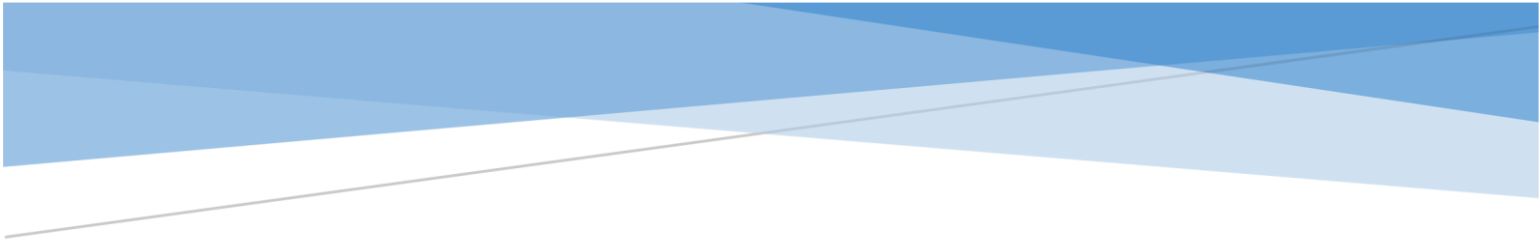
Part of the [Applied Statistics Commons](#), and the [Statistical Models Commons](#)

---

## Recommended Citation

Savage, Torrence; Wittrock, Brittany; and Brough, Joseph, "Reincarceration Rates for DWI and Domestic Violence Offenders" (2018). *Criminal Justice Data*. 1.  
[http://repository.stcloudstate.edu/criminal\\_justice\\_data/1](http://repository.stcloudstate.edu/criminal_justice_data/1)

This Research Study is brought to you for free and open access by the Air Reports at theRepository at St. Cloud State. It has been accepted for inclusion in Criminal Justice Data by an authorized administrator of theRepository at St. Cloud State. For more information, please contact [modea@stcloudstate.edu](mailto:modea@stcloudstate.edu), [rswexelbaum@stcloudstate.edu](mailto:rswexelbaum@stcloudstate.edu).



# REINCARCERATION RATES FOR DWI AND DOMESTIC VIOLENCE OFFENDERS

Stearns County Community Corrections

Torrence J. Savage, Brittany Wittrock, Joseph Brough  
[Email address]

## Table of Contents

Executive Summary.....	2
Background .....	2
Goals .....	3
Data Information.....	3
Data Formatting.....	4
Results.....	5
All Clients in All Years Included .....	5
Figure 1 and 2.....	5
Table 1 (Domestic Overall).....	5
Clients in Previous or Future Years Removed .....	7
Table 3 (Domestic After Years Excluded) .....	7
Table 4 (Domestic Previous Years Excluded) .....	7
Conclusion.....	7
Appendix .....	8
Variable List.....	8

## Executive Summary

Stearns County Community Corrections is looking for the likelihood for offenders to be re-incarcerated within ninety days to three years after the last contact between the agent and the client. All of the clients were separated by year and categorized by whether their initial crime was Domestic Violence or DWI. Many of these clients had multiple observations for cases that were reduced to include only the case with the agent that they worked with the longest.

It was found that the re-incarceration rate for both Domestic and DWI had a decrease of approximately 75% over the course of four years. These results do not seem to fit with what is expected from this population of offenders. Multiple clients were included in different years when there should have only been one listing of each client with a final effective date. It is likely that there was an error when the data was pulled from the system. Our hypothesis is that clients who had an effective date and their case with corrections was closed, reoffended and their case was reopened. These clients may not be listed in the data set. This would take out a large number of those clients who reoffended recently and skew the results to include less reoffenders as it gets closer to the current year.

## Background

Stearns County Community Corrections (SCCC) is working with students at St. Cloud State University on various projects regarding data they've collected about their services. Scott Ergen and Joseph Kustritz acquired data for students to analyze and provided some goals for the project. They also provided information to better understand the data, and feedback regarding potential results. Dr. David Robinson coordinated these Jail Team meetings over the course of the semester and facilitated communication between students and the SCCC.

## Goals

The primary goal of this project was to find the clients' re-incarceration rates within ninety days to three years of the Effective Date. Also, if there was a re-incarceration, find how many times it occurred and if it was the same type of offense as previously. Finally, find which agent they worked with the most and which agents had the highest/lowest re-offense rates for their clients.

## Data Information

The Domestic and DWI data was made available by Scott Ergen through Dr. Robinson and was comprised of 8 excel files. Four of the files contained information regarding clients that had a Domestic case and the other four files had client information for those who had a DWI case with an Effective date between 2010 & 2013. Only clients who have been convicted with a Domestic or DWI charge and have an Effective date between January 1st, 2010 and December 31st, 2013 are being considered.

A secondary set of data was made available by Joseph Kustritz that was comprised of 5 excel files that contained all records of offenses between 2009 and 2016. This data was split up by year, and cases that occurred in 2009 were eliminated.

## Data Formatting

The analysis for this project required that each client only have one row of data with their information and primary agent. The following steps were taken with the DWI and Domestic data sets to eliminate duplicate rows and find the agent the client worked with the longest:

1. The data was imported into JMP.
2. Rows with “Disposition Description” = “Dismissed” or “Acquitted,” and rows with “Agent Code” as listed above were deleted.
3. Using the “Start Date” and “End Date,” the amount of days each agent spent with each client was calculated and placed into the new column “Days with Agent.”
4. The data was then exported it into excel.
5. The data was then sorted first by “Client Number” and then by “Days with agent.”
6. Duplicate rows were deleted based on “Client Number,” “Last Name”, “First Name,” and “Date of Birth.”

Next an inner join of the Client data for each year (2010, 2011, 2012 & 2013) with the detention data for all years (2010-2016). This was done using matching on the clients’ First Name, Last Name, and BirthDate.

## Results

### All Clients in All Years Included

The original graphs and tables created are listed below. According to the data, there was a large drop in re-incarceration rates from 2010-2013 for both Domestic and DWI offenders.

Figure 1 and 2

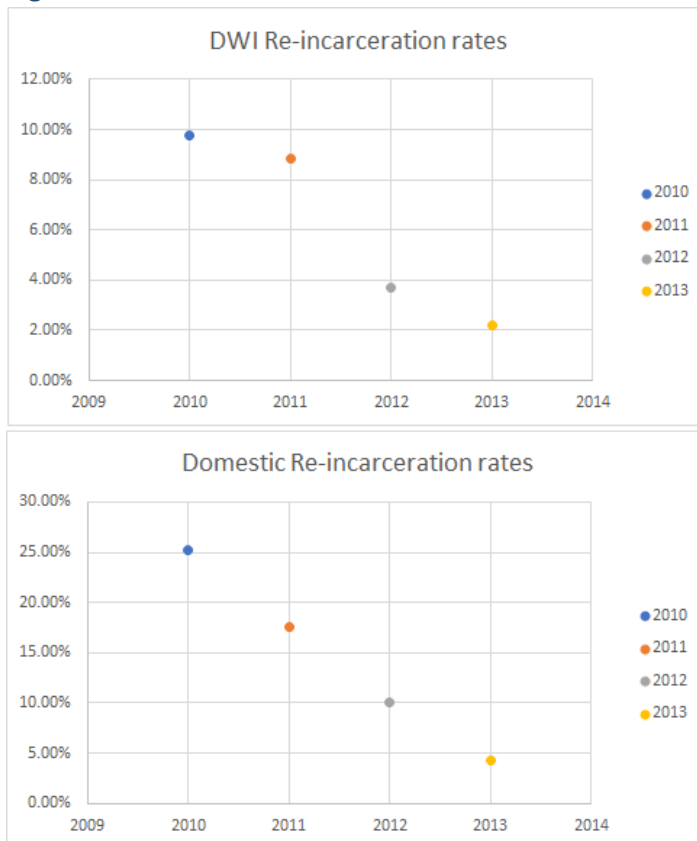


Table 1 (Domestic Overall)

Domestic (Overall)			
Year	N	Reoffenses	Rate
2010	473	119	25%
2011	590	104	18%
2012	519	52	10%
2013	520	22	4%

Table 2 (DWI Overall)

DWI (Overall)			
Year	N	Reoffenses	Rate
2010	1763	172	10%
2011	1290	114	9%
2012	1182	44	4%
2013	1095	24	2%

According to past experience working with these clients, these numbers seem highly unlikely. Domestic violence offenders in particular are historically unlikely to change their behavior patterns. The same data formatting process was repeated several times by multiple people with the same results. The data was checked to make sure there were no discrepancies in the distribution of offenses or clients by year. These results should not be considered accurate.



### Clients in Previous or Future Years Removed

After examining the results more carefully, it was discovered that there were multiples of the same clients included in different years. According to our information, the last date the client worked with the county was supposed to be the date their case was closed. However, many of the same clients appeared in multiple years. Taking the clients' first or last effective date in the data set and deleting the later or earlier occurrences were both considered.

Table 3 (Domestic After Years Excluded)

Domestic (After Excluded)			
Year	N	Reoffenses	Rate
2010	299	32	11%
2011	415	39	9%
2012	427	23	5%
2013	520	22	4%

Table 4 (Domestic Previous Years Excluded)

Previous Years Excluded			
Year	N	Reoffenses	Rate
2010	473	119	25%
2011	517	75	15%
2012	337	23	7%
2013	334	10	3%

Clearly, the rates are decreasing every year in all cases. Any further analysis of this data, other than to find why it is wrong, would be useless.

### Conclusion

The data indicates that there is a large drop in re-incarceration rates from 2010-2013 for both Domestic and DWI offenders. Past experience of the SCCC indicates that this is extremely unlikely. The data formatting was examined for possible errors and completed several times by different people. We were unable to find the source of the error, whether it was the student's analysis or a problem with how the data was pulled from the system. Our hypothesis is that the clients who currently have an active file are not listed in the data set. This would explain why the clients from approximately seven to eight years ago are more likely to be in the data set and the clients from five to six years ago are less likely. This type of analysis could be attempted again, but how the data is extracted from the system needs to be examined more carefully to ensure that the right clients are included in the data.

## Appendix

### Variable List

**Effective Date**            The last date of contact between the program and client

**Disposition Description**    Convicted, Acquitted or Dismissed of the charge. Cases that were dismissed were removed from the dataset.

**Agent Code**                Initials of agent that worked with the client

Agents with the following codes were removed from the dataset:

JLZ

BLS

JLL

TLG

AJH

KJC

ZZZ

PSI

ADR

WAR

FEE

CSWA

Any with numbers

**Start Date**                Date that agent started working with the client

**End Date**                 Last date that agent worked with the client

**Days with Agent**         Number of days that the agent has worked with the client