

An Analysis of Sex Offenses

Using Incident-Based Reporting Data



Oklahoma Statistical Analysis Center
Oklahoma State Bureau of Investigation

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An Analysis of Sex Offenses in Oklahoma
Using Incident-Based Reporting Data

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Executive Summary

The Oklahoma Statistical Analysis Center (SAC) conducted an analysis of sex offenses reported by local law enforcement to the Oklahoma State Incident-Based Reporting System (SIBRS) in 2015. The statewide analysis included four sex offenses: forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling. Researchers analyzed 1,315 reports that included 1,489 separate offenses (some reports included multiple offenses). The reports included 1,423 unique victims of a sex offense and 1,440 offenders.

Key findings:

- In 2015, 199 law enforcement agencies submitted reports through SIBRS containing at least one sex offense;
- June had the largest (127) number of sex offenses reported, while February had the least (93);
- In the majority of reports (82%), the victim(s) were known to the offender(s);
- The majority of offenses (75.9%) took place in a residence;
- The most frequently used weapons reported were personal weapons (hands, feet, fists, ect.).

Introduction

Law enforcement agencies in Oklahoma have lacked sufficient data for planning and problem solving. The SAC previously conducted two analyses on SIBRS data with the intention of demonstrating the benefit incident-based reporting data may have on planning and problem solving.

This project focuses on the benefit of incident-based data for reporting purposes, as well as the quality of the data submitted to SIBRS. Unlike the previous SIBRS projects, which only analyzed data from a single agency, this project includes data from 199 law enforcement agencies in Oklahoma. Researchers focused their analysis on forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling.

Traditional summary-based reports include the number of forcible rapes reported, the number of rapes cleared by law enforcement, and the racial/ethnic demographics of offenders arrested for rape. Incident-based reports include more detail than summary-based reports. This project will demonstrate the data reporting possibilities available through incident-based reporting. Common errors discovered with SIBRS data will also be discussed.

Incident-Based Reporting Background

Law enforcement agencies have relied on summary reporting through the Uniform Crime Reporting (UCR) Program to provide crime data to the Federal Bureau of Investigation (FBI). In the 1980s, an evaluation of the UCR was performed with the goal of broadening and improving the UCR Program. As a result of this evaluation (“Blueprint for the Future of the Uniform Crime Reporting Program”), new guidelines were implemented. These guidelines are fulfilled through the use of the National Incident-Based Reporting System (NIBRS) (National Archive of Criminal Justice Data).

Incident-Based Reporting Compared to Summary Reporting

Incident-based reporting is greatly different than summary reporting. Summary reporting requires local agencies to only report the monthly count of eight index offenses, as well as arrest counts for specific offenses. Incident-based reporting allows for the collection of details about the offense, victim, offender, location, weapon, etc. The Justice Research and Statistics Association (JRSA) identified additional advantages of incident-based reporting. For instance, incident-based reporting does not use the hierarchy rule that is used in summary reporting. The hierarchy rule maintains that in multiple-offense situations, only the most serious offense, or the offense highest on the hierarchy list, is counted. Incident-based reporting counts each offense in a multiple-offense situation. Furthermore, summary reporting is restricted to collecting counts of

eight index offenses, but incident-based reporting allows for the collection of a number of offenses. According to the NIBRS User Manual (2013), data are collected for at least 46 offenses. Finally, incident-based reporting allows for the analysis of variables to determine if any relationships exist.

Incident-Based Reporting in Oklahoma

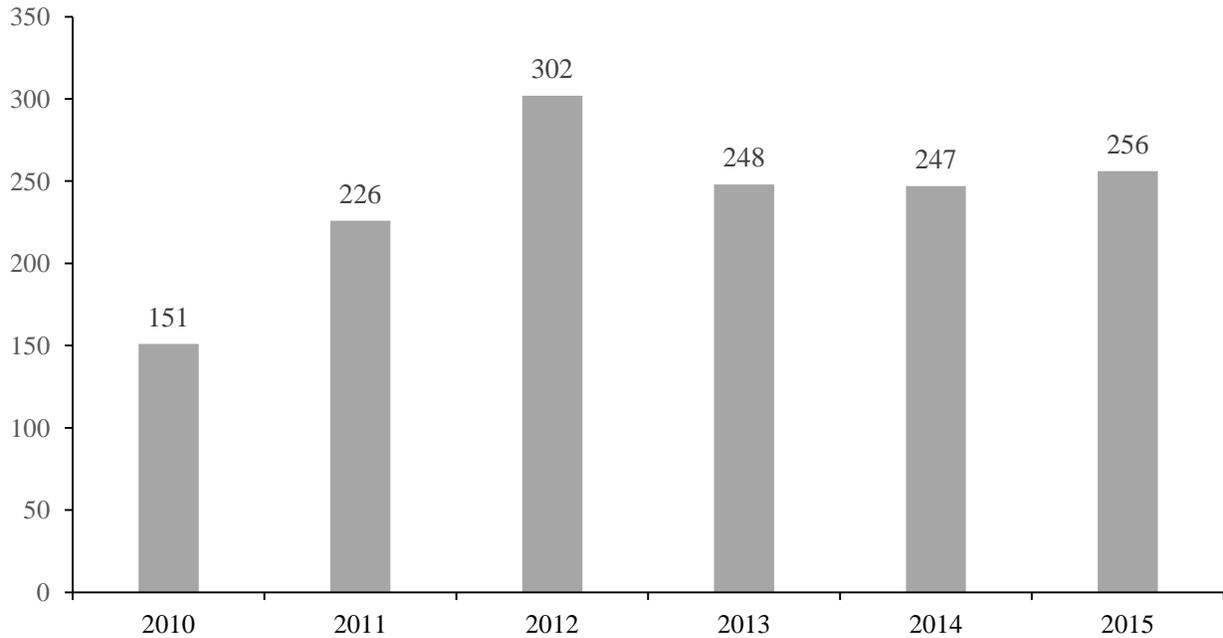
On September 1, 1973, the Oklahoma State Bureau of Investigation (OSBI) assumed statewide management of the UCR Program. In 1976, the Oklahoma State Legislature mandated through Title 74 O.S. §150.10 that all law enforcement agencies were required to report crime statistics in summary format to the OSBI. Realizing the usefulness of incident-based data, an advisory board consisting of UCR contributing agencies, advocated for the transition to incident-based reporting.

Following this recommendation, OSBI began the development of SIBRS in 2003. Shortly thereafter, agencies began submitting crime data to SIBRS, and in October 2009, Oklahoma received official certification to report incident-based data to the FBI (JRSA, 2016). SIBRS serves as an online records management system and is available to all agencies participating in the UCR Program.

In 2015, 256 police departments and 64 sheriffs' offices contributed crime data to the UCR Program through SIBRS. Contributing SIBRS agencies reported 27% of index crimes reported in Oklahoma. Population estimates indicate 41% of Oklahomans reside in a SIBRS jurisdiction.

A majority of SIBRS agencies serve populations fewer than 15,000 (225), and 14 agencies serve populations of at least 25,000. The largest jurisdictions continue to submit data via the summary reporting (State Incident-Based Reporting System 2015).

Figure 1. SIBRS agency participation, 2010-2015



Past Projects Using Incident-Based Data

Two projects using incident-based reporting data have been conducted by the Oklahoma SAC. The first project, “Police Planning and Problem Solving Through Incident-Based Reporting Data,” focused on characteristics and trends in domestic violence cases in Muskogee, Oklahoma. This project began July 1, 2010, and concluded March 31, 2012. Researchers analyzed approximately 1,600 domestic violence incident reports and offered planning recommendations to the Muskogee Police Department. In addition, researchers published a domestic violence research guide for law enforcement based on their findings.

The second project, “Police Planning Through Incident-Based Reporting Data: Property Crimes in Tahlequah, Oklahoma,” focused on property crimes occurring in Tahlequah, Oklahoma, between January 1, 2012, and December 31, 2014. Researchers analyzed property crime trends and characteristics based on data submitted by the Tahlequah Police Department. The purpose of this project was to demonstrate the benefit of using incident-based reporting data to assist law enforcement with planning, problem solving, and allocating resources.

Methods

Researchers analyzed 1,315 SIBRS reports containing incidents of forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling. Unlike previous SIBRS projects, which only analyzed data from a single agency, this project included data from 199 law enforcement agencies in Oklahoma.

SIBRS reports are divided into 10 segments; however, data for this project were only collected from six segments (“Administrative,” “Offense,” “Victim,” “Offense,” “Suspect/Arrestee,” and “Narrative”). From these segments, 15 data elements (variables) were collected. These variables included the Originating Agency Identifier (ORI) number, the report number, date of incident, time of incident, report date, report time, offenses included in each report, number of victims, age of victim(s), victim to offender relationship, location(s) of offense(s), weapon(s) used, number of offenders, age of offender(s), and if a complete narrative was included with the report.

Results

Law Enforcement Agencies

In 2015, 199 law enforcement agencies submitted reports through SIBRS containing at least one sex offense. The Muskogee Police Department had 77 reports containing one or more sex offenses in 2015. Fifty-four law enforcement agencies only had one report containing one or more of the four sex offenses. See Appendix B for a complete list of agencies and the number of reports submitted.

Report Date and Time

Initially, researchers planned to analyze the incident date and time, as well as the report date and time. After discovering issues surrounding the entry of these data elements, researchers made the determination to only analyze the report date and time. June had the largest (127) number of sex offenses reported, while February had the least (93). Law enforcement received the largest (11.9%) number of reports between 10:00 p.m. and 11:59 p.m., and least (3.7%) between 6:00 a.m. – 7:59 a.m.

Table 1. Crime reported to law enforcement, by month

Month	Number	Percent
January	118	9.0%
February	93	7.1
March	110	8.4
April	107	8.1
May	100	7.6
June	127	9.7
July	107	8.1
August	119	9.0
September	113	8.6
October	126	9.6
November	99	7.5
December	95	7.2
Not Reported	1	0.1
Total	1,315	100.0%

Table 2. Time crime reported to law enforcement

Month	Number	Percent
12:00 a.m. – 01:59 a.m.	62	4.7%
02:00 a.m. – 03:59 a.m.	69	5.2
04:00 a.m. – 05:59 a.m.	51	3.9
06:00 a.m. – 07:59 a.m.	49	3.7
08:00 a.m. – 09:59 a.m.	95	7.2
10:00 a.m. – 11:59 a.m.	86	6.5
12:00 p.m. – 01:59 p.m.	124	9.4
02:00 p.m. – 03:59 p.m.	128	9.7
04:00 p.m. – 05:59 p.m.	116	8.8
06:00 p.m. – 07:59 p.m.	101	7.7
08:00 p.m. – 09:59 p.m.	88	6.7
10:00 p.m. – 11:59 p.m.	157	11.9
Unknown	189	14.4
Total	1,315	100.0%

Offenses

Researchers analyzed 1,489 offenses included in the SIBRS reports. Of the reports analyzed, 1,180 contained only one offense, while 135 contained two or more offenses. Of the 135 reports with two or more offenses, 24 reports contained only multiple sex offenses while 111 contained at least one sex offense along with another type of offense.

Table 3. Number of reports with multiple offenses

Number of offenses	Number of reports
One	1,180
Two	108
Three	19
Four	5
Five	2
Six	1
Total	1,315

Table 4. Offense, by type

Offense type	Number
Sex offenses	1,355
Forcible fondling	658
Forcible rape	489
Forcible sodomy	145
Sexual assault with an object	63
Violent crimes	15
Property crimes	12
Non-index offenses	107
Total	1,489

Victims

Of the reports analyzed, 1,325 had a single victim of a sex offense. Of those that had multiple victims, 19 had one victim of a sex offense, 58 had two victims of a sex offense, 17 had three victims of a sex offense, three had four victims of a sex offense, and one had five victims of a sex offense.

Table 5. Victims of sex offense

Victims in report	Number of reports
Single victim only	1,220
Multiple victims, one victim of sex offenses	19
Multiple victims, two victims of sex offenses	58
Multiple victims, three victims of sex offenses	17
Multiple victims, four victims of sex offenses	3
Multiple victims, five victims of sex offenses	1

The average age of victims of sex offenses reported in SIBRS was 17.6. The majority (63%) of victims were under the age of 18, while 1.9% were 55 and older.

Table 6. Age of sex offense victims

Age	Number	Percent
Under 18	904	63.7%
18-24	169	11.9
25-34	158	11.1
35-44	79	5.6
45-54	38	2.7
55 and older	27	1.9
Age of victim unknown	44	3.1
Total	1,419	100.0%

Offenders

Of the reports analyzed, 1,215 had one offender, 84 had two offenders, 14 had three offenders, two had four offenders, and one had seven offenders.

Table 7. Offenders

Offenders in report	Number of reports
One	1,215
Two	84
Three	14
Four	2
Seven	1
Total	1,316

The average age of offenders was 32.3 years old. Just over half (51.4%) of offenders were younger than 35, and just less than 3% were 65 and older. The age of 212 offenders was missing from the SIBRS reports analyzed.

Table 8. Age of offenders

Age	Number	Percent
Under 18	262	18.2%
18-24	204	14.2
25-34	273	19.0
35-44	203	14.1
45-54	156	10.8
55-64	91	6.3
65 and older	39	2.7
Age of victim unknown	212	14.7
Total	1,440	100.0%

Victim to Offender Relationship

Victim-to-offender relationships were also analyzed for the four sex offenses. In the majority of reports (82%), the victim(s) were known to the offender(s). Of the relationships in which the victim(s) were known to the offender(s), but not related, “acquaintance” was the most frequently (35%) reported, followed by “otherwise known”. Instances in which the victim was the offender’s child represented 29% of family member relationships. “Other family member” represented 25% of family member relationships.

Table 9. Relationship of Victim to Offender

Relationship type	Number
Family member	527
Child	154
Other family member	133
Stepchild	78
Sibling	52
Grandchild	48
Spouse	21
Stepsibling	21
In-law	10
Adoptive/foster child	6
Common-law spouse	3
Stepparent	1
Known, not family member	750
Acquaintance	259
Otherwise known	250
Friend	102
Boyfriend/girlfriend	58
Child of boyfriend/girlfriend	22
Neighbor	22
Ex-spouse	8
Roommate	8
Biological parent of the same child	7
Employee	6
Ex-roommate	3
Babysitree	2
Employer	1
Homosexual partner	1
Spouse of ex-spouse	1
Other	2
Stranger	70
Relationship unknown	184
Left blank	27
Total	1,560

Location of Offense

The location of offense is another data element available in incident-based reporting that is not always available in summary reporting. The majority of reports (76%) indicated the offenses took place at a residence. The second most frequent (5%) location was “other/unknown,” which indicates that either the location was not an option for the reporting officer to select or the information was not collected.

Table 10. Location of offense

Location	Number
Residence/home	1,029
Other/unknown	65
School/college	58
Highway/road/alley	40
Hotel/motel	28
Field/woods/fenced enclosure	29
Jail/prison	25
Commercial/office building	14
Parking lot/garage	11
Church/synagogue/temple	8
Convenience store	8
Restaurant	7
Drug store/doctor's office/hospital	6
Lake/waterway	5
Bar/night club	4
Grocery/supermarket	4
Department/discount store	3
Government/public building	3
Left blank	3
Specialty store	3
Service/gas station	2
Total	1,355

A supplementary analysis was performed in order to examine the connection between victim-to-offender relationships and the location of the crime(s). In 86% of sex offenses that occurred at a residence, the victim was related to, or knew the offender. In 3% of offenses that occurred at a residence, the victim did not know the offender. The victim knew the offender in 78% of sex offenses that occurred at schools or colleges, and were strangers in 2% of offenses that occurred at these locations. For 62% of sex offenses that occurred in correctional facilities, the victim knew the offender. Finally, victims knew the offenders in 63% of sex offenses that occurred in places of worship (i.e., churches, synagogues, or temples).

Weapons

The most frequently (61%) reported weapon used for sex offenses in 2015 were personal items (hands, fists, and feet). In 310 incidents, it was reported that no weapon was used.

Table 11. Weapons used to commit sex offenses

Weapon	Number
Firearm	15
Automatic firearm	1
Handgun	13
Type not specified	1
Drugs/narcotics	20
Objects	28
Blunt object	7
Knife or cutting instrument	21
Physical	839
Personal weapons (hands, fists, feet, etc.)	838
Asphyxiation (by strangulation)	1
Not known	163
Other	35
Unknown	101
Left blank	27
No weapon	310
Total	1,375

Data Quality

Although incident-based reporting data provides more information than summary reporting data, several data quality issues were encountered while completing this project. Fifty reports contained errors associated with the time and date the incident occurred or the time and date in which the incident was reported to law enforcement. For example, Figure 2 shows the incident and report date were the same, but the incident and report times were problematic. In this specific example, the incident occurred between 0:00 and 23:59. However, according to the incident report, the crime was reported to law enforcement at 22:30. In other instances the report and/or incident date and time were left blank. It should also be noted that in 229 reports the date and time of the incident and the report date and time were identical.

Figure 2. Example of Incident and Report Time Error

INCIDENT OCCURRED ON OR BETWEEN:										REPORTED ON:				
MONTH	DAY	YEAR	DOW	HOUR	MONTH	DAY	YEAR	DOW	HOUR	MONTH	DAY	YEAR	DOW	HOUR
December	11	2015	Friday	00:00	December	11	2015	Friday	23:59	December	11	2015	Friday	22:30

In 29 reports, the age of the victim was either not included in the report, was incorrect, or was reported as a range (e.g., 0-99). The same issue was found for offenders in 40 reports. The victim-to-offender relationship was either reversed or missing in 49 reports. Seven reports did not include correct information about the location where the crimes occurred, while one report did not include the correct weapon used to commit the offense. Errors categorized as “other” were found in seven reports. Errors categorized as “other” include the state reported as a victim of a sex offense, incomplete narratives (i.e., the narrative was started, but not finished), and programming syntax included in the narratives.

Figure 3. Example of Programming Syntax Found in Narrative

```

NARRATIVE:
P class=MsoNormal style="BACKGROUND: white; MARGIN: 0in 0in 6pt; LINE-HEIGHT: normal">B style="mso-bidi-font-weight: normal">SPAN style="FONT-SIZE: 10pt; FONT-FAMILY: 'Arial','sans-serif'; mso-fareast-font-family: 'Times New Roman'">Crime Type: Child Molestation?xml:namespace prefix = "o" ns = "urn:schemas-microsoft-com:office:office" />o:p>/o:p>/SPAN>/B>
P class=MsoNormal style="BACKGROUND: white; MARGIN: 0in 0in 6pt; LINE-HEIGHT: normal">B style="mso-bidi-font-weight: normal">SPAN style="FONT-SIZE: 10pt; FONT-FAMILY: 'Arial','sans-serif'; mso-fareast-font-family: 'Times New Roman'">Case
  
```

Finally, in some instances when information was missing or reported incorrectly in the SIBRS reports, the narrative segment provided the correct information in 86 reports. However, in 114 reports a narrative was not included. Therefore, if information was missing or incorrect in the report, the narrative was not available to provide the information.

Recommendations

Based on errors encountered while completing this project, researchers make the following recommendations to assist law enforcement in providing accurate crime data:

- Copying and pasting from previous reports when creating new reports should be avoided. Though this error was noticed because of manual data entry, in the future it could potentially be overlooked if data are automatically queried from a database.
- In some instances during data entry, multiple duplicate reports were discovered. The only difference in data elements was the case number. For example, one report would contain the case number 2015-111, while the other would be 2015-111A. Care should be taken to ensure duplicate information is not entered, as it could potentially result in inflated incident numbers.
- Incident date and time should not be the same as the date and time the incident was reported to law enforcement.
- Victims' and offenders' ages should not be reported as an indiscernible range that cannot be easily placed into a specific age category (e.g., 0-99).
- Victim-to-offender relationship should be reported as the victim's status in the relationship, not the offender's. For instance, if a nine year old is assaulted by their grandparent, then the relationship should be reported as "grandchild."
- Location should be reported as where the incident occurred, not where law enforcement took the police report.
- Reporting agencies should be consistent in reporting of weapons used. Some reporting officers may only report a weapon was used if it was a gun, knife, or some other tangible object. It may be the case that officers are reporting "none" if none of these items were used.
- All reports should include a narrative. In 86 reports, the narrative provided data elements that otherwise would have been missing data. Therefore, in the event information is incomplete or missing in other report segments, a thorough and complete narrative may be used to fill in those data elements. A narrative may also be used to address issues as the one listed in the previous bullet point.
- In anticipation for the FBI UCR Program to transition to only incident-based data collection by January 1, 2021 (UCR Program Quarterly, 2016), law enforcement agencies should take great care to ensure the data reported through SIBRS is complete and accurate

Conclusion

Researchers analyzed 1,315 SIBRS reports containing incidents of forcible rape, forcible sodomy, sexual assault with an object, and forcible fondling. Reports were submitted by reporting law enforcement agencies between January 1, 2015, and December 31, 2015. Researchers analyzed 1,315 reports that included 1,489 separate offenses (some reports included multiple offenses). The reports included 1,423 unique victims of a sex offense and 1,440 offenders. Data included in this project were submitted by 199 reporting law enforcement agencies in Oklahoma.

The Muskogee Police Department had the largest (77) number of reports containing one or more sex offenses in 2015. June had the largest (127) number of sex offenses reported, while February had the least (93). Law enforcement received the largest (11.9%) number of reports between 10:00 p.m. and 11:59 p.m., and least (3.7%) between 6:00 a.m. – 7:59 a.m. The 1,315 reports analyzed included 1,489 total offenses – of these, 1,355 were sex offenses. In the majority of reports (82%), the victim(s) were known to the offender(s). The majority of reports (76%) indicated the offenses took place at a residence, and the most frequently (61%) reported weapons were personal items (hands, fists, and feet)

Several errors were encountered by researchers during the completion of this project. Based on the errors found in SIBRS reports, researchers provided recommendations for reporting agencies to consider when completing SIBRS reports. Even though these errors were discovered and noted, researchers were still able to demonstrate the benefit of incident-based reporting data through the findings presented in this report.

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The Oklahoma State Bureau of Investigation is recognized by the Bureau of Justice Statistics as the Statistical Analysis Center (SAC). The SAC collects, analyzes, and disseminates justice information. These functions are located within OSBI's Office of Criminal Justice Statistics.

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