



Cornell University  
ILR School

Cornell University ILR School  
**DigitalCommons@ILR**

---

Research Studies and Reports

ILR Collection

---


6-30-2015

# Reporting of Sexual Assault: Institutional Comparisons, 2013

M. E. Karns

*Cornell University*, [karns@cornell.edu](mailto:karns@cornell.edu)

Follow this and additional works at: <http://digitalcommons.ilr.cornell.edu/reports>

 Part of the [Applied Statistics Commons](#), [Categorical Data Analysis Commons](#), [Gender and Sexuality Commons](#), [Higher Education Commons](#), [Higher Education Administration Commons](#), [Other Education Commons](#), and the [Other Statistics and Probability Commons](#)

**Thank you for downloading an article from DigitalCommons@ILR.**

**Support this valuable resource today!**

---

This Article is brought to you for free and open access by the ILR Collection at DigitalCommons@ILR. It has been accepted for inclusion in Research Studies and Reports by an authorized administrator of DigitalCommons@ILR. For more information, please contact [hlmdigital@cornell.edu](mailto:hlmdigital@cornell.edu).

---

# Reporting of Sexual Assault: Institutional Comparisons, 2013

## Abstract

How well are colleges counting sexual assaults that occur on their campuses? This paper provides two measures, the Assault Reporting Ratio (ARR) and the Reporting Rate per 10,000 students (R10K), that address this question. The ARR and R10K are benchmarks that identify institutions that are leading in this area. The measures facilitate comparisons across institutions and over time. The measures enable administrators and researchers to evaluate the effectiveness of institutional policies and practices that govern the reporting of sexual assault.

The Clery Act requires institutions of higher education to notify the Department of Education annually about the number of crimes reported on their campuses. The present analysis uses Clery Act data on forcible and non-forcible sexual offenses to create measures that allow a standardized comparison of institutions. The analysis includes adjustments for gender ratio and institution size. National survey results are used to calculate expected assault numbers, which are then compared to institutional reporting numbers to create the ARR. The ARR is expressed as a percentage. An ARR of 100% indicates that the school is counting all of the assaults predicted by national surveys. The R10K is the reported number of assaults per 10,000 students, calculated from the data provided by the institution.

A total of 1,230 schools were used in the analysis; of those 30.7% reported no sexual offenses. The mean Assault Report Ratio (ARR) was 2.54% (7.4) with a median of 0.93%. The mean Reporting Rate per 10,000 (R10K) was 7.47 (22.22) with median of 2.94. Ranking tables of the Top 20 institutions, overall and stratified by enrollment, are given. The standardized measures can be used to evaluate institutional policies, changes in programs, and procedures for reports. Attachments include ranking of all institutions in analysis by each measure, Excel, and csv delimited data files.

## Keywords

sexual assault, Clery Act, reporting, assault reporting ratio, ARR, unreported crime, rape, forcible sexual offenses, college, university, higher education, reporting rate, R10K

## Disciplines

Applied Statistics | Categorical Data Analysis | Gender and Sexuality | Higher Education | Higher Education Administration | Other Education | Other Statistics and Probability

## Comments

### Suggested Citation

Karns, M. E. (2015). *Reporting of sexual assault: Institutional comparisons, 2013* [Electronic version]. Retrieved [insert date] from Cornell University, ILR School site: <http://digitalcommons.ilr.cornell.edu/reports/58>

### Required Publisher Statement

Copyright held by the author.

**Reporting of Sexual Assault:  
Institutional Comparisons, 2013**

**M.E. Karns, MPH, JD  
Department of Social Statistics  
School of Industrial and Labor Relations  
Cornell University  
June 30, 2015**

**Distributed through ILR Digital Commons**

**Contact [Karns@Cornell.edu](mailto:Karns@Cornell.edu)**

## Table of Contents

Quick Start and Summary .....	page 2
Introduction	
Overview .....	page 3
Report Goals .....	page 4
Methodology	
Data Sources .....	page 4
Assumptions .....	page 5
Calculations.....	page 6
Discussion	
Interpretation of Rates.....	page 6
Limitations .....	page 7
Future Research .....	page 8
Statistical Summary	
Table 1. Assault Report Ratio: Descriptive Statistics.....	page 10
Table 2. Reporting Rate: Descriptive Statistics .....	page 11
Ranking Tables	
Table 3. Top 20 Assault Report Ratio (ARR) .....	page 12
Table 4. Top 20 Reporting Rates (R10K).....	page 13
Table 5.1-5.8 Top 20 ARR by Institutional Size Category .....	page 14-21
Table 6.1-6.8 Top 20 R10K by Institutional Size Category .....	page 22-29
Appendices	
Appendix A. How to Calculate Rates .....	page 30-31
Appendix B ARR and R10K by Institution .....	Attached document
Appendix C.1 ARR Highest to Lowest.....	Attached document
Appendix C.2 R10K Highest to Lowest.....	Attached document
Available Files	
Yearfile.pdf	
Yearfile.csv	
Yearfile.xlsx	

## Quick Start

### What are the Measures?

**Assault Report Ratio (ARR)** – this is a ratio of the reported number of cases to the expected number of cases. It is expressed as a percentage. An ARR of 100% would mean that the reported number equaled the expected number of cases. Lower numbers indicates the fraction that the institution recorded compared to the estimate from national statistics.

**Reporting Rate per 10,000 (R10K)** – the number of reported sexual offenses divided by the student population size. The rate is expressed as a number per 10,000 people for ease of interpretation.

### Interpretation Reminder

The crimes of sexual assault are some of the least reported in the country. Higher reporting rates reflect those institutions that are getting more *reports*; this does not mean they are less safe. Higher numbers are generally better numbers in this context as they may reflect procedures that encourage reporting. See Interpretation section for more information.

### Summary Statistics

1,230 institutions were included in the analysis  
30.7% reported zero sexual assaults in the year  
Overall ARR mean: 2.54%, standard deviation 7.4%; median 0.93%  
Overall R10K mean: 7.47, standard deviation 22.22; median 2.94  
Details are in tables 1 and 2

### Top 20 Tables

Institutions with the highest assault report ratios and reporting rates. (Tables 3-4)

### Find Specific Institution

Go to Appendix B. Use your search function within the document reader.

### Cannot Find a Specific Institution?

This report was limited to 4 year colleges that have residential facilities and more than 1,000 students. You can calculate a new institutional rate using steps described in Appendix A. or by using the .xlsx file with formulas included.

Data Files See attachments. Available in .pdf, .csv, and .xlsx formats.

### **Recommended Citation**

Karns, M.E., "Reporting of Sexual Assault: Institutional Comparisons, 2013" Issued through ILR Digital Commons June 2015.

### **Contact Info for Suggestions, Corrections and Comments**

Every effort has been made for accuracy however errors may occur. Please contact the author at Karns@cornell.edu to send comments and corrections. Revisions will be issued.

## Introduction

### Overview

Institutions of higher education have recently come under scrutiny for practices related to reporting and prevention of sexual assault on campus. Sexual assault is one of the least reported crimes and as institutions grapple with the best way to encourage reporting there is little to guide them in terms of best practices. This report aims to address this need. By creating comparisons that take into account population size and gender ratio we can see that some institutions do better than others at recording incidents of sexual assault. Similarly, by comparing the measures over time we can observe the effects of interventions within institutions.

The intended audience for this report includes administrators, advocates, and anyone interested in the comparison of institutions. The current document contains the full set of tables for both measures. A companion article, under preparation, will go into methodological detail, a fuller description of the assumptions, and a limited set of tables.

This report relies on data that all institutions of higher education are required to report to the U.S. Department of Education under the Clery Act. The reporting definitions and periods are the same for all institutions. Each institution is required to report the student population size and the number of sexual offenses.<sup>1</sup> “Institutions must disclose reported offenses, not the findings of a court, coroner or jury, or the decision of a prosecutor.”<sup>2</sup> Cumulative report counts are filed annually by the institution and made available to the public through websites, publications, and the Department of Education.<sup>3</sup>

Two numerical measures, the Assault Report Ratio and the Reporting Rate per 10,000, have been created using the data provided to the U.S. Department of Education by each institution and from national surveys. These were done for each institution and calculated identically. The measures can be used as comparisons within (e.g., over time) and between institutions.

The Assault Report Ratio compares the reported number of cases to the expected number of cases. The ARR takes into account the institutional gender ratio, the national statistics on sexual assault, and the reporting rate. The ARR describes what percentage of the expected cases are reported. An ARR of 100% would mean that all cases expected were reported. Lower values indicate fewer reports are being made than expected. Use caution in interpreting the numbers that are over 100%; often there is a burst in reporting when a major event has occurred (e.g., an investigation by the Department of Investigation through the Office of Civil Rights).<sup>4</sup> For example, Swarthmore has a high ARR at 199% in 2013.<sup>5</sup> In the same year an OCR investigation was underway – this may have influenced the reporting rate for the institution.

---

<sup>1</sup> THE HANDBOOK FOR CAMPUS SAFETY AND SECURITY REPORTING, (2011) at 37-40.

<sup>2</sup> *Id.* at 34.

<sup>3</sup> *Id.* at 149–153.

<sup>4</sup> Corey Rayburn Yung, *Concealing campus sexual assault: An empirical examination.*, 21 PSYCHOL. PUBLIC POLICY LAW 1–9, 4 (2015).

<sup>5</sup> CLERY ACT DATA TOOL, <http://ope.ed.gov/security/>. Swarthmore reported 12 sexual offenses in 2012 and 89 in 2013.

The Reporting Rate per 10,000 (R10K) is a simple rate of reports at each institution (number of reports divided by population size). This has been expressed as a per 10,000 person number for ease of interpretation. A higher R10K indicates that more reports are being made at that institution after adjusting for population size.

### **Report Goals**

1. Provide an annual report with standard comparisons across institutions for the reporting of sexual assault.
2. Assess the gap between the reported and predicted numbers of assaults, based on survey data, to improve policies and practices.
3. Provide an empirical basis for comparison for evaluation of program impact, implementation, investigations, and procedural changes.

The comparison of the assault report rate within institutions by year and between groups of institutions will shed light on what factors affect reporting rates. The use of a standard format and expression in common units allows the initial evaluation of programs, policies and practices. There are undoubtedly many reasons that an individual school might have a change in reported assaults from year to year. Similarly, there are many factors, some not yet identified, which might explain the variation between schools. In order to start identifying these reasons and factors, researchers need benchmarks. These measures, ARR and R10K, provide a starting point, rather than a conclusion, in understanding assault reports.

## **METHODOLOGY**

### **Data Sources**

Under US law, each institution of higher education is required to report annually on crimes that occur on their campus.<sup>6</sup> The definitions are standard for the reporting period, crime definition, and populations. This collection of data is often referred to as Clery Act Data.

The Clery Act Data, provided to the Department of Education, is made available publicly through a data extraction tool.<sup>7</sup> The numbers in the analysis are exactly as downloaded from the website. If an institution revised its data after inclusion in the Department of Education website, those revisions will not be reflected in this report.

Gender ratios for each institution were found at the Department of Education's National Center for Education Statistics. Data were obtained from the Integrated Postsecondary Report System files.<sup>8</sup>

The analysis was limited to institutions which have at least a four-year program, a residential option, and at least 1,000 students. Schools had to provide data to the Department of Education to be included. The data set was limited to the main campus for each school; no aggregation of campuses was done. If a school did not provide gender ratio data, population data, or a crime report (which could be zero) then it is not in the analysis. All data were used as reported.

---

<sup>6</sup> INSTITUTIONAL SECURITY POLICIES AND CRIME STATISTICS., 34 CFR 668.46(c).

<sup>7</sup> CLERY ACT DATA TOOL, *supra* note 5.

<sup>8</sup> INTEGRATED POSTSECONDARY REPORT SYSTEM, NATIONAL CENTER FOR EDUCATION STATISTICS, <http://nces.ed.gov/datatools>.

### **Assumptions**

This report assumes the approximate accuracy of national survey data indicating 20% of women and 3% of men are assaulted during their lifetimes. The majority of these assaults happen during college years.<sup>9 10 11 12 13</sup> Surveys and studies from 1987 to the present consistently report around 20% of female college students experience sexual assault.<sup>14</sup> Because little is known about the age distribution of assaults, this report makes no assumptions about distribution across years, and assigns assaults evenly across four years.<sup>15</sup>

This report makes no assumptions about the effect of various institutional characteristics (large vs. small, state vs. private, urban vs. rural, etc.) on the assault rate. At this stage of the research, there is no principled reason to assume that institutions of one sort have higher or lower rates of assault than other institutions. There is extensive evidence that the rate of assault for men is lower than the rate of assault for women, and this difference is built into the calculation of the expected rate. But aside from this correction for the gender ratios of the student body, this report proceeds on the assumption that the rates of assault per person are the same for all institutions.

With new research and new evidence (e.g. from perpetrator surveys, campus climate surveys, or revised national surveys), it may become possible to identify institutional characteristics that affect the rate of assaults. In that case, it may be possible to change the rate calculations in future versions of this report in order to reflect that new research. Any revised assumptions would need to be disclosed, and applied evenly to all institutions that share the relevant characteristics. Selective application of the revised assumptions would eliminate the comparability of the measures.

### **Calculations**

---

<sup>9</sup> Kilpatrick, D. and McCauley, J., *Understanding National Rape Statistics*, (2009). Available at [http://www.vawnet.org/Assoc\\_Files\\_VAWnet/AR\\_RapeStatistics.pdf](http://www.vawnet.org/Assoc_Files_VAWnet/AR_RapeStatistics.pdf).

<sup>10</sup> Patricia Tjaden & Nancy Thoennes, *Prevalence, Incidence, and Consequences of Violence against Women: Findings from the National Violence against Women Survey. Research in Brief.*, (1998), Available at <http://eric.ed.gov/>.

<sup>11</sup> DEAN G. KILPATRICK ET AL., DRUG-FACILITATED, INCAPACITATED, AND FORCIBLE RAPE: A NATIONAL STUDY (2007), available at <http://www.niccsa.org>.

<sup>12</sup> A. M. Gross, *An Examination of Sexual Violence Against College Women*, 12 VIOLENCE WOMEN 288–300 (2006).

<sup>13</sup> LANGTON, L & SINOZICH,S, RAPE AND SEXUAL ASSAULT VICTIMIZATION AMONG COLLEGE-AGE FEMALES, 1995-2013 19 (2014), available at <http://www.bjs.gov/content/pub/pdf/rsavcaf9513.pdf>.

<sup>14</sup> M. P. Koss, C. A. Gidycz & N. Wisniewski, *The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students*, 55 J. CONSULT. CLIN. PSYCHOL. 162–170, 168 (1987); Christopher P. Krebs et al., *College Women’s Experiences with Physically Forced, Alcohol- or Other Drug-Enabled, and Drug-Facilitated Sexual Assault Before and Since Entering College*, 57 J. AM. COLL. HEALTH 639–649, 643 (2009); Post/Kaiser poll shows that 20 percent of women sexually assaulted in college | The Washington Post, , <http://www.washingtonpost.com/sf/local/2015/06/12/1-in-5-women-say-they-were-violated>.

<sup>15</sup> One adjustment that could be made to the analysis would be to weight the calculation of expected reports by the percentage of graduate students at the institution. There is little information on the difference between undergraduates and graduate students when it comes to the rates and reporting of sexual assault. Lacking information about the graduate student rate, this step would be premature. If research becomes available to make this adjustment, it can be included.



**Assault Report Ratio (ARR):**

The ARR is the ratio between the number of observed reports and expected reports.<sup>16</sup> Observed reports are obtained from the Clery data. Expected reports are based on gender ratio, institutional size, and national statistics.<sup>17</sup>

The total expected number of cases was calculated by summing the expected numbers from female and male genders. The gender-specific population count was calculated as the proportion of gender applied to the population reported in the Clery data. Each population was multiplied by the annual assault rate from national survey data (females = 0.05, males = 0.0075) to create a gender-specific expected number. The gender-specific expected numbers were summed to get an overall expected number. ARR is the total reported cases divided by the total number of cases expected, expressed as a percentage. (See Appendix A. How to Calculate Rates.)

**Reporting Rate per 10,000 (R10K):**

Reported cases were calculated as the sum of forcible and non-forcible sexual offenses.<sup>18</sup> This was divided by the institution size to create a per capita rate. For ease of comparison all numbers were expressed as per 10,000.

**INTERPRETATION & DISCUSSION**

**Interpretation of Rates**

The ARR and R10K should be used to compare and evaluate the policies and practices for each institution. Higher rates reflect more reporting, not necessarily higher crime rates. The goal is to have a higher rate of reporting, in either the ARR or R10K, to understand the extent of the problem and to start addressing the necessary changes.

**Assault Reporting Ratio (ARR):** The ARR is expressed as a percentage that ranges from 0% to infinity. An institution with an ARR of 100% is receiving as many reports as the survey data predict. Institutions with ARR lower than 100% are getting a fraction of the reports anticipated. An ARR above 100% should be interpreted cautiously. Often an increase in reporting reflects an event such as an Office of Civil Rights (OCR) investigation. There is evidence that reporting rates increase around the time of an OCR investigation and then drop off again.<sup>19</sup>

---

<sup>16</sup> This ratio is the same technique as the Standardized Mortality Ratio, a measure that is widely used in public health and epidemiology, and is used to compare a specific group to the number that would be expected based on population data. See for example, Rothman, *Modern Epidemiology*, Little, Brown, and Co., 1986, p. 45-49. The SMR, and therefore the ARR, both rely on the indirect standardization method to calculate the expected number and to interpret the ratio.

<sup>17</sup> For a comparison of the direct and indirect standardization methods and results see: Maurice E. Pouw et al., *Hospital Standardized Mortality Ratio: Consequences of Adjusting Hospital Mortality with Indirect Standardization*, 8 PLoS ONE e59160 (2013).

<sup>18</sup> THE HANDBOOK FOR CAMPUS SAFETY AND SECURITY REPORTING, *supra* note 1 at 37-39. Forcible sex offenses have four types (rape including when the victim is incapable of giving consent because of incapacity; forcible sodomy; sexual assault with an object; and forcible fondling); non-forcible sex offenses are defined as incest and statutory rape.

<sup>19</sup> Yung, *supra* note 4.

For example, one institution has an ARR of 5%. This means that, given the gender ratio of students, they are getting 5% of the anticipated assault reports and they are not getting 95% of the reports of assaults. This school might look at other similarly situated schools with higher ARR and determine what makes them different. Adoption of best practices that are modified to the specific institution may help to encourage reports.

**Reporting Rate per 10,000 (R10K):** This describes the number of reports the institution has for every 10,000 students. By using 10,000 as a unit of measure, comparisons can be made across different size institutions. The R10K is based on a per capita rate and expressed as number per 10,000 for ease of interpretation. A per capita rate of .005 would be an R10K of 50. A school that has 2,000 students with an R10K of 100 would have reported 20 cases. The R10K potentially ranges from 0 to infinity. In practice, it ranges from 0 to 580. For those schools that report no sexual offenses the R10K is 0. Like the ARR, a higher R10K indicates that a greater percentage of the assaults are being reported.

There may be factors, as yet unknown or unidentified, that would explain the variation in reporting rates. For example, if a college has a program of early intervention on predatory behavior that demonstrates a reduction in assault reports then they would have a reason to explain the reduced ARR and R10K numbers. At this stage of the research there are no clear ways to identify such programs or their impact on the reporting rates.

Given that the goal of reporting sexual assault is to reduce sexual assaults, assist victims and hold perpetrators accountable, a corollary is that institutions should be striving to have high reporting rates. Only when the reporting rate comes close to the anonymous campus-specific rates or the national rate of 20% will we have assurance that all events are being reported and dealt with.

**Limitations:**

There are two major limitations in this analysis that are due to the underlying Clery data.

First, the Clery data reflects the number of reports in a year, not necessarily the number of events in that year. The report of an event from ten years ago is counted together with the report of an event last semester. The Department of Education’s requirement is for the institution to report in the first year they became aware of the event.<sup>20</sup> While murders are reported in the year that they occur, many sexual assaults may not be due to institutional and personal decisions.<sup>21,22</sup> Victims may delay reporting due to trauma, discouragement with the process, or lack of awareness of avenues for reporting. Increased awareness, whether due to investigations or media attention, can lead to a sudden increase in reporting of events that happened in previous years. If future releases of Clery data disaggregate the total reports by the years in which the events occurred, this will provide a clearer picture of the rate of events per year.

---

<sup>20</sup> THE HANDBOOK FOR CAMPUS SAFETY AND SECURITY REPORTING, *supra* note 1 at 93–95.

<sup>21</sup> Corey Rayburn Yung, *How to Lie with Rape Statistics: America’s Hidden Rape Crisis*, 99 IOWA LAW REV., 1225–1226 (2014).

<sup>22</sup> Bonnie S. Fisher, Francis T. Cullen & Michael G. Turner, *The Sexual Victimization of College Women. Research Report*, BJS 23 (2000), <http://eric.ed.gov/?id=ED449712>.

The second limitation is that the Clery data (number of reports and population of institution) does not provide any data about the person making the report, for instance their gender or degree-program.

The lack of information on the gender of victims is a limitation because repeated national surveys have consistently reported a sexual assault rate of 20% among college age women and 3% among college age men. The present analysis addresses this limitation by adjusting the expected rate of assaults by the gender ratio of the institution, using IPEDS data.

There is also some recent survey evidence that sexual assault events may be less likely in graduate students and that reporting might also be different.<sup>23</sup> Until this finding has been replicated across the country, it would be premature to make any adjustment by graduate/undergraduate ratios in the number of expected assaults. At that time, a new analysis of rates should be calculated to adjust for the graduate student population.

### **Future Research Potential**

This report is a starting point in the discussion of the analysis and understanding of sexual assault reporting within institutions of higher education. The ability to compare reporting rates in a standard form allows the initial evaluation of programs, policies and practices. Currently each institution has a baseline of compliance guidelines (for reporting and adjudication) but the way each interprets the requirement leads to a myriad of approaches. The reporting rate analysis allows the evaluation of each of those experiments to begin understanding the best ways to address sexual assault on campuses. Hypotheses about contributors to the reporting practices can be generated and tested using the rate measures as outcomes.

A preliminary review of institutional websites for assault victims indicates that there is a wide range of policies and procedures that impact the reporting rate. For example, some institutions periodically post data on assaults reports and responses (including sanctions of perpetrators), while others have no information at all on the number or outcome of reports. A victim looking at the first website would have some idea of what the likely result of a report would be. The same victim looking at the second institution may be disinclined to report because of the lack of clarity in the institution’s response. Resources, staffing, and training presumably have an effect, though how much is not known. One of the major goals of this report is to begin the systematic evaluation of the policies and practices across institutions.

There will also be reasons that are not related to the policies but rather reflect the dominant culture. For example, in countries where there is greater gender equality there are higher reporting rates of sexual assault.<sup>24</sup> The same might be true for higher education; students select schools that fit their cultural norms, including gender equality. This is the type of question that can be explored using the ARR and R10K as outcome measures.

---

<sup>23</sup> RESULTS OF 2015 UNIVERSITY OF MICHIGAN CAMPUS CLIMATE SURVEY ON SEXUAL MISCONDUCT, 15–16 (2015), <https://publicaffairs.vpcomm.umich.edu/wp-content/uploads/sites/19/2015/04/Complete-survey-results.pdf>. In this survey, the overall rate of nonconsensual sex in the last year was 11.4%; however further breakdown shows that 22.5% of undergraduate women experienced this in the last year while female graduate students reported 9.2%; for male students, 6.8% of undergraduates reported this compared to 1.1% of graduate students.

<sup>24</sup> VIOLENCE AGAINST WOMEN: AN EU-WIDE SURVEY ; MAIN RESULTS, 25 (Agency for Fundamental Rights ed., 2014).

Dealing with the acknowledged limitations of the current data will also be an area for future research. Addressing the different rates of events and the reporting of events in the undergraduate population as distinct from the graduate population will be an important step, once this data is available. Until then analyses of undergraduate-only or institutions could be done to evaluate relative differences.

This first analysis is stratified on school size and adjusts for gender distribution. Consideration of these factors allows an improved, if limited comparison, of rates. Further research should consider additional factors such as presence of social organizations, affiliations, and attrition rates. Different models should be developed which change the assumptions and reflect research about perpetrators as well as victim-oriented surveys.

## Descriptive Statistics Summary

Table 1. Assault Report Ratio Statistical Summary

Institution Size	% Mean (SD)	% Median (IQR)	% Maximum	# Reporting Zero Assaults*	Number in Category
Total	2.54 (7.4)	0.93 (2.33)	199.0	378	1230
1,000 - 1,999	4.71 (1.36)	1.64 (5.12)	199.0	128	273
2,000 - 4,999	2.58 (5.98)	1.04 (2.68)	89.7	170	426
5,000 - 7,499	1.26 (1.73)	0.92 (1.63)	15.0	37	137
7,500 - 9,999	1.13 (1.32)	0.71 (1.37)	8.00	19	81
10,000 - 14,999	1.39 (1.34)	1.00 (1.56)	5.76	14	112
15,000 - 19,999	1.01 (1.06)	0.78 (1.10)	5.46	7	53
20,000 - 34,999	1.03 (0.81)	0.85 (0.97)	4.37	3	115
35,000 and up	0.9 (0.65)	0.73 (0.79)	2.71	0	33

\*The institutions reporting zero assaults were included in all calculations.

Table 2. Reporting Rate per 10,000 Statistical Summary

Institution Size	R10K Mean (SD)	R10K Median (IQR)	R10K Maximum	# Reporting Zero Assaults*	Number in Category
Total	7.47 (22.22)	2.93 (7.35)	580	378	1230
1,000 - 1,999	14.18(40.00)	5.52 (15.43)	580	128	273
2,000 - 4,999	8.05 (18.37)	3.36 (9.03)	281.95	170	426
5,000 - 7,499	3.92 (5.05)	2.99 (5.48)	41.0	37	137
7,500 - 9,999	3.48(3.85)	2.40 (4.02)	23.48	19	81
10,000 - 14,999	4.19(3.86)	2.97 (4.87)	16.89	14	112
15,000 - 19,999	2.96 (2.84)	2.39 (3.24)	14.17	7	53
20,000 - 34,999	3.06 (2.35)	2.68 (2.91)	12.37	3	115
35,000 and up	2.62 (1.87)	2.15 (2.22)	8.09	0	33

\*The institutions reporting zero assaults were included in all calculations.

## Ranking Tables

**Table 3. Top 20 Assault Report Ratios\***

Rank	ARR	Institution Name	ARR
1		Swarthmore College	199.12%
2		Occidental College	89.72%
3		Reed College	45.20%
4		Sewanee-The University of the South	44.66%
5		Hampshire College	42.42%
6		Gallaudet University	34.87%
7		Vassar College	31.11%
8		Davidson College	31.00%
9		Trinity College	30.98%
10		Franklin and Marshall College	23.66%
11		Willamette University	23.33%
12		Middlebury College	23.31%
13		Claremont McKenna College	21.48%
14		Hendrix College	20.23%
15		Colorado College	18.86%
16		Morehouse College	18.24%
17		Knox College	17.74%
18		Amherst College	17.65%
19		Rollins College	17.49%
20		Saint Johns University	17.46%

Institutional size category is based on report to Dept. of Educ.

ARR = Reported Cases/Expected Cases (see Methodology section).

ARR = 100% indicates Reported Cases equaled Expected Cases.

A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 4. Top 20 Reporting Rates per 10,000\***

<b>Rank R10K</b>	<b>Institution</b>	<b>R10K</b>
1	Swarthmore College	580.18
2	Occidental College	281.95
3	Reed College	134.66
4	Hampshire College	134.05
5	Sewanee-The University of the South	129.34
6	Gallaudet University	115.31
7	Vassar College	96.89
8	Davidson College	89.49
9	Trinity College	87.87
10	Willamette University	70.05
11	Franklin and Marshall College	69.66
12	Middlebury College	68.14
13	Hendrix College	62.33
14	Claremont McKenna College	60.24
15	McDaniel College	58.84
16	Colorado College	58.22
17	Rollins College	57.09
18	Knox College	56.18
19	Cornell College	53.33
20	Earlham College	51.77

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

Tables 5.1- 5.8 Top 20 Assault Report Ratios by Institutional Size Category

**Table 5.1 Top 20 Assault Report Ratios: Institutional Size 1,000 - 1,999**

Within Group Rank ARR	Institution Name	ARR
1	Swarthmore College	199.12%
2	Reed College	45.20%
3	Sewanee-The University of the South	44.66%
4	Hampshire College	42.42%
5	Gallaudet University	34.87%
6	Davidson College	31.00%
7	Claremont McKenna College	21.48%
8	Hendrix College	20.23%
9	Knox College	17.74%
10	Amherst College	17.65%
11	Saint Johns University	17.46%
12	Cornell College	17.27%
13	Pomona College	16.79%
14	Earlham College	16.72%
15	Kenyon College	15.47%
16	Bates College	15.47%
17	Randolph-Macon College	15.28%
18	Grinnell College	15.26%
19	Colby College	14.85%
20	Connecticut College	14.10%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.



**Table 5.2 Top 20 Assault Report Ratios: Institutional Size 2,000 - 4,999**

Within Group Rank ARR	Institution Name	ARR
1	Occidental College	89.72%
2	Vassar College	31.11%
3	Trinity College	30.98%
4	Franklin and Marshall College	23.66%
5	Willamette University	23.33%
6	Middlebury College	23.31%
7	Colorado College	18.86%
8	Morehouse College	18.24%
9	Rollins College	17.49%
10	McDaniel College	16.92%
11	Allegheny College	16.63%
12	Hobart William Smith Colleges	16.59%
13	Wesleyan University	15.82%
14	Bucknell University	14.93%
15	Williams College	14.24%
16	Carleton College	13.02%
17	Franklin Pierce University	12.86%
18	Skidmore College	12.20%
19	St Lawrence University	11.55%
20	DePauw University	11.30%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.3      Top 20 Assault Report Ratios: Institutional Size 5,000 - 7,499**

<b>Within Group Rank</b>	<b>Institution Name</b>	<b>ARR</b>
1	Dartmouth College	14.98%
2	Brandeis University	6.73%
3	Lock Haven University	5.91%
4	Westfield State University	5.73%
5	Christopher Newport University	5.42%
6	Southern Oregon University	4.21%
7	SUNY College at Geneseo	3.85%
8	Xavier University	3.85%
9	Rensselaer Polytechnic Institute	3.71%
10	University of the Pacific	3.59%
11	Grambling State University	2.89%
12	Southern Polytechnic State University	2.76%
13	Ramapo College of New Jersey	2.73%
14	Framingham State University	2.55%
15	Frostburg State University	2.52%
16	University of Hartford	2.45%
17	Clarion University of Pennsylvania	2.34%
18	Worcester State University	2.29%
19	Monmouth University	2.29%
20	Missouri Southern State University	2.22%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.4      Top 20 Assault Report Ratios: Institutional Size 7,500 - 9,999**

Within Group Rank ARR	Institution Name	ARR
1	Brown University	8.00%
2	University of Wisconsin-Platteville	5.04%
3	University of Massachusetts-Dartmouth	3.91%
4	Gonzaga University	3.75%
5	Shippensburg University of Pennsylvania	3.63%
6	Texas Christian University	3.41%
7	Santa Clara University	2.82%
8	State University of New York at New Paltz	2.67%
9	Northern Michigan University	2.55%
10	Princeton University	2.34%
11	Loyola Marymount University	2.24%
12	Radford University	2.20%
13	University of Alaska Fairbanks	2.05%
14	Chapman University	1.96%
15	SUNY College at Brockport	1.95%
16	Millersville University of Pennsylvania	1.90%
17	University of San Diego	1.89%
18	Eastern Illinois University	1.86%
19	University of Wisconsin-Stevens Point	1.72%
20	Coastal Carolina University	1.71%
28	SUNY College at Oswego	1.66%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.5 Top 20 Assault Report Ratios: Institutional Size 10,000 - 14,999**

Within Group Rank ARR	Institution Name	ARR
1	University of Maine	5.76%
2	Carnegie Mellon University	5.53%
3	Massachusetts Institute of Technology	4.97%
4	Washington University in St Louis	4.88%
5	Emory University	4.82%
6	University of Notre Dame	4.64%
7	University of Rochester	4.63%
8	Vanderbilt University	4.43%
9	University of Wisconsin-Whitewater	3.98%
10	University of Wyoming	3.94%
11	Tufts University	3.60%
12	Yale University	3.49%
13	University of New Hampshire-Main Campus	3.28%
14	University of Vermont	2.75%
15	Azusa Pacific University	2.61%
16	Villanova University	2.56%
17	Boston College	2.50%
18	Western Carolina University	2.50%
19	Case Western Reserve University	2.38%
20	University of Minnesota-Duluth	2.25%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.6 Top 20 Assault Report Ratios: Institutional Size 15,000 - 19,999**

Within Group Rank ARR	Institution Name	ARR
1	Stanford University	5.46%
2	Rochester Institute of Technology	3.98%
3	Miami University-Oxford	3.30%
4	Bowling Green State University-Main Campus	2.79%
5	University of Chicago	2.62%
6	University of California-Santa Cruz	2.34%
7	Minnesota State University-Mankato	1.94%
8	SUNY at Albany	1.77%
9	California State University-Chico	1.43%
10	Saint Louis University	1.42%
11	Wright State University-Main Campus	1.42%
12	Duke University	1.35%
13	West Chester University of Pennsylvania	1.32%
14	Appalachian State University	1.27%
15	Southern Illinois University-Carbondale	1.23%
16	Baylor University	1.22%
17	University of North Dakota	1.20%
18	University of Rhode Island	1.19%
19	California Polytechnic State University-San Luis Obispo	1.14%
20	Georgetown University	1.11%

Institutional size category is based on report to Dept. of Educ.

ARR = Reported Cases/Expected Cases (see Methodology section).

ARR = 100% indicates Reported Cases equaled Expected Cases.

A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.7 Top 20 Assault Report Ratios: Institutional Size 20,000 - 34,999**

Within Group Rank ARR	Institution Name	ARR
1	Harvard University	4.38%
2	University of Virginia-Main Campus	3.77%
3	University of California-Santa Barbara	3.69%
4	University of Connecticut	3.09%
5	University of Massachusetts-Amherst	2.71%
6	Columbia University in the City of New York	2.68%
7	Ball State University	2.51%
8	Georgia Institute of Technology-Main Campus	2.49%
9	University of California-San Diego	2.48%
10	University of Pennsylvania	2.32%
11	University of Oklahoma-Norman Campus	2.19%
12	Colorado State University-Fort Collins	2.08%
13	University of Pittsburgh-Pittsburgh Campus	2.02%
14	Northeastern University	1.92%
15	Cornell University	1.81%
16	Stony Brook University	1.74%
17	Auburn University	1.70%
18	Western Michigan University	1.68%
19	University of Oregon	1.65%
20	University of Kansas	1.65%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 5.8      Top 20 Assault Report Ratios: Institutional Size 35,000 and up**

Within Group Rank ARR	Institution Name	ARR
1	University of California-Los Angeles	2.71%
2	University of Wisconsin-Madison	2.41%
3	Michigan State University	1.86%
4	University of Maryland-College Park	1.85%
5	University of Michigan-Ann Arbor	1.73%
6	Ohio State University-Main Campus	1.54%
7	Rutgers University-New Brunswick	1.44%
8	Pennsylvania State University-Main Campus	1.34%
9	University of California-Berkeley	1.25%
10	Indiana University-Bloomington	1.11%
11	University of Illinois at Urbana-Champaign	1.01%
12	University of Florida	0.92%
13	University of Houston	0.88%
14	Florida State University	0.79%
15	University of Central Florida	0.76%
16	University of Arizona	0.75%
17	Temple University	0.73%
18	Arizona State University-Tempe	0.71%
19	University of Southern California	0.65%
20	University of North Texas	0.60%

Institutional size category is based on report to Dept. of Educ.  
 ARR = Reported Cases/Expected Cases (see Methodology section).  
 ARR = 100% indicates Reported Cases equaled Expected Cases.  
 A higher ARR suggests better reporting at the institution, not necessarily a higher crime rate.

**Table 6.1- 6.8. Top 20 Reporting Rates per 10,000 by Institutional Size Category**

**Table 6.1 Top 20 Reporting Rates per 10,000: Institutional Size 1,000 - 1,999**

Within Group Rank R10K	Institution Name	R10K
1	Swarthmore College	580.18
2	Reed College	134.66
3	Hampshire College	134.05
4	Sewanee-The University of the South	129.34
5	Gallaudet University	115.31
6	Davidson College	89.49
7	Hendrix College	62.33
8	Claremont McKenna College	60.24
9	Knox College	56.18
10	Cornell College	53.33
11	Earlham College	51.77
12	Amherst College	50.42
13	Pomona College	49.69
14	Kenyon College	46.92
15	Connecticut College	46.83
16	Mount Ida College	46.58
17	Grinnell College	46.48
18	Beloit College	45.94
19	Randolph-Macon College	45.63
20	Bates College	44.67

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.



**Table 6.2 Top 20 Reporting Rates per 10,000: Institutional Size 2,000 - 4,999**

Within Group Rank R10K	Institution Name	R10K
1	Occidental College	281.95
2	Vassar College	96.89
3	Trinity College	87.87
4	Willamette University	70.05
5	Franklin and Marshall College	69.66
6	Middlebury College	68.14
7	McDaniel College	58.84
8	Colorado College	58.22
9	Rollins College	57.09
10	Allegheny College	50.90
11	Hobart William Smith Colleges	50.59
12	Wesleyan University	46.80
13	Bucknell University	44.35
14	Williams College	41.86
15	Franklin Pierce University	40.83
16	Skidmore College	40.71
17	Carleton College	39.12
18	St Lawrence University	35.91
19	Denison University	35.18
20	DePauw University	34.72

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.3 Top 20 Reporting Rates per 10,000: Institutional Size 5,000 - 7,499**

Within Group Rank R10K	Institution Name	R10K
1	Dartmouth College	41.00
2	Brandeis University	20.60
3	Lock Haven University	19.01
4	Westfield State University	17.27
5	Christopher Newport University	17.20
6	Southern Oregon University	13.35
7	SUNY College at Geneseo	12.40
8	Xavier University	12.06
9	University of the Pacific	10.90
10	Grambling State University	9.86
11	Framingham State University	9.33
12	Ramapo College of New Jersey	8.54
13	Clarion University of Pennsylvania	8.22
14	Endicott College	7.95
15	Monmouth University	7.92
16	Worcester State University	7.76
17	Rensselaer Polytechnic Institute	7.45
18	University of Hartford	7.33
19	Frostburg State University	7.31
20	Missouri Southern State University	7.12

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.4 Top 20 Reporting Rates per 10,000: Institutional Size 7,500 - 9,999**

Within Group Rank R10K	Institution Name	R10K
1	Brown University	23.48
2	Gonzaga University	11.83
3	University of Wisconsin-Platteville	11.48
4	Texas Christian University	11.08
5	University of Massachusetts-Dartmouth	11.05
6	Shippensburg University of Pennsylvania	10.60
7	State University of New York at New Paltz	9.24
8	Santa Clara University	7.98
9	Northern Michigan University	7.85
10	Loyola Marymount University	7.25
11	Radford University	7.05
12	University of Alaska Fairbanks	6.55
13	Chapman University	6.34
14	Princeton University	6.24
15	SUNY College at Brockport	6.15
16	Eastern Illinois University	6.14
17	Millersville University of Pennsylvania	6.04
18	University of San Diego	6.01
19	Coastal Carolina University	5.28
20	University of Wisconsin-Stevens Point	5.18

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.5      Top 20 Reporting Rates per 10,000: Institutional Size 10,000 - 14,999**

Within Group Rank R10K	Institution Name	R10K
1	University of Maine	16.89
2	Emory University	15.16
3	Washington University in St Louis	14.25
4	University of Rochester	13.61
5	Vanderbilt University	13.33
6	Carnegie Mellon University	12.94
7	University of Notre Dame	12.37
8	University of Wyoming	11.74
9	University of Wisconsin-Whitewater	11.64
10	Massachusetts Institute of Technology	11.50
11	Tufts University	11.04
12	University of New Hampshire-Main Campus	10.06
13	Yale University	9.91
14	Azusa Pacific University	9.30
15	University of Vermont	8.65
16	Western Carolina University	7.92
17	Boston College	7.69
18	Villanova University	7.48
19	Howard University	6.80
20	University of Denver	6.79

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.6      Top 20 Reporting Rates per 10,000: Institutional Size 15,000 - 19,999**

Within Group Rank R10K	Institution Name	R10K
1	Stanford University	14.17
3	Miami University-Oxford	10.06
4	Bowling Green State University-Main Campus	8.85
2	Rochester Institute of Technology	8.44
6	University of California-Santa Cruz	6.98
5	University of Chicago	6.65
7	Minnesota State University-Mankato	5.83
8	SUNY at Albany	5.19
9	Saint Louis University	4.61
10	West Chester University of Pennsylvania	4.42
11	California State University-Chico	4.28
12	Wright State University-Main Campus	4.20
13	Appalachian State University	3.92
14	Duke University	3.88
15	University of North Carolina at Greensboro	3.87
16	Baylor University	3.84
17	University of Rhode Island	3.66
18	Georgetown University	3.36
19	Southern Illinois University-Carbondale	3.34
20	University of North Dakota	3.30

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.7      Top 20 Reporting Rates per 10,000: Institutional Size 20,000 - 34,999**

Within Group Rank R10K	Institution Name	R10K
1	Harvard University	12.37
2	University of Virginia-Main Campus	11.51
3	University of California-Santa Barbara	10.80
4	University of Connecticut	8.88
5	Ball State University	8.29
6	Columbia University in the City of New York	7.79
7	University of Massachusetts-Amherst	7.71
8	University of Pennsylvania	6.90
9	University of California-San Diego	6.78
10	University of Oklahoma-Norman Campus	6.23
11	Colorado State University-Fort Collins	6.09
12	University of Pittsburgh-Pittsburgh Campus	5.93
13	Northeastern University	5.49
14	Northern Arizona University	5.26
15	Georgia Institute of Technology-Main Campus	5.12
16	Cornell University	5.09
17	Stony Brook University	4.97
18	Western Michigan University	4.94
19	University of Oregon	4.90
20	Auburn University	4.83
20	University of Kansas	4.82

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Table 6.8 Top 20 Reporting Rates per 10,000: Institutional Size 35,000 and up**

Within Group Rank R10K	Institution Name	R10K
1	University of California-Los Angeles	8.09
2	University of Wisconsin-Madison	7.03
3	Michigan State University	5.47
4	University of Maryland-College Park	5.10
5	University of Michigan-Ann Arbor	4.80
6	Rutgers University-New Brunswick	4.37
7	Ohio State University-Main Campus	4.35
8	Pennsylvania State University-Main Campus	3.65
9	University of California-Berkeley	3.59
10	Indiana University-Bloomington	3.20
11	University of Florida	2.81
12	University of Illinois at Urbana-Champaign	2.67
13	University of Houston	2.53
14	Florida State University	2.44
15	University of Central Florida	2.35
16	University of Arizona	2.22
17	Temple University	2.15
18	University of Southern California	1.93
19	Arizona State University-Tempe	1.85
20	University of North Texas	1.83

Institutional size category is based on report to Dept. of Educ.

R10K = (Reported cases/Institution size)\*10,000

R10K interpretation – for every 10,000 students this is the number of sexual assault cases the institution reports; higher R10K indicates better reporting, not necessarily higher crime rate.

**Appendices**

Appendix A. How to Calculate Rates ..... page 30-31  
Appendix B ARR and R10K by Institution.....Attached document  
Appendix C.1 ARR Highest to Lowest.....Attached document  
Appendix C.2 R10K Highest to Lowest .....Attached document

**Available Files**

- Yearfile.pdf
- Yearfile.csv
- Yearfile.xlsx



## Appendix A. How to Calculate ARR and R10K

### If your institution is not listed

This report was limited to schools that reported all data, had gender ratios available, had at least 1000 students, and were four-year colleges. Any institution can follow the same calculation method; the years should be adjusted for 2-year institutions.

### Calculate an individual institution rate:

#### Part 1. Reporting Rate

1. Add sexual offenses together (forcible and non-forcible) to create Reported number
2. Divide by Reported by institutional size (external) to create Rate
3. Multiple Rate by 10,000 to create the Reporting Rate per 10,000 number for comparison

#### Part 2. Assault Report Ratio (ARR)

1. Obtain the institutional gender ratio (external)
2. Multiply female % by institutional size to create Female Population; do same for male to create Male Population
3. Multiply Female Population with the fraction .05 to create Expected Female Reports (see assumptions above)
4. Multiply Male Population with the fraction .0075 to create Expected Male Reports (see assumptions above)
5. Add together Female Expected Reports and Male Expected Reports to create Total Expected
6. Divide Total Reported (see Part 1) by Total Expected to create Assault Report Ratio (ARR)
7. Multiply by 100 to express as Assault Report Ratio percentage

### Worked Example of ARR and R10K Calculations

My institution is Cornell University. I check the Clery data reports for 2013 and find that there are 11 reports of forcible touching and zero of non-forcible. The institution size reported is 21,593. The gender ratio of female to male is .5129 to .4871.

#### Part 1. Reporting Rate per 10,000 (R10K)

1. Add sexual offenses together (forcible and non-forcible) to create Reported number  
**= 11**
2. Divide by Reported by institutional size (external) to create Rate  
**= 11/21,593**  
**= .0005**
3. Multiple Rate by 10,000 to create the Reporting Rate per 10,000 (R10K) for comparison  
**= .0005 x 10,000**  
**= 5.09**

#### Part 2. Assault Report Ratio (ARR)

1. Obtain the institutional gender ratio  
**Female .4871**  
**Male .5129**
2. Multiply female % by institutional size to create Female Population  
**= .4871 x 21,593**  
**= 10,517**  
  
Multiply male % by institutional size to create Male Population  
**= .5129 \* 21,593**  
**= 11,075**

3. Multiply Female Population with the fraction .05 to create Expected Female Reports (see assumptions above)  
 $= 10,517 \times .05 = 525.85$
4. Multiply Male Population with the fraction .0075 to create Expected Male Reports (see assumptions above)  
 $= 11,075 \times .0075$   
 $= 83.06$
5. Add together Female Expected Reports and Male Expected Reports to create Total Expected  
 $= 525.85 + 83.06$   
 $= 608.91$
6. Divide Total Reported (see Part 1) by Total Expected to create Assault Report Ratio (ARR)  
 $= 11/608.91$   
 $= .0181$
7. To express as percentage multiply by 100  
 $= .0181 \times 100$   
 $= 1.81\%$

### **Contact Info for Suggestions, Corrections and Comments**

Every effort has been made for accuracy however errors occur. Please contact me at Karns @ cornell.edu to send comments and corrections. Revisions will be issued.

### **Revision History**

Version 1. Initial report issued on June 30, 2015.