



## **NIBRS:**

**What is it, what can I do with it, and  
what are the limitations?**



BUREAU OF JUSTICE STATISTICS

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# Increasing desire for IBR data

National dialogue on law enforcement has highlighted the need for better crime data

- Crime Indicators Working Group (CIWG)
  - More robust framework for indicators of crime
  - Contextual information on attributes of criminal incidents
- Committee on National Statistics (CNSTAT) Panel on Modernizing the Nation's Crime Statistics
  - Calls for creating a more flexible system of crime data classifications
  - Fundamental goal of crime data collection is to provide a better description of crime in the US

# *NIBRS: What is it?*



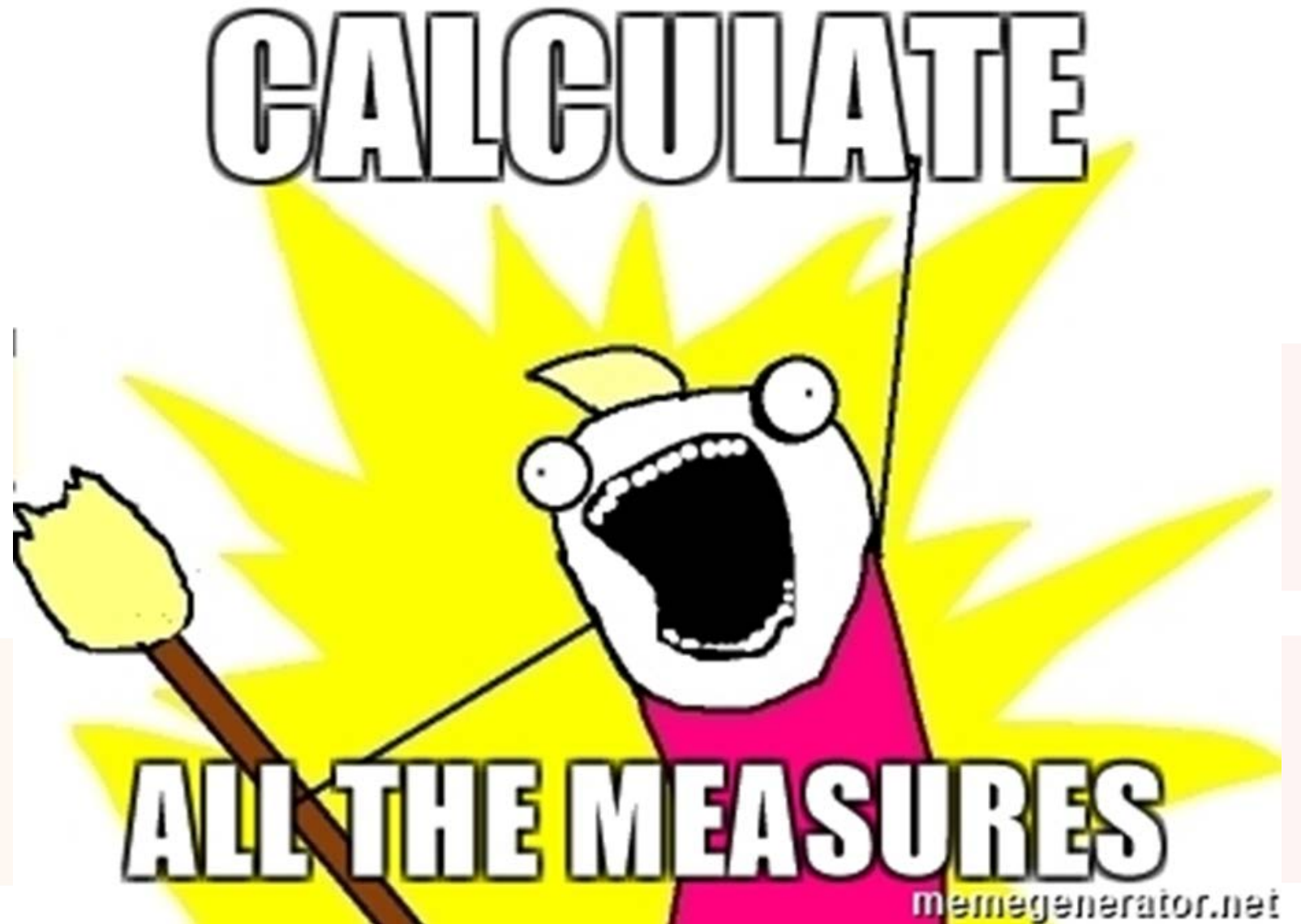
# NIBRS

- Counts crimes and arrests known to law enforcement
- Incident-Based:
  - the date, time and location of the incident;
  - demographic information on each victim and offender involved in the incident;
  - the relationships between each of the victims and the offenders;
  - other details of the incident, including victim injury, type of weapon involved, alcohol or drug involvement, property loss, and drugs seized;
  - clearance information, including both arrest and clearances by exceptional means; and
  - date of arrest and arrestee demographics.

# *NIBRS: What can I do with it?*



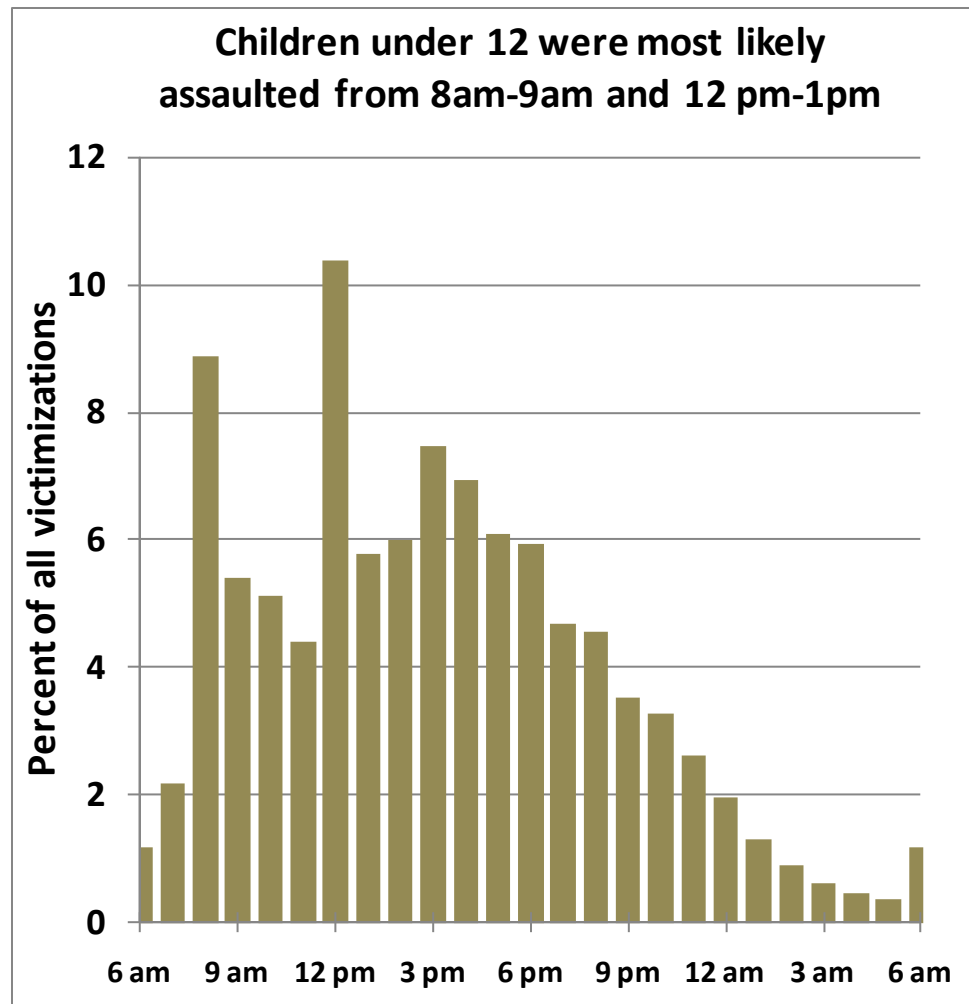
- Everything!



- Understand the amount of crime known to law enforcement
  - Counts and Rates
- Create profiles of crimes, victims, offenders
- Understand the nature of multi-offense incidents
- Look at patterns within crime across multiple dimensions



## Violent sexual assaults involving children under 12



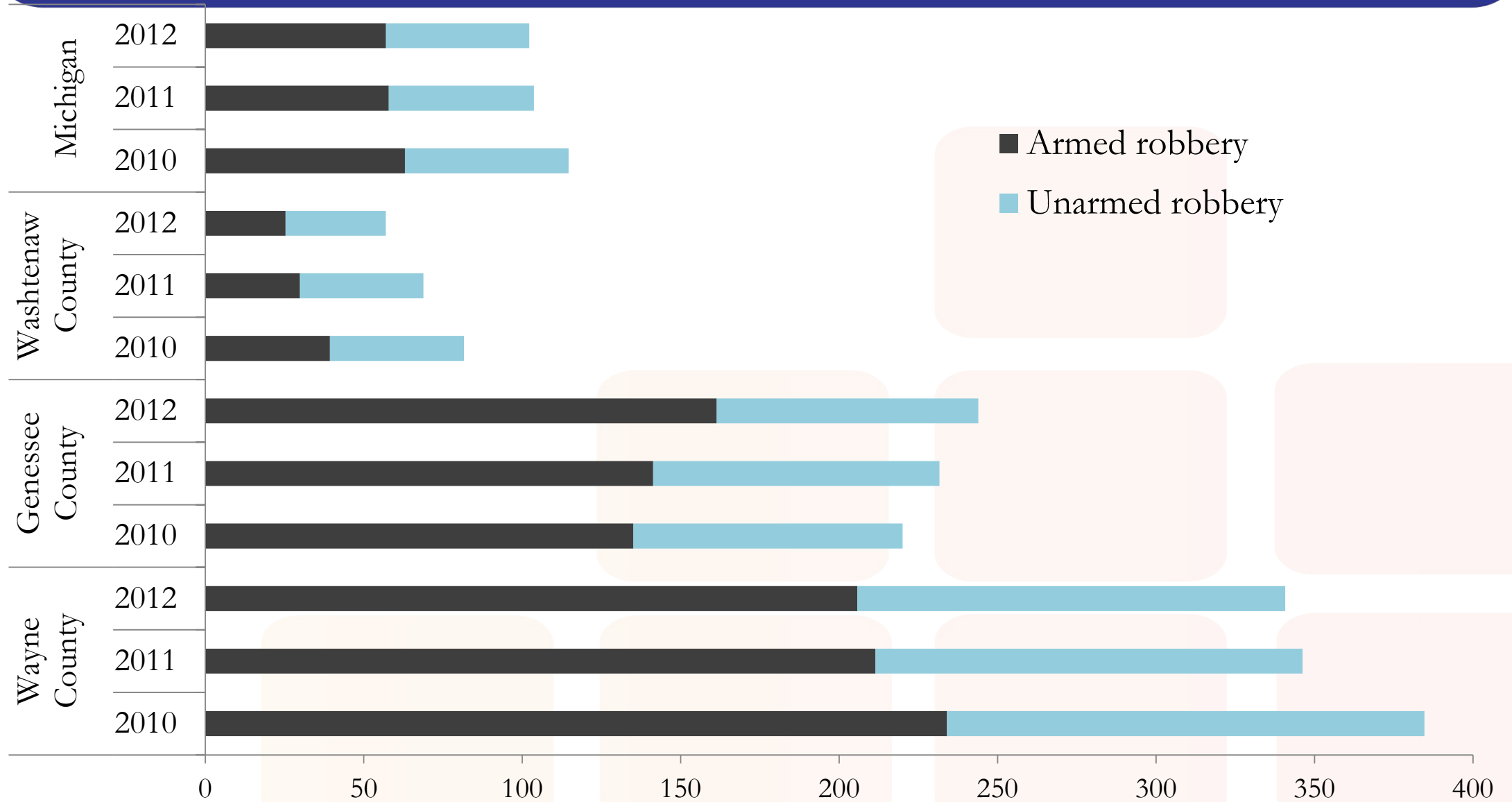
Offender	Intimate	Other	Friend	
Age	All	partner	family	/Acq. Stranger
All	1,000	2	583	387 28
<b>Residence</b>	<b>877</b>	<b>1</b>	<b>549</b>	<b>315 12</b>
7 to 11	74	0	36	37 1
12 to 17	261	0	<b>152</b>	<b>107</b> 2
18-24	92	0	53	37 3
25-34	168	1	<b>114</b>	50 3
35-44	141	0	<b>99</b>	40 1
45-54	82	0	<b>54</b>	27 1
55+	58	0	41	17 1
<b>Non-residence</b>	<b>123</b>	<b>0</b>	<b>34</b>	<b>72 16</b>
7 to 11	21	0	1	20 0
12 to 17	34	0	9	23 3
18-24	17	0	4	9 4
25-34	18	0	8	6 4
35-44	14	0	7	5 3
45-54	11	0	3	6 2
55+	8	0	3	4 1



# Unpacking of incident characteristics across place

Year	Robbery rate per 100,000 persons in Michigan
2010	114.7
2011	103.7
2012	102.3

# Clear differences across place in the same phenomenon



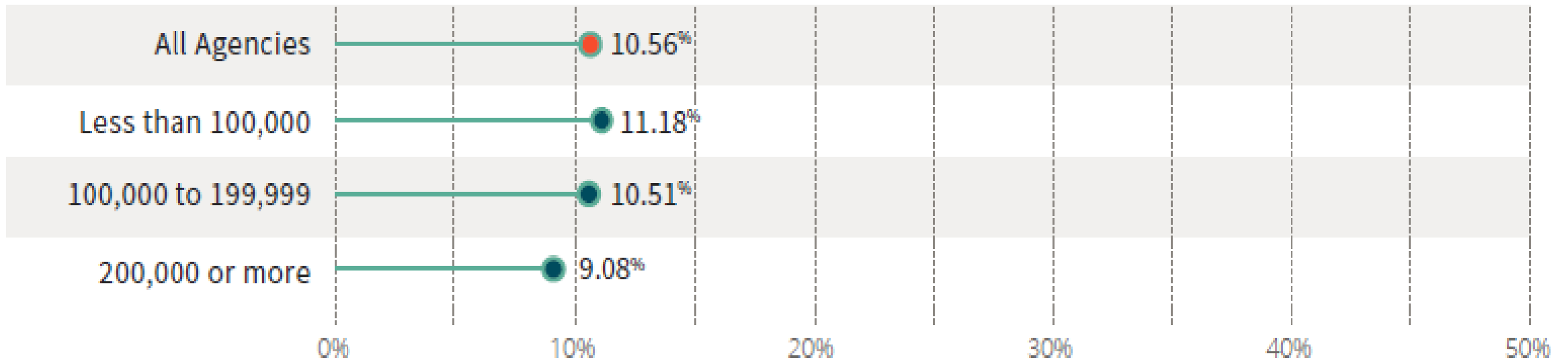
# What does NIBRS mean for local crime statistics?

- NIBRS eliminates the need for the hierarchy rule.
  - Hierarchy rule can still be used for annual crime statistics.
- BJS and the FBI have analyzed NIBRS data to assess how often incidents involve multiple offense types.

# BJS Findings: Multiple Offense Incidents (MOI) in NIBRS

- In 2014, 89% of all incidents in NIBRS involved a single offense.
- Largest agencies: 91% of all incidents involve a single offense.
- 1% of incidents involved 3 or more offenses.

Percent of Incidents with Multiple Offenses, By Agency Population Served, NIBRS, 2014



# Are certain incidents more likely to involve multiple offenses?

Type of offense in incident	Total	Single offense	Multiple offenses
Serious violent non-sexual offenses	100%	81.6%	18.4%
Violent sex offenses	100	93.2	6.8
Other violent offenses	100	89.1	10.9
Non-violent sex offenses	100	93.0	7.0
Property offenses	100	88.8	11.2
Fraud offenses	100	84.7	15.3
Public order offenses	100	59.2	40.8
Drug offenses	100	65.6	34.4
Total incidents	4,873,424	4,348,023	525,401

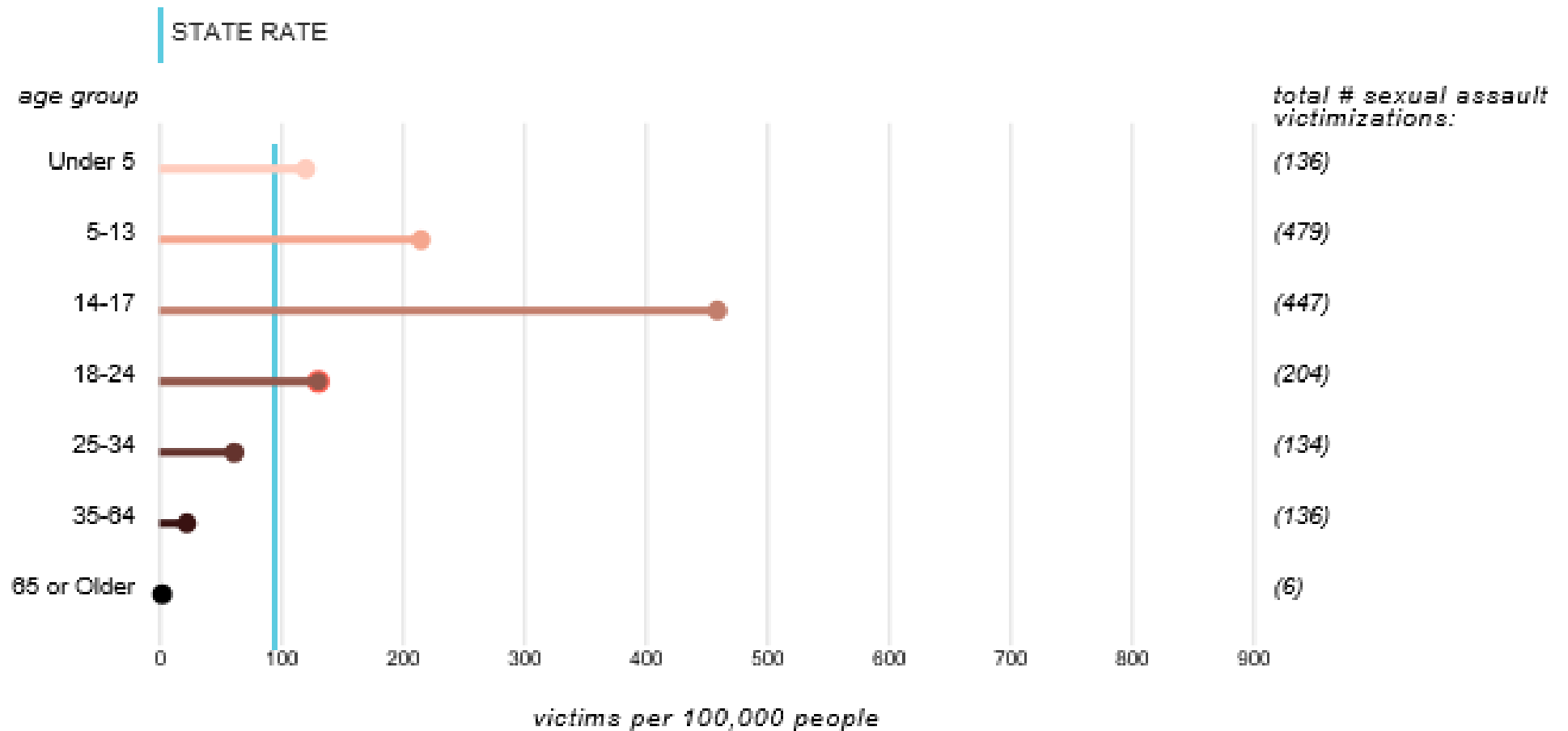
# Online Interactive Report Series

1. BJS is developing a series of online interactive reports that will present analyses from NIBRS focused on certain criminal offenses or characteristics about the nature of crime reporting and police response.
2. The primary goals of these reports are to:
  - a) Create an interactive report structure that allow for users to manipulate certain data figures or graphics
  - b) Highlight the features and strengths of the NIBRS data in a user-friendly format.

# Rates of sexual assault victimization by victim age, Idaho, 2015

Mouse over bars for more detail.

Hover over a category in legend to isolate that category.



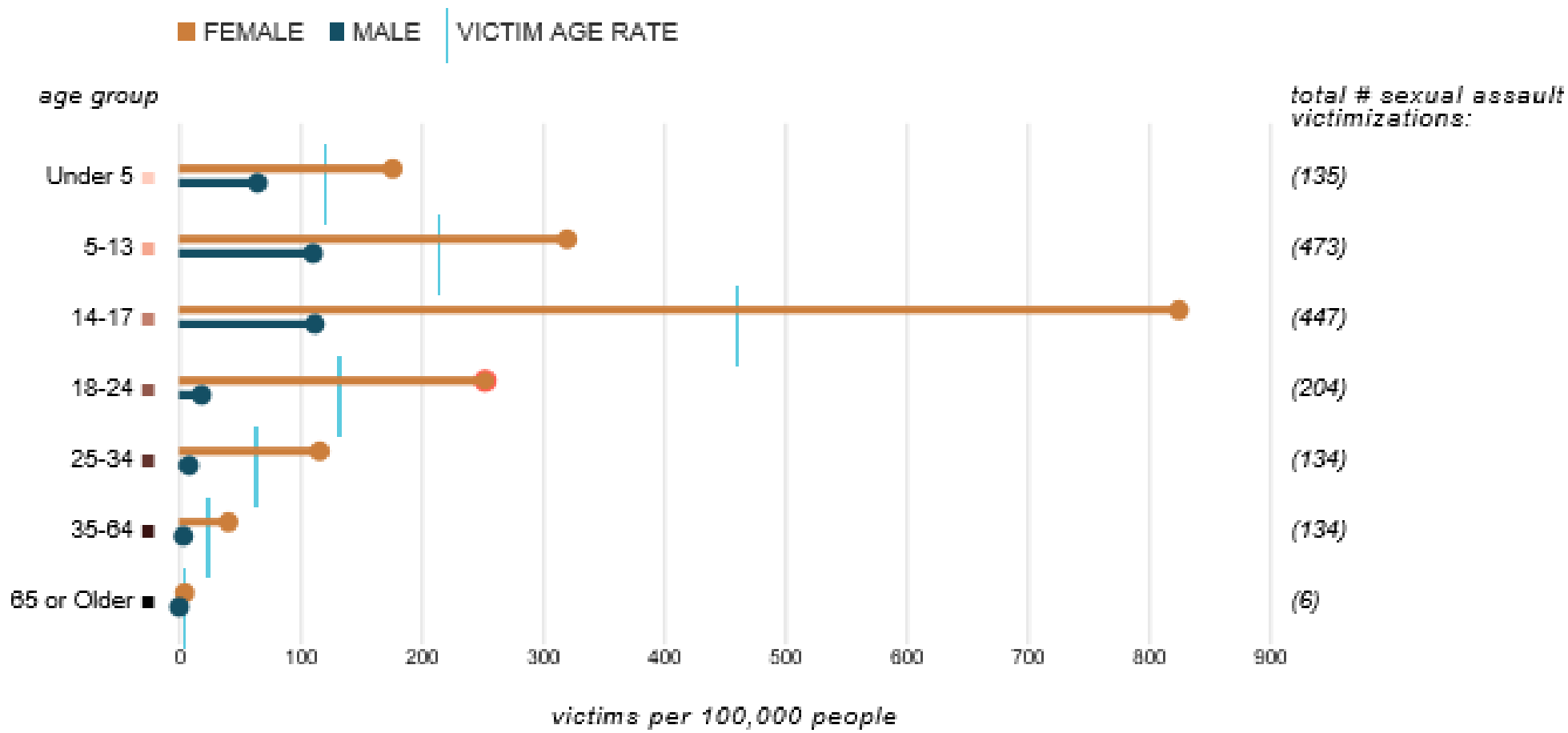
Select a view: victim age breakdown by:

- VICTIM SEX
- VICTIM RACE
- reset

# Rates of sexual assault victimization by victim age, by victim sex, Idaho, 2015

Mouse over bars for more detail.

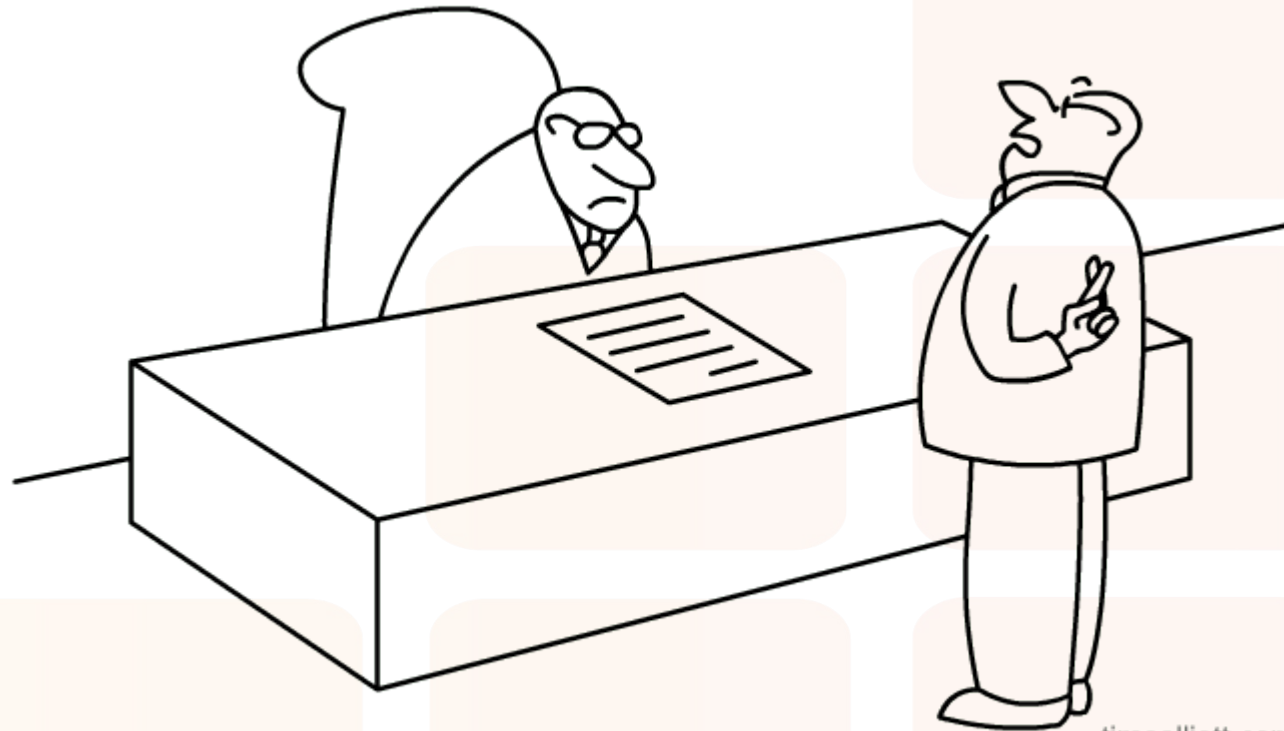
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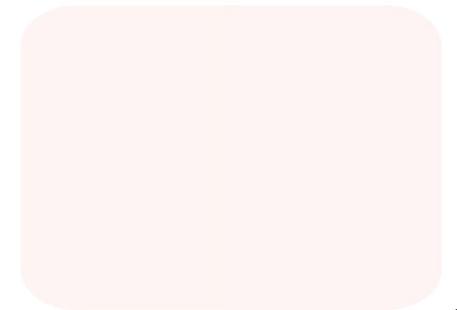
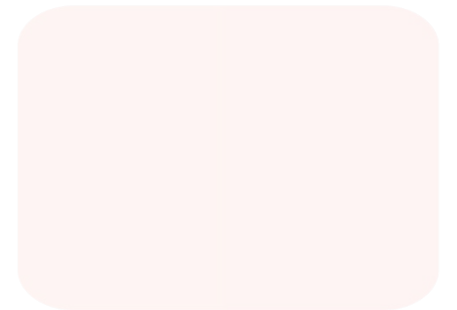
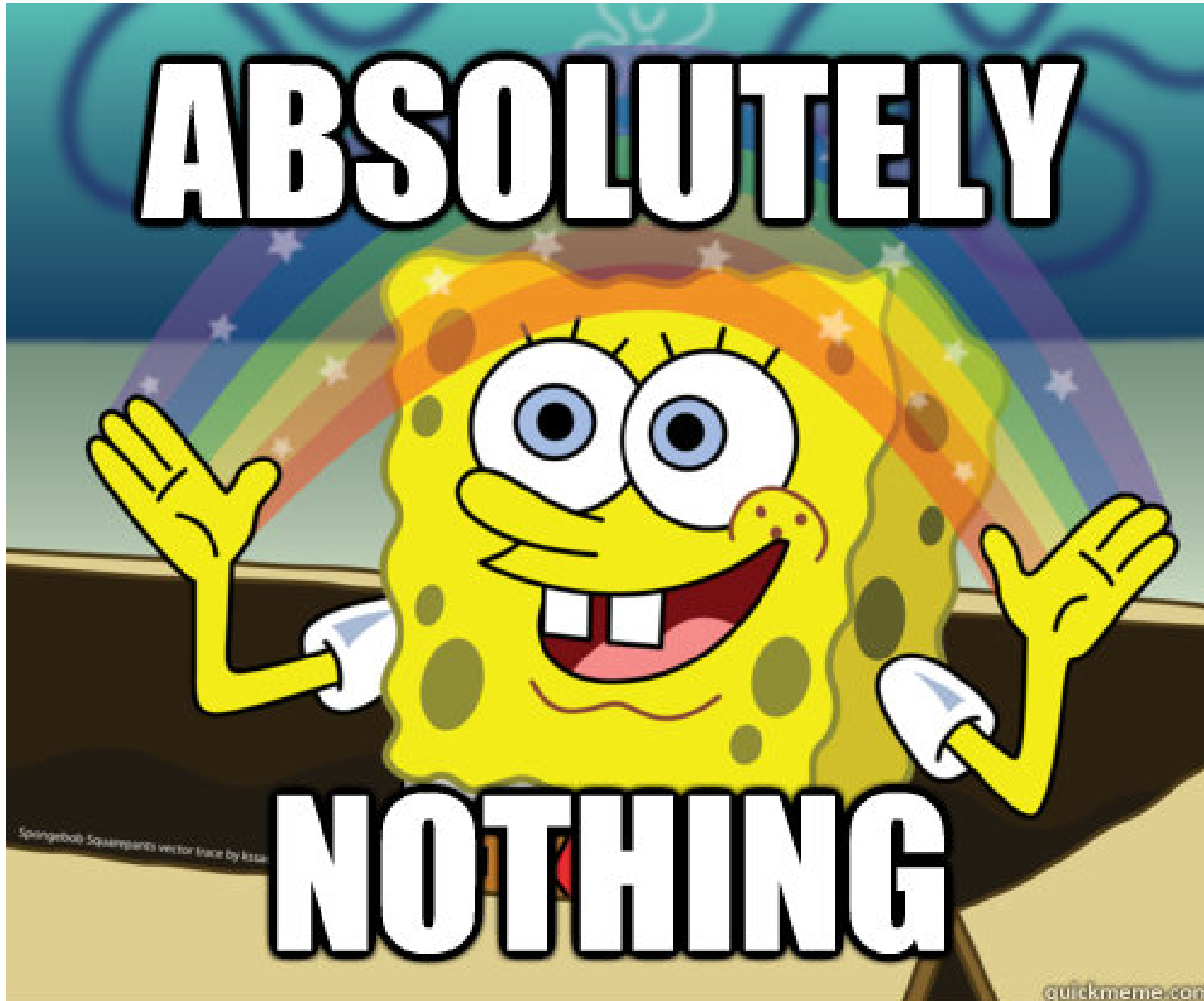
Select a view: victim age breakdown by:



# *NIBRS: What are some of the limitations?*



*"Yes sir, you can absolutely trust those numbers"*



# Ok, some limitations

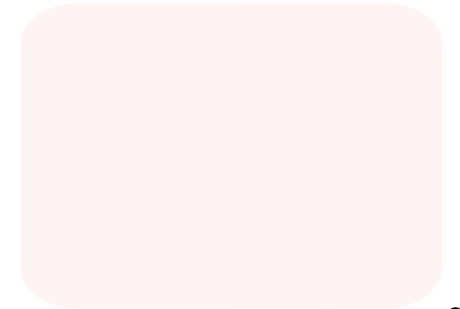
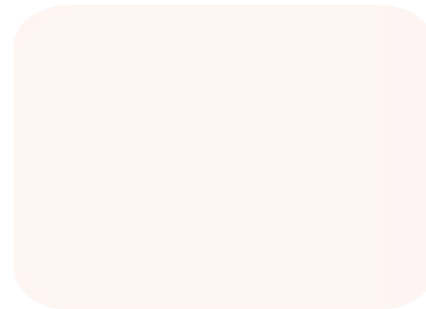
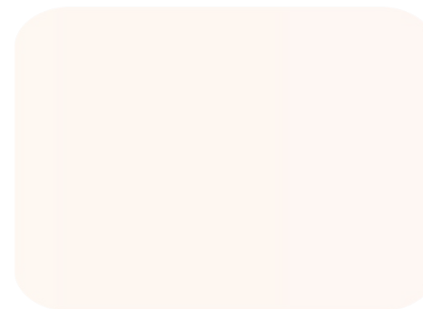
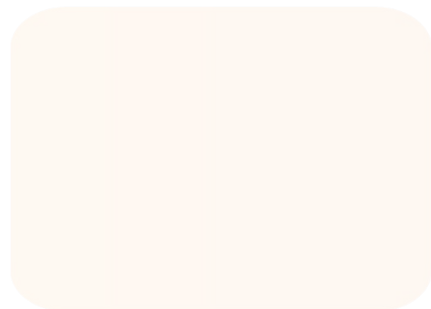
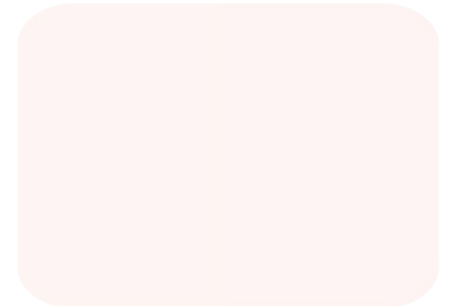
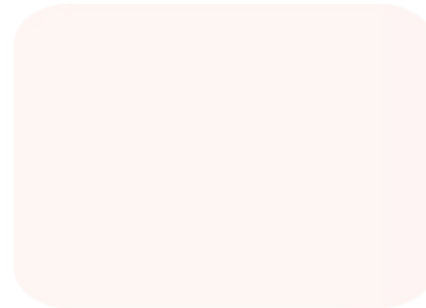
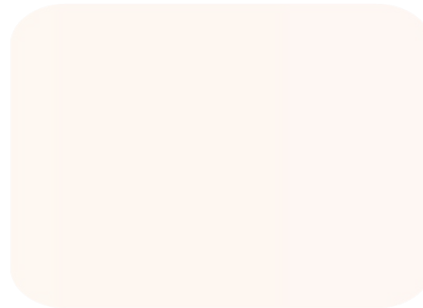
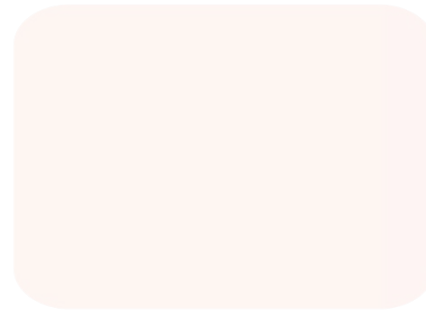
- Data can be complicated to use
  - NIBRS data is structured as a hierarchical system with 6 main segment levels, each with a different layout
  - This means there are many different levels of possible analyses with hundreds of possible combinations, each may require a different plan
- How you acquire the data (from an agency RMS or State repository, FBI files, or NACJD Extract files) can have a major impact
  - What kinds of data linking is necessary
  - The complexity of creating a file for analyses

# For example

- How many aggravated assaults involved a juvenile victim, juvenile offender, and multiple offenses?
- Requires being able to link victim, offender and offense data.
  - Multiple units of analysis depending on specifically what question you are asking:
    - What percent of all offenses involved multiple victims and multiple offenders?
    - What was the average number of offenders involved in offenses involving multiple victims and multiple offenses
    - What is the victimization rate for juvenile victims involved in offenses involving a juvenile offender?

# What other issues can I face?

- Potential data coding issues
  - High use of missing/unknown
    - Garbage in → Garbage out
  - Default codes
    - Time of Day- 99



# Conclusions

- NIBRS data takes practice to use, but its worth it!
- Necessary to understand the limitations and confirm the data are appropriate for the task
- Important implications can be drawn
  - Investigation, prosecution, and designing interventions
- NIBRS data can help bridge current gaps
  - Particularly for vulnerable and/or rare survey populations (e.g., young victims and male victims)

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