

# The Importance of the Quality of Arrest Data in NIBRS

Mr. Dan Bibel

Alex Wagner, Fisher College

Ted Cross, University of Illinois, Urbana-Champaign

Rosa Mazzeo, Fisher College

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# Overview

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How this all started

Data collection process

What we found so far

Potential outcomes of this project

Future projects and research

Questions?

# How this all started

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Prior NIJ project on sexual assaults

Initial analyses of MA state NIBRS data revealed an arrest rate substantially lower than reported national arrest rates for sexual assault

Not like MA, so something had to be wrong here

This created concern about the reliability of the state's NIBRS data for the research

Contacted several Massachusetts police agencies to find out more

Agencies typically were reporting data at one point of time in the case, usually early

Agencies did not typically update NIBRS data later, even though arrests may have taken place

# How this all started

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The research team initiated an alternative method that avoided NIBRS altogether

The research team created individualized data entry sheets for 144 police agencies represented in the sample

Asked police chiefs to arrange for data on arrests and criminal charges to be entered and asked to be returned to research team

This data collection method yielded a 97.9% response rate

Would not have been possible without support of our partners MACA and EOPSS

Found arrest rates to be aligned with national numbers

# How this all started

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Current project spun out of the previous project

Research arrest data quality in NIBRS for:

- Sexual Assaults
- Aggravated Assaults
- Simple Assaults
- Intimidation

Stratified random sample of 172,716 assault incidents (2011-2013)

165 agencies and 480 incidents are in our sample data set

Also review potential RMS impact on data quality

Qualitative component with surveys and interviews of LE personnel

# How this all started

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One goal of NIBRS was to improve the measurement of clearance data, including arrest data

One strength of NIBRS is the opportunity to update data, which can improve accuracy of NIBRS data if items change after initial reporting

There are challenges to obtaining reliable NIBRS data

Our study is the first study we know of specifically focusing on the reliability of NIBRS arrest data

# Project delays

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This was designed as a 9 month project

Data collection was to start in March 2016

Encountered delays with a stakeholder and data collection was delayed for months

Multiple rounds of data collections were necessary to get the desired response rates

- Letters
- Emails
- Phone Calls

We are still collecting data and this presentation is based on data collected as of May 14

# Data Collection – Phase 1

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Initial mailing in late June 2016 - 165 agencies / 480 cases

We stopped receiving responses at the end of August

Responses	Overall Response Rate
Agencies – 53	32%
Cases – 159	33%



# Data Collection – Phase 2

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Second mailing to 112 non-respondents / 321 cases in November 2016

We stopped receiving responses at the end of December

Responses	Overall Response Rate
Agencies – 34	53%
Cases – 104	55%

# Data Collection – Phase 3

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Third mailing to 78 non-respondents / 217 cases in early February 2017

By April 1 only 9 agencies had responded

<b>Responses</b>	<b>Overall Response Rate</b>
Agencies – 9	58%
Cases – 35	62%

# Data Collection – Phase 4

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Final push: Remaining non-respondents were emailed and faxed in early April

Follow-up survey and phone calls aimed to increase response rate to at least 80%

As of May 14:

<b>Responses</b>	<b>Overall Response Rate</b>
Agencies – 39	80%
Cases – 73	73%

# Data Collection – Surveys

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Surveys were also sent out with the mailings

29 agencies completed the survey

6 agencies agreed to be interviewed via telephone

The hope is this will provide more insights and enrich the findings of this research

# Agency Size Considerations

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We anticipate size of agency might result in different NIBRS reliability outcomes

Sample to be created with equal numbers of cases by agency size

We used below definition:

- Small agency -> 0 to 25 FT employees, 160 incidents
- Medium agency -> 26 to 99 FT employees, 160 incidents
- Large agency -> 100 or more FT employees, 160 incidents

# What we found so far, agency size (not final findings yet)

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Sample / sub-sample	% arrests not recorded in NIBRS	% non-arrests recorded as arrests NIBRS	N (incidents)
Total	24.9%	5.4%	348
Small agencies	12.3%	3.3%	117
Medium agencies	29.7%	9.1%	130
Large agencies	31.7%	2.4%	101

# What we found so far

(Most serious offense examples)

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Sample / sub-sample	% arrests not recorded in NIBRS	% non-arrests recorded as arrests NIBRS	N (incidents)
Total	24.9%	5.4%	348
Simple Assault	17.5%	4.8%	84
Aggravated Assault	22.4%	9.1%	89
Forcible Rape	30.8%	2.5%	53
Intimidation	33.3%	7.4%	78

# What we found so far (RMS)

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Only 80 responses so far on RMS vendors

Not possible at this point to clearly distinguish between RMS and agency size impact

Need to follow up to see if we can get more responses on that

Will update MACA and others on this down the road



# What we found so far (survey says...)

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A little too early for robust results

Still going through survey comments (remember just closed data set for this presentation)

Fewer than 40% received training from RMS vendors

About 77% received training/support from CRU/Dan Bibel in some form

Mixed comments on other issues (examples below)

- More vendor training after RMS software updates
- More training on resolving NIBRS errors
- CRU training should be tied more to RMS

# Potential project outcomes

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Identify methods for improving the measurement of arrest

Increase the validity and statistical power of arrest data in NIBRS

Point to methods for improving the process of updating NIBRS data

Initiate inquiry on several of the tools supporting or impeding NIBRS quality

NIBRS definitions, instructions and training and RMS software, enabling new avenues for improvement

Give voice to data specialists, encouraging a dialogue that will facilitate improvement

With the involvement of the Massachusetts Chiefs of Police and the Massachusetts Association of Crime Analysts, the project will increase attention to the value and quality of state data, encourage greater state and local use of NIBRS, and model state efforts to improve NIBRS.

# Questions?

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Dan Bibel	<a href="mailto:dbibel@verizon.net"><u>dbibel@verizon.net</u></a>
Alex Wagner	<a href="mailto:awagner@fisher.edu"><u>awagner@fisher.edu</u></a>
Ted Cross	<a href="mailto:tpcross@illinois.edu"><u>tpcross@illinois.edu</u></a>
Rosa Mazzeo	<a href="mailto:rmazzeo@fisher.edu"><u>rmazzeo@fisher.edu</u></a>