

NIBRS LEARCAT Workshop

July 22, 2026

Ekokoi Gouahinga: Good afternoon and welcome to this workshop on the National-Incident Based Reporting System, or NIBRS, organized by the Bureau of Justice Statistics. My name is Koi Gouahinga, I'm a public affairs specialist here at BJS and it is my pleasure to be your host today. Before we get to the heart of what brings us here, I wanted to go through a few housekeeping items. First, please be aware that this event is being recorded.

And we'll share the recording and the transcript with all attendees. This means that there's no need for you to record it from your end. All attendees' microphones are muted. This is to minimize disruptions.

Your confirmation e-mail referenced a few resources that we think would be useful for you to follow along this afternoon. And we've also posted them in the Q&A window. You may ask questions at any time throughout this event by using the Q&A function on your screen. And our presenter will handle those questions at the appropriate time.

And finally, this platform offers live captions. You can enable them by tapping or clicking the "CC" icon or the three dots that you see on your screen. With that out of the way, it is now my pleasure to pass the microphone to Erica Smith, the chief of the Law Enforcement Incident-Based Statistics Unit at BJS. Erica, the floor is yours. Please.

Erica Smith: Thank you, Koi. I appreciate the introduction. As Koi said, my name is Erica Smith and I oversee the Law Enforcement Incident-Based Statistics Unit at BJS. I'm going to give just a quick introduction to the agenda for today's webinar as well as a little bit of a background on the work that this unit does relative to the data from the National Incident Based Reporting System.

So, after I give a little bit of an introduction of the unit's work, I'm going to pass it over to my colleague, Kimberly Martin, who will go through, then, a brief primer on the key features of NIBRS and some of the other considerations regarding the data. She's also going to walk through a number of different elements related to the construction and use of the NIBRS extract data files, and then finish up with a tutorial on what is included in the BJS LEARCAT tool. LEARCAT is the Law Enforcement Agency Reported Crime Analysis Tool that we stood up several years

ago in conjunction with the work that we were doing on the, with the FBI on transitioning agencies to NIBRS reporting.

At the end, we'll also cover some information about resources that are available to you all and then go into a Q&A portion where you all can ask any questions that you might have that have come up relative to the topics we're covering today. So, with that, I'd like to talk a little bit about the work of this particular unit. So, I managed the Law Enforcement Incident-Based Statistics Unit at BJS, and our primary goal is to collect data and produce statistics on crime known to law enforcement.

We have been working over the last, I would say, 10 years, to try to improve the amount of statistical information from and about law enforcement agencies. This unit was established in 2015, I believe it was the year, in order to focus specifically on supporting the transition of law enforcement agency crime reporting to the NIBRS format. And then from there we've grown to have a bit of an expanded purpose, to not only improve that statistical infrastructure on crimes known to law enforcement, but then to also expand beyond that to generate data and statistics on the broader work of law enforcement. Including calls for service and other information related to the outcomes of incidents that are known to law enforcement.

And then we've also undertaken a number of different activities to provide better public access to these data. So, a lot of those things are underway. And as you all can imagine, like with the onset, I guess is maybe the way I would say it, of a lot of these different AI tools, the landscape is constantly changing. So, we're hoping that you'll see some more of these items from us later in the year.

So, our particular areas of focus are really in that, as part of the criminal justice funnel that a lot of you are probably already aware of, it's on those crimes that are reported to law enforcement and then arrest outcomes. At least as of right now. So, kind of swirling around this idea of crime known to law enforcement are all of these different projects that this unit manages, you know, as sort of large buckets. Next slide, please. What we're going to focus on specifically for this talk is the work we do with the NIBRS data, both the hierarchical files and then the extract data files. The work that this unit does with those particular data sources is, really falls into three general categories.

The first are our web-based reports, so this includes the data dashboards that we've made available, as well as some of the topic-based reports that we have published over the last several years. The second is LEARCAT, which you'll hear a lot more about in a little bit. That has, kind of, five main areas right now of information that you can access through that tool. And they're listed here for you.

And then the extract data files. So, the extract data files have been around for quite a long time. BJS has been producing them for a number of years, but we've really done a lot internally to revamp that process so that we can be creating these files much more quickly.

And you'll see the focus right now of those, of the production of the extract data files, is in these four particular file areas. And Kim's going to walk through a lot of that with you all in the next part of this webinar. So, with that, I am going to turn it over to Kimberly Martin. She is a statistician in the Law Enforcement Incident-Based Statistics Unit here at BJS. Kim is our resident expert on all things NIBRS-related. She put together the entire infrastructure for the LEARCAT tool, and she also is the person who spearheaded revamping the process, the processing of the NIBRS data for the extract data file. So, she is the perfect person to be providing this webinar and, with that, I'm going to turn it over to Kim.

Kimberly Martin: Thank you, Erica, for the introduction and thank you all for joining us today. So, just a brief overview of what we're going to discuss. So, the extract files and the walkthrough with LEARCAT. It's a lot of material. So today may go a little quickly, but some of these slides that you'll see that we don't go into too much detail on, they are resource slides for you and I encourage questions at the end of this and of course contact me after the webinar with any questions you have. And with that in mind, I want to go ahead and bring us back to the focus of the bulk of today's talk.

So, here's a brief overview. We're going to talk about what exactly is NIBRS. What information can it provide about crime? And you could probably teach an entire college semester just on NIBRS and all of the information and detail that it has. So, we can't dive too deep into that today, but we're going to hit all the high points so that you can understand the structure of the data and why we create the extract files and why they're useful. We're going to talk about how the extract files are created, why are they a useful resource, and when they're a useful resource. And that sometimes depends on your research question, how are they developed and what's the cadence and the timing with which they are released to the public?

What can users also gain from accessing NIBRS data through LEARCAT? And then we want to talk about the resources that we've developed for NIBRS data users. This is just a brief snapshot of where we've been with crime data reporting and where we are now since the 1920s. Crime data reporting was in the Summary Reporting System format. It was counts of 10 offenses; 10, usually 8, but also human trafficking until 2021 when the FBI set a deadline to sunset the Summary Reporting System and

transition the nation's law enforcement agencies to NIBRS. And what this did was, it was a monumental shift really, in how we measure crime.

We were able to finally move away from top-line estimates that are rooted in the offense and start moving towards attribute-based measures of crime and what NIBRS has allowed us to do is have meaningful indicators of the drivers of crime. So, for example, if theft or robbery is happening, what types of property are being stolen? How often is an offender armed with a firearm? How often do incidents have multiple victims or multiple offenders? And what types of incidents are being cleared by arrest versus not cleared?

We've come a long way. We've got about 81% of UCR-eligible agencies that are now NIBRS certified and reporting. That's as of 2024, and in 2024, the last most recent year of our annual data for NIBRS, 89%, almost 89%, of the U.S. population was covered by a strictly NIBRS-reporting law enforcement agency. And when I say law enforcement agency, it's really a varied pool of law enforcement agencies.

That's one of the reasons why the NIBRS data collection is fairly complex. Not only are the data coming from over 15,000 agencies across the country, they're very different types of agencies. And I think that that's important for understanding both the content and the scope of the data in NIBRS and also it kind of goes back to the quality of the data.

So about 74%, 75%, of all law enforcement agencies in the U.S. that participate in UCR are municipal police departments, meaning city police departments. That leaves about a quarter of agencies that are county police departments or county sheriff offices, state police, special task forces, campus law enforcement, tribal, and increasingly, we have federal law enforcement agencies that are contributing to NIBRS. Here's where we are... a snapshot as of 2025, and you can find this information on the FBI's Crime Data Explorer, the CDE.

As of 2025, the preliminary figures show that now almost 91% of the U.S. population is covered by a NIBRS-reporting agency. And I just want to take a second to, you know, kind of pause and appreciate that. As Erica, you know, mentioned earlier, we've been at this transition effort, gosh, since it's been over a decade now, I just realized. I started at BJS in 2013, and the very next year, in 2014, we were off to the races helping, you know, working with the FBI, a really full-throated partnership to help transition the nation's law enforcement agencies to NIBRS. And in less than 10 years, we've gone from 33% of the U.S. population covered by NIBRS-reporting agencies to 91%.

So, this is going to be a pretty quick overview of the crimes and the scope of information that is included in NIBRS. And this is sort of an important thing to look, you know, to discuss before we get into the extract files and what we include in the extract files. So, the most recent NIBRS technical specification from the FBI is dated 2025. They come out about every 2 years. And so as of the last technical specification, there are 71 unique offenses in NIBRS, and they're spread across 28 different crime categories.

So, that is a pretty big, monumental shift in and of itself, just the scope of crimes measured in NIBRS compared to the Summary Reporting System. So, for example, in the Summary Reporting System, we had, you know, theft, for example, larceny theft is one of the part one, what we used to call part one crime. In NIBRS you get many different varieties of theft. Several varieties of fraud and then also a growing number of the offenses are federal only or tribal only. So, 19 of those 71 offenses pertain just to those types of agencies, federal and tribal.

And then there are an additional 10 Group B offenses for which we don't have incident information, but we do have arrest information. Those typically are lower-level crimes. So liquor law violations, disorderly conduct, vagrancy, trespassing. These slides, we don't go into too much detail on. They're there as a resource for you. You will find this information in the FBI's NIBRS user manual, and that was included as a link in the registration for today's webinar and I encourage everyone to look through that manual. But these slides can kind of serve as a cheat sheet for you.

There are a certain number of crimes against persons and then crimes against property and crimes against society. So here's a snapshot of crimes against persons, and I have an asterisk next to robbery. Technically, robbery is a crime against property in NIBRS, but for statistical purposes we do treat robbery as a violent crime, a crime against persons.

And here are the crimes against property. These offenses make up the bulk of the offenses that are measured in NIBRS. And they really go into quite a bit of detail. So, you know, like I said, larceny, theft, defenses, they're broken out into eight different types. Fraud, also broken out into eight different types. And fraud includes a wide variety of criminal offenses: computer hacking, identity theft, different types of fraud. And then there's also crimes against society. And we're going to go back in just a few minutes to talk about what that means.

Crimes against persons, crimes against property, crimes against society. Those are victim types and those victim types, such as society victims, are an important indicator as to the scope and types of information you'll get about a particular offense

in NIBRS. So crimes against society includes things like all of our drug offenses, illegal weapons offenses, pornography, prostitution and also animal cruelty.

And then when you look at crimes against society, one of the things that's unique about NIBRS is that you will get additional information about those offenses called type of criminal activity. And what you can see on the slide is some of the types of criminal activity that are flagged in NIBRS. So for example, if it's an offense of animal cruelty, you will get information about the type of cruelty, whether it was an organized offense, whether it was neglect, things like that. And with drugs and narcotic possession offenses, you'll get information about whether or not it was trafficking or cultivation or use.

One of the things I want to call out is that NIBRS, I would say, one of the most valuable aspects of NIBRS, is that it measures the type of property lost, and that is one of the key indicators we have to help us understand what may be driving the levels and trends in crime. So, for example, with crimes against property, we can look at whether or not something was seized, stolen, recovered, damaged. And that includes vehicles, which I'll talk about in just a minute as it pertains to robbery. And there are 67 different unique property types tracked.

So like I just mentioned, we can use that information along with the offense information to also construct measures of crime that are not necessarily unique offense codes in NIBRS. And here I gave the example of carjacking. You can go into the victim extract file, which we'll talk about in just a second, you can select robbery events. You can select those where something was stolen during the robbery. And then look for type of property, automobile, and that's how we construct measures of carjacking.

The other thing that's really useful about the property types in NIBRS is that you are able to track trends, maybe emerging trends, in what is stolen, what may be driving spikes or declines in stolen property. So one example that I received an AskBJS question about recently was theft of non-precious metals, meaning copper and aluminum. You can actually track that in NIBRS. So here are some of the examples of the property types that you will see. And it's quite varied. I'm not going to go into detail on this slide, only to mention that these are some of the characteristics of offenses and incidents and victims that you can capture with the NIBRS data.

I put an asterisk next to victim type and that is because there are multiple victim types in NIBRS and this is, I think one of the true values, one of the value-added aspects of NIBRS. There are person victims, but there are also business establishments, financial institutions, the government, organizations. Depending on the victim type, you will get a certain set of information about a particular incident.

So for example, if it's a person victim, you're going to get more characteristics of individuals. So the demographic characteristics of victims, for example. And then we also have law enforcement victims in NIBRS, so these are some of the information, some of the pieces of that incident information that you can get. But again, it depends on the type of victim and the type of crime.

So I want to talk a little bit about how the NIBRS data are collected. Because it is such a unique data collection. So these are administrative data and there's a pretty lengthy pipeline from the point of entry of an incident, right, by a police officer into a law enforcement agencies, what we call an RMS, a record management system. It starts there.

That's the point of entry, and there's a pipeline that sort of churns between that point of entry until it is ultimately submitted to a state UCR program. And then ultimately to the FBI and to BJS. So I want to talk about what that pipeline looks like. So this is just a very simplified, it's a very simplified version of what really happens, but it can be distilled down into these steps.

So someone, somehow, that crime becomes known to law enforcement. Either the victim reports it, a third party reports it, or law enforcement observes it. Then they have to determine if that incident was founded. Did they actually take a report? Once they take that report, it is entered into NIBRS. So what you're initially going to get from that report is the sort of initial instant information such as time of day, what the offense was, but then there's going to be follow-up investigative findings. And so there might be multiple times that that incident is touched by that law enforcement agency and updated, especially when it comes to arrest and clearance. And then there may be additional charges added.

So a victim may go from serious injury to a fatality; the quantity of drugs seized may change. So these incidents are constantly being updated in that records management system and that has implications for the quality of the data. So once you enter that data pipeline at the point of origin, there are multiple times that people can update that incident, and one of the key challenges is making sure that that incident doesn't get duplicated in their system and that the records are accurate by the time they're sent to the FBI or to the state and to the FBI. This is just a very simplified version of what that pipeline looks like.

So the method and timing of police recording of NIBRS data, it drives that data quality at the state and federal levels. Some agencies submit data every month, every day. Some agencies wait months to submit their data. But for most agencies, so the

vast majority of agencies in the U.S. are local law enforcement, state and local law enforcement.

They're going to collect their data in their records management system and then it will go to their state Uniform Crime Reporting program. And that state UCR program is really the linchpin of this entire system. They do so much work, they take the data from all of their local agencies, they clean it, they do validation checks, they send back incidents that maybe have errors or warnings. Ultimately, once that data is cleaned and ready for consumption, they submit it, then to the FBI and then it comes to BJS.

Now this is not necessarily the process for federal and tribal agencies. They are what we call direct reporters. They do not go through a state UCR program per se. Some of the tribal agencies are part of the Bureau of Indian Affairs, BIA. They are also direct reporters. But some tribal agencies also submit through their state UCR program. It just depends.

So how does BJS use the NIBRS data? And why you know, this kind of gets at why we started creating the extract files and why we've continued to do so. So for our purposes, you know, we use the data for calculating formula grants. So one example would be burn Jack money. Right. But primarily we use them for statistical purposes. And because we use it for statistical purposes, it's not, you know, the emphasis is on data quality, data completeness. We have a wide range of indicators and data elements that we examine closely. We look at things such as, you know, unit response from the agencies before we put, you know, our data out. We look for inconsistencies in the data.

And the reason I bring this up is because when you get an extract file, or if you go to the FBI's API and you download something from the CDE, even though that data has gone through lots of checks and lots of validation, you should still look for inconsistencies. So for example, you know, look out for robbery victims that are age 4. That's something you might see. You know, look for intimate partner incidents where maybe a victim is 10. You still have to look for those types of things in the data. And that's part of the cleaning process we do. It is a real shift in terms of focus. You know there's real time data, operational uses of NIBRS data, that's quite different. So for example in the CDE's main visualization page, you're going to get real time updates. They also have monthly crime data that will be coming out soon. The data are coming out much more quickly than they ever have. And so people need access to that data right away.

Well, for statistical purposes, we have to go through a post-ingestion process where we have to store the data. We have to clean it. We have to do our own validation

checks and then for the NIBRS national and state estimates, which we will have a webinar about in several weeks, we go through weighting imputation. We have to make decisions about what to suppress.

If we do suppress something and that's time consuming and complex. So that's really the main difference. Some examples of using the data more operationally. If you want to understand rare events. So for example, officer shootings, homicides that co-occur maybe with sexual assault or robbery, serial offending. One example that I have recently was I got an AskBJS question about home invasion and whether or not we can measure it with NIBRS, and I'll talk about actually that example in a few minutes.

But. Operational uses of the data are when you want to answer the, you know, the main questions: the what, where, when, who and how. So for example, and we have publications about this where you can see examples like with robbery, for example. If you see a spike in robbery in your jurisdiction, is it because a particular type of property is highly sought after?

One example of an operational use of the data that I really enjoyed, that I thought was really fascinating recently was one that was done by the US Marshals Service. Where they examined a serial rapist, essentially, that was targeting elderly victims. Fairly rare, relatively in terms of sexual assault, to see elderly victims. The vast majority of sexual assault victims are young. And they were able to build a profile and then look for other patterns in elderly victim sexual assault across the country and come up with some answers as to how to deploy resources to address it.

Another really interesting example is you can go to the FBI's Crime Data Explorer and there's a recent report where they use the data to understand what they call flash mob shoplifting. So large groups of offenders and the offense being shoplifting, I thought that was really interesting. So there are ways to use the data in multiple formats for multiple purposes. So there are a number of outlets for you to access the NIBRS data and this is really, I think, an important but underappreciated aspect of accessing the data and using it. So from the BJS side we have multiple formats and outlets for you to access the data. So as I mentioned earlier, there's going to be a webinar in several weeks that discusses how we use the NIBRS data to develop national and state estimates of crime and, you know, I won't discuss that too much, but that's quite different, the use of the data from what we call "as-reported data." As-reported data is what is in the BJS's LEARCAT and what is in the NIBRS extracts and as-reported simply means we have done no imputation for item missingness. We've done no weighting to address unit non-response or partial reporting by agencies. It is as raw the cut as the data as you're going to see. So if you go to the BJS

LEARCAT, you will have all of that reported data, so long as an agency reported at least one full month of data. That's the inclusion criteria for LEARCAT.

In the extracts, we don't put any inclusion criteria on. If an agency submitted something, they are going to be in those NIBRS extracts and we're going to talk in much more detail in just a minute about what an extract is, what it means, that a data file from NIBRS is "concatenated." The NIBRS extracts are accessible from ICPSR, and I'll show you some links to that. But it is essentially a repeated cross-sectional design. It gives you a snapshot in time of what that as-reported data looks like. So to understand the purpose and the value of the extracts, you really have to have an appreciation for the structure of the NIBRS data. And this is a diagram that the FBI has published. And I've broken it up into two slides. Normally it's on one page but the key takeaway here is that the data are nested.

So you can think of the incident as an overarching umbrella, and within that incident, and you can think of it as an event, there are going to be multiple units of count for that incident. There will be offenders. There will be victims. There may or may not be an arrestee, and then, within each of those, what we call segments, you will have additional data elements that NIBRS captures.

If it's a property offense, you will have types of property loss that is its own segment in the offense segment. That is where we get all of our information about the type of location and whether or not an offender was armed with a firearm, for example; and whether or not offenders were suspected of using a computer, a drone, drugs or alcohol, and this is also where our bias motivation elements for hate crime come from. And then an underappreciated but crucial piece: one of the segments of NIBRS that we use is the administrative segment. That is where you're going to get your incident or report time of day. And the date and whether or not that incident was cleared by law enforcement.

So that is just a very quick snapshot of the structure of the data and I'm going to bring that chart back up. This is why we do the extract files. We take this nested structure and we flatten it. That's about as simple a way to explain it as there is. It's essentially a practice of calculating a lot of one too many joints within the data. So for example, if you have multiple offenders and multiple victims, what we do with the extracts is we connect the correct victim to the correct offender and to the correct offense and all of that appears on one flat record, which makes for a wide file and I'll talk about the implications of that in just a second. So the extract files are our main focus today and then I'll spend about 20 to 30 minutes on LEARCAT. I just want to give a really brief background about the NIBRS extracts.

So they're housed at ICPSR. Specifically, what we call the NACJD, the National Archive of Criminal Justice Data. They go all the way back to 1991. That was when the state of South Carolina started reporting NIBRS for the nation. They were sort of the initial pilot, the test case.

The extracts were designed to make analyzing the NIBRS data much more efficient and much more accessible to researchers. We have done a lot of the calculations and the coding logic necessary to sort of dive in and be able to examine an incident or a victimization event in a fairly straightforward way by attaching from other segments everything to that record. So for example, if I wanted to connect weapons from the offense segment to specific offenses and victims in a multi-offense or multi-victim incident, you can do that with the extracts. You don't have to program that. We've done that for you. We've taken elements from the property segment, the arrestee segment, and we attach all of it together and those cross-segment linkages allow you to get a much more complete picture of an incident without having to do extensive programming, which may be prohibitive for some folks.

It also requires a lot of computing resources, if I'm being honest. The data are not small. So this is the big picture of what the life cycle of an extract file looks like. And I want to just focus on steps 5, 6 and 7 on the right side of the slide.

We, as Erica mentioned earlier, there used to be quite a bit of lag time between BJS getting the NIBRS data and then developing and validating and releasing the extract files. We have shrunk that time, that life cycle, down substantially. And actually this is a good, probably a good moment, to put a plug in: the 2024 NIBRS extracts are now available at the NACJD online at ICPSR.

We have had a little bit of a delay in getting them out. They normally would have been out last fall. We had a little bit of a delay with the government shutdown and some other resource issues, but they are now out as of yesterday.

And really, what we're doing right now from step 5, 6 and 7 pertains to the 2025 extracts. So here's what our cadence looks like each April. And this is important for understanding the content and periodicity of the extract files.

Each April, the FBI has a deadline. State UCR programs and also the direct reporters, they have – at least this year – I believe, until April first to submit what we call their annual data. So lots of agencies or states will submit data on a rolling basis, but there's an annual data file. You can think of it as sort of like a locked data file.

Agencies have until April 1 to get that to the FBI, and that's what becomes the annual data. That is released in the form of master files or official state by state NIBRS files on the CDE, and that is the data that is subject to the annual Crime in the United States report. So we get that data usually mid- to late April directly from the FBI now. And then between April and the end of July, we are developing the extracts and doing our data validation. Then by the end of July – which I'm proud to say, we are on track to hit this year – by the end of July, we will then submit those extract files to ICPSR, the NACJD. They take several weeks – four to six weeks – to do their processing.

And then between August and September, our cadence now is that those extract files will be released each year. That is our goal. So what is an extract file? It is essentially the smushing together, the flattening of segments in NIBRS. So there are 7 segments that are the primary input data, the batch header, the administrative, the offense, property, victim, offender, and arrestee segments. And there's a link here to ICPSR where you can go and read about more of those segments.

I put an asterisk next to offense and property. Those are not individual-specific extract files that we create. We create the batch header, the admin, victim, offender and arrestee. And we also have a newer type of victim extract file that I can touch on a little bit later, maybe at the end of the webinar related to firearm violence.

I put an asterisk next to offense and property because those are not individual extract files, but we borrow information from those segments and attach that to the victim file, the offender, and arrestee file and we create an incident extract, which is not a segment. So the incident extract is something that we have created to basically provide a snapshot of an event and put it as one incident per record on a row. You can create a unique key for those incidents by concatenating. And this is just a data management tip: if you are going to be doing any analyses, you know comparing crimes or counting crimes at the agency level or maybe at the city level, you're going to want to create a key where you combine an ORI and an Incident Number so no single ORI will have the same Incident Number.

But there could theoretically be incident numbers that match across ORIs. So that's why we say combine your ORI and your Incident Number and some of the elements of the incident extractor that we track up to three victims. And for those 3 victims, we track up to 10 offenses.

We did quite a bit of work to determine how many offenses we do want to capture in NIBRS. For the vast majority of incidents, I believe the last time I did an analysis on this, it was 89%, 88% of all criminal incidents in NIBRS consist of a single offense, OK? It's, you know, multiple-offense incidents are relatively rare, but they do

happen. And so we do count up to 10 offenses. We also append offender and arrestee demographic information. And one thing that I really want to sort of flag for everyone is that there's a particularly useful variable in that incident extract called "all offense" – ALLOFNS.

It is a string variable, an alphanumeric variable and it will tell you in that one column every single offense code that occurred in that incident. This is just a very brief example of what an incident extract looks like, and this is a screenshot from SPSS. This is an incident extract file from 2024 and what I have circled up at the top shows that where you see RECOFS, that's the number of offenses in that specific incident. There were three offenses.

To the right of that, you will see that there was one type of property and then there were two victims in that incident, but we've put it all on one row to the right of that incident number. So, what you can see at the bottom is, I've circled codes 131520 and 290. Those are the three offenses that happened in that incident, and you'll get details about those offenses all on the same record.

Why are the extracts valuable? Well, let me give you an example for the incident extract. You can explore lots of questions with these data and the reason why I want to talk about this is because I think we're sort of entering into a new phase where we are so flush with data. We have so much of it. Not only is there a broad scope of information in NIBRS, but now we have almost 91% of the U.S. population covered by it, so there's lots of data, millions of cases each year.

What types of questions can you explore with all of this data? You know, for years and years and years, we put out crime stats that were top-line estimates, what we call top-line estimates. So, the rate of, let's say aggravated assault, the rate of robbery or the count of robbery. With the incident extract, the types of questions I've explored with it – and that I hope you do, too – are here on the slide.

Here's just a few examples. So, one of the things that I have an interest in is co-occurring crimes. And so, here's an example of what you could do with an incident extract if you are interested in the topic of intimate partner violence. You can go into that incident extract and see what other types of offenses are co-occurring in intimate partner violence.

You can also examine, is there another victim present during that intimate partner violence incident, such as a child or another family member? You can also look at the incident characteristics, the victim characteristics and see how that's related to the arrest and clearance outcome. You know clearance rates and the decline in them have

been the topic of a lot of conversations, both in the media and both in statistical circles or research circles. You know, for years, for decades, we counted, you know, we measured clearance as just a percentage of crime. Well, for the first time, thanks to NIBRS, we can actually look at the characteristics of an incident or a victim and then look at that clearance outcome and then try to understand if there are characteristics, you know, distinctive characteristics between those incidents that are cleared and those that are not.

And the reason I bring up clearance is because it is an incident-level measure. In NIBRS, if you clear one offense in an incident or if you make one arrest, it clears the entire incident. You can also look at really rich details about a particular event, so I recently did an analysis of intimate partner violence where I looked at the percentage of incidents that were male-on-male, male-on-female, female-on-female, female-on-male and tried to look at the distinctive characteristics between those types of dyads for victims and offenders. And then the data were able to support also looking at intimate partner violence by whether it was committed by current versus ex-partners. That's the kind of detail you can get into. So, you can really move beyond just reporting the rate or the number of intimate partner violence incidents.

One of the ways I've been using the incident extract recently is looking at incidents of gun violence involving four or more victims. What we sometimes refer to as mass shooting or mass gun violence incidents by time of day and location type. The reason I'm interested in location type for those types of incidents is just basically to see if it's something that's happening maybe in a workplace.

You know, I was surprised to go into the data and find many years ago, that the vast majority of gun violence happens in a residence. You know, I was expecting a lot of them to occur out in public, or maybe in a public building, or on the street. You could also explore dynamics of group-based offending by the age of the offenders and the victims and type of crime, which is really interesting. Right after the pandemic, I know that many folks – I received a lot of AskBJS emails about this – were trying to get a handle on trends and fluctuations in group offending among teens. And what we, you know, would look at is things like, you know, are teens, victims of crime at the hands of other teens or is it at the hands of adults? You know, that's the type of detail you can get into thanks to having an incident-level file.

And one of the things I like to look at also is whether the presence of a firearm during crime has any relation at all to the probability of a victim being injured or the severity of that injury. So, I just want to show a brief example of how we've used the incident extract. This is from a report BJS published several years ago, and it was kind of our first pilot effort at doing an online interactive report with the NIBRS data. The online interactive report format, I, I feel like NIBRS really lends itself to that because there

are so many different permutations of the data that you could look at. And that interactive format allows you to do that.

And I would love to show it live, but I was worried about there being glitches, so I've just got a screenshot here. This is a chart for the state of Tennessee. It's their sexual assault data from 2019. Tennessee is what we call a NIBRS full reporter state, which means the state is strictly NIBRS. There is no summary reporting and they have a very high unit response and unit, you know, complete data among its agencies. So, I just wanted to let Tennessee shine here.

What you can see is, we examine the clearance of sexual assault compared to the clearance of other types of serious violent crime, and what we found was that a violent crime with the lowest clearance rate is sexual assault. The next one being robbery. And we also were able to look at using the incident extract file, whether or not an arrest clearance, or clearance at all, is related in any way to the characteristics of victims. And what we found was that clearance by arrest was much less likely – I wouldn't say much, but it's noticeably less likely – for victims between the ages of 18 and 24. Also, for elderly victims and for children under the age of 5.

So, that's the incident extract. I would say there are two extract files that are used more than any other. It's the incident extract and then this one, the victim extract. Here, each victimization — and really you can think of a victimization as a person event. So, there is no unique victim identifier. Let's say you're examining data from Tennessee, like we were just looking at. The same victim could be, let's say someone who's a repeat victim of crime.

I'm thinking of crimes like intimate partner violence, breaking and entering, perhaps. They may appear as a victim multiple times in that data, but each victim event is what distinguishes them. So, the victim extract consists of one victimization event per record. And then you join in what we call end records from all the other segments to that victimization event and it basically goes from a long-nested format to a wide format. What that means is you will see the same incident number repeat sometimes on those rows and that's not a mistake. It's because some incidents have multiple victims. And what the victim extract allows you to do is each victim gets their own row, their own record, and it's a view into the data from the victim's perspective. So, if it's a person victim – I mentioned earlier, there are also business establishment victims, financial institutions – but if it's a, it's if it's a person victim, particularly of violent crime, you're going to get victim demographics. It's going to be mandatory. With one exception. So, you're going to get age, race, sex.

Ethnicity is not mandatory, but there are some states that report ethnicity. I'm thinking of Texas and it's measured simply as Hispanic origin or not Hispanic origin, independent of race. Those victim characteristics are optional for property crimes, but agencies do sometimes submit that data for property crimes, and one of the reasons why, the logic is that, if you provide that type of information for property crimes, particularly victim-offender relationship, you can get a better understanding of multiple-offense incidents, especially domestic violence, family violence, where there may be simple assault, you know, a simple assault by an intimate partner, but also maybe identity theft or destruction of property, things like that.

So, here's an example of the way I've used a victim extract and this kind of gives you an idea of what it might look like. So, there's a victimization event on a row and I will be able to tell if a firearm was used because we've appended that information from the offense extract. Whether or not you knew the assailant, whether it happened in public or a private setting. So, public meaning parks, sidewalks, parking garages, bars, other establishments. So, you can also look at if someone was robbed with that stolen property was and whether or not law enforcement cleared it.

Now, that victim segment or I'm sorry, that victim extract, first has to, we get to it by creating the victim segment. So, when we get the raw data that goes into these extracts from the FBI, we have to segment it ourselves. It's just one really large database, an operational database, and this is what the raw segment looks like, that victim segment.

And so, you'll see on the far left, column 4001 it says 4, that's because victim segment is number 4 and whenever you see variables in the extract files that start with 4000, it means they're from that victim segment and then you'll see variable 4007. Those are offense codes. So, here's when you want to really use the extracts. If you want to calculate granular detailed statistics on crime. So, here are a couple of questions you can ask. An analysis of variety of offense types experienced by victims of domestic violence.

One example that I mentioned recently — and I use the 2024 victim extract to do it — I started trying to search for incidents that resemble home invasion. And in the 2024 extracts, I found them. They looked like burglaries that were at a location-type code of 20, which means home or residence, and during those burglaries or breaking-and-entering incidents, there was a co-occurring kidnapping, aggravated assault, or homicide. You can use the extract files to build those types of really unique, granular measures of crime.

You can also really find the extracts useful if you want to take the NIBRS data and create small-area crime statistics. So, for example, city-level crime statistics, county-

level crime statistics, those are things that we don't have estimates for as part of the NIBRS National Estimation program. And I want to give you an example of what granular looks like and what using the data at the local level looks like.

So this is an example from that sexual assault report, the interactive one that I just mentioned, where we wanted to take all this data about sexual assault and examine where the vast majority of those sexual assaults are occurring and at what time. And that's what those large orange bubbles are. It shows you that the vast majority of sexual assaults are occurring at a residence or somewhere that acts like a residence, like a hotel, and they are typically happening in the morning, around 8:00 a.m., at noon and then in the late afternoon. And I don't get into this here, but part of that is a function of the age of the victims. Most of sexual assault victims in NIBRS are young.

Here's an example of how BJS used the data at the county level. This is a report that we did on fluctuations in crime in the Bakken oil production region of the Dakotas and Montana. There was a huge uptick — I say huge, that's a statistical term — a significant uptick in population in that area, a predominantly rural area, and it was because of the fracking or oil production boom, and people from outside the area suddenly moved there. People who were not, you know, necessarily knew each other or from that area.

And there was an increase in crime. And we wanted to sort of examine the spatial patterning of that and when it occurred. And so, we did a county-level analysis here.

And here's an example of an analysis I did recently at the city level. And this is the rate of firearm robbery victimization in some of the largest cities that report NIBRS data. And this is from the 2024 extract file. That's what I used here. And this is just a map where I've calculated the rates. All of the information you need to calculate these rates is in the extract files.

So, for victims, you will have both the numerator, the crime and also population served. So, a couple of considerations and I'm going to go through this pretty quickly, about 5 minutes. When you go into a NIBRS extract file, you are going to see several things that, well, I want to flag several things for you to look at. One is that you're always going to see two sets of offense codes.

The one that I have circled here starts with 2000 and you'll see three of them in every extract file, except for administrative and batch header. Those are offense codes from the offense segment. And the types of things I'm going to touch on here are things that we now know about the extract files, but they are not necessarily written

anywhere. So, those offense segment offense codes — I know that sounds like a mouthful.

What they are is a summary of the three most serious offenses in the incident. But let's say you're doing a victim-level analysis and there's multiple victims. One of those victims in the incident may not have been the victim of one of those crimes. It could have been another victim in the incident, which is why victim-level analyses are so valuable.

So, here is a snapshot of all the victim file, victim segment offenses. And there's a lot. So, for all, for three victims, you get up to 10 offenses. And this really, I think, encapsulates the value of the extract files.

Just this one snapshot. It shows you that we've calculated for you the victim and the specific offense attached to that victim because a victim could be in an incident, but not necessarily be a victim of every offense. Some additional considerations if you're using the extract files. If you want to use it at the local level, so, like the city analysis of firearm robberies I just showed you. You are probably going to have to calculate new fields and you're going to have to aggregate that data up. It's going to require some programming and data manipulation, and if there are questions about that, we are happy to answer.

We do that here at BJS. We use the data that way. You're also going to want to be very, very careful if using the extract files to verify — especially if you're using the data at the local level — that you're comparing apples to apples.

So going back to this map, I made sure that every city on this map reported a full 12 months of data, otherwise it wouldn't really be a fair comparison. It would be a biased estimate if we put in, say, a city that had just... For example, in 2025, LAPD transitioned to NIBRS, but they did it partway through the year, like a lot of agencies do. I did not calculate a rate, or I would not calculate a rate, for LAPD with only 6 months of data, say, and then compare it to an agency that had 12 months of data. So, you want to be careful about that.

You're also going to want to pay attention to agency indicator — that is a variable in the extract files — and select the type of agency that's related to the question you're going to have. And really, this gets to, I think the issue of population served. If you're going to use these data to calculate rates, I really wanted to flag population served. In the NIBRS data — and again this isn't written anywhere — there are going to be up to five population-served variables.

We call them population served informally, but they're going to show up like this. What you see on this slide, UCR_POP1, UCR_POP2, all the way up to UCR_POP5. One of the pitfalls and challenges, you know, that you want to be aware of is don't ever stop at Population 1. I, in calculating city-level crime rates, this is a snapshot of some of the largest NIBRS agencies that were on that map, a firearm robbery that I just showed you. Initially, I went in and I calculated a rate of firearm robbery using just that first population variable and then I stepped back and realized, OK, something is off, when I saw really large rates, like unusually large rates, for Kansas City, for example. Well, that's because Kansas City straddles multiple counties, and for every county they straddle, the population in that county served by that agency is going to go to, go into a different population column and you have to add them up if you're going to be using this data to calculate rates.

So, if I had stopped at Population one for Kansas City, I would be missing about 200,000 residents from their denominator, which really will inflate a rate. Same thing with Oklahoma City. I had stopped at population one and I was missing around 172,000 residents. So, that's just something I wanted to mention.

People, well, we frequently get questions about why are there multiple populations in the file, and it's because that's just the structure of how the FBI basically organizes population served. They do it by county. So, I'm from the Atlanta area. The City of Atlanta, Atlanta PD, straddles two counties, Fulton and DeKalb. So, for Atlanta, you would see population 1 and population 2. The largest population always goes in population 1.

So, these are just a couple of other factors to consider. Agency under-reporting is a big one, but it also has potential implications if you want to take that agency reporting, you know, that that agency data, and create maybe state-level measures of crime. And we've developed a tool to help get a better sense of the quality and completeness of the data from agencies. This is from LEARCAT and it's called the Monthly Incident Count Module. And what you can do is go in and so, here I've selected the largest agencies. This is exactly the process I went through when creating that firearm robbery map for large cities that I showed earlier.

For the city of Omaha, they transitioned to NIBRS in 2023. I knew, for example, in 2023 that I could not include Omaha in that map that I showed. It would not have been an apples-to-apples comparison to, say, St. Louis Metropolitan PD, right above it, that had a full, complete year of data.

The reason this is so valuable, this LEARCAT module, is because there is a variable — and, again, this is the subject of a lot of our AskBJS questions — there is a variable in

the NIBRS data, in all UCR data, that it's an agency indicator of reporting. Did they report each month? What type of report did they submit? Was it a zero-crime report? Was it an incident report? There will be a single variable that measures the number of months reported and people often will go to that variable and they'll say, "OK, if it says 12, that means that that agency reported a full year of data." That is not true. Again, it's not written anywhere.

This is, you know, why we are sharing it via webinar and why I hope, you know, we continue to get questions from, from folks through AskBJS. If an agency submits anything, it could be a Group B arrest. Just one. So, for example, I'm going to pick on Kansas City, the second row here.

If Kansas City has submitted two incidents in the month of January instead of 3,551, they would get counted as having reported in January. Likewise, Omaha PD, they're going to show up as having reported their data for April, even though there's one incident. So, be careful with that variable. It does not mean that there is complete data for a given month or for every month for that agency. It means something was submitted.

That's why this tool, the Monthly Incident Count tool, is so important. And I, it's probably the part of LEARCAT that I use the most, quite honestly. And here's an example with Wichita, in Kansas. That's their largest agency. They're a long-time NIBRS reporter, but for whatever reason, every now and then, an agency may switch their record management system.

In the case of Maui, I remember several years ago they had wildfires and so they had lots of reporting, complete reporting for, you know, the first half of the year and then it sort of dropped off and they were not able to submit their data for another like 6 to 8 months. They were behind schedule because of those wildfires. That's the kind of stuff you need to be on the lookout for.

And in the case of Wichita, the reason why I'm picking on them is because they show something reported each month. So, they would show up as a 12, having reported all 12 months of the year in the extract files. But as you can see here, it's really not complete reporting. Well, does that data for Wichita stay missing? And this is important for the extract files.

So, that annual data that I mentioned that comes in in April and is the basis for the extract files. If agencies miss that deadline, or if they submit their data but it's, maybe they're missing the last three months of the year? It does not make it into the

extracts. So, what happens, let's say, to 2025 data that was due by April one this year?

If it was not part of that annual cutoff, it will not be in the extracts. And I mention that only to encourage people. If, let's say, you're wanting to examine a rare crime, a relatively rare crime, let's say you're interested in human trafficking, I encourage you to go to the CDE and to get an updated count, because the CDE, their main visualization page, is constantly churning and updating with new data, whereas the extract files really are a snapshot in time at that time.

So, if you want revised data for a previous calendar year, you won't get it from the extracts, per se. You can get it from LEARCAT, which is going to be the subject that we talk about next. But we do it on an annual basis. So, for example, when we update LEARCAT this year with 2025, we will do a refresh of 2024, and there will be updated data for some agencies that submitted only partial data for last year.

This is just a, and I'm just going to put this up on the screen and then refer you to a publication that we have. If you want to understand the more technical aspects of how the extract files are created — this is just a brief snapshot, kind of a diagram of what that looks like — you can get scripts, much more technical detail about how they're created and developed, in this report right here on the BJS website. You'll see diagrams like this that just show the process flow and life cycle.

So, this is just a summary of the strengths of NIBRS. I'll let you read over that on your own — and some of the limitations that I mentioned. And then I want to dive into LEARCAT. This is our other main source of NIBRS data as reported data. And I've just got, you know, I would love to do a live demo. That is dicey. So, we decided to do screenshots here, but I encourage everyone to go to LEARCAT and to get comfortable with it, and sort of explore the types of data that you can get.

Not every NIBRS data element is included in LEARCAT. The data are sizable, and so we've tried to limit, really, the amount of data, elements and characteristics of crime. We include all crimes, but some of the characteristics we don't allow people to filter on. This is what the main page looks like: you will see a map of the U.S. and this map is important because if it's a dark blue state, it means they are a full-reporter state and you can calculate rates for them. If they are not a dark blue state, we do not allow users to calculate rates since the data would not be representative at the state level.

And what you'll notice is, there's an incident view and a victim view and you can get two units of count in LEARCAT: incidents and victimizations. We have not yet incorporated offenders or arrestees. And I just want to kind of walk you through a couple of examples of what you can do. And I just picked a random year, this is 2022.

And this is the state of Texas. What you have up here in the far upper left corner is what we call count corner.

So, I've gone from this map and I've selected Texas. And then here is, or here are, Texas' counties and what you can see from the bar chart is just over half of all crimes recorded by Texas police were property crimes. And you can see how much violent crime incidents they had and how many victimizations those violent crime incidents accounted for.

One of the frequent questions I get is, why are there more victimizations than incidents? And here in Texas, you can see there's 105,000 victimizations that occurred within 88,000 incidents. That's because there's multiple-victim incidents. You can, also, for Texas, as I mentioned earlier, since it is a full-reporter state, calculate all of this as a rate.

Other units of count, or other units of measure, are percentages and counts. So, you can also look at different types, more rare crimes. This is human trafficking. And you can see that's relatively rare compared to other violent crimes. About 2,200 incidents in 2022.

And then I want to highlight a module that you will see up at the top. There are several tabs. One of them is "Analytics On Demand." This is really what this and the tab next to it, "Rates on demand" is what sets LEARCAT apart, I think, from other NIBRS tools. What we wanted was to create both a visualization tool, something that makes the data explorable and accessible and intuitive.

So, we wanted that visualization piece that you get from this part of the website. But then we wanted to, you know, us being more of us — you know, our purposes for the data being more statistical and research-focused — we also wanted to build in the ability for users to come in and create their own crosstabs. So, for example, if I want to know how many, you know, human trafficking incidents there are by state and by sex of the victim, I can come into "Analytics On Demand" and do that. "Analytics On Demand" is going to give you counts. We don't do rates in there. There's no percentages.

You can calculate your own percentages. But it will give you counts, so one of the most recent analysis I did — and it's so quick and easy — you can go in and you can select, you know, whatever variables you want, whatever state you want. You can even filter the data out.

So, let's say you want to do a very detailed three-way crosstab: age, race, sex, weapon for all violent crime. You don't have to show all the violent crime offenses. You can just select them and then click filter. And it's already there, like you can see here. So, here is what that interface looks like in the “Analytics On Demand” module. I've selected Victimization as my unit of count. You can also choose Incidents. I've selected every state for that year.

This is 2022 and because I'm only looking at 2022, no other years, I've just clicked Filter Only. And it's going to hide that from my table so that it doesn't take up space. And here I'm looking at a four-way tab. So, it's state, by offense, by victim age, and by relationship status. What was I trying to examine here? Well, I got an AskBJS inquiring as to how relatively rare or common kidnappings of young children by strangers are? I went into analytics on demand and I was able to answer that question within a few minutes.

So, it's really powerful that way. You don't have to open a statistical software package. You don't have to wait on the file to load, and that is something I, I, I appreciate. These files, the extract files, they're very wide files, right? So, they can be pretty cumbersome in terms of computing resources and also storage, data storage. You don't have to worry about that with LEARCAT. You can go in without opening a file, do that analysis and then download the table.

And you can see right here what that table looked like when I ran it. So, this is kidnapping victimization by victim age and relationship to the offender. And this is native to Tableau. What you'll see is kind of a heat map-type feature here, where it's going to hone in on where the most cases are.

And so, what you'll see here is kidnapping and abductions by intimate partners at those age categories were particularly common in the state of Colorado relative to other states. And again, that took me less than 5 minutes. It takes me sometimes 5 minutes just to open a NIBRS file. So, that's a feature I really appreciate. You can get quick answers to your questions.

We do a lot with calculating rates, either incident rates or victimization rates at BJS. This is a module called “rates on demand” and what you can calculate here, at this point, at this stage of LEARCAT development, are incident rates. We have not incorporated victim rates yet, but you can also look at victimization rates on the main visualization page.

Here we calculate incident rates and you have to choose a state that is a full-reporter state. So, we have some guardrails on the data and what you can do with it on the

LEARCAT website. We basically dim out or turn off rate features for any geographic area where the data are not fully represented.

So, for example in 2022 you would not find California in this drop-down menu, you wouldn't find New York, you wouldn't find Pennsylvania, you wouldn't find Florida. But you will find states where NIBRS is the only crime data reporting standard, and Colorado has been a longtime reporter of NIBRS for the whole state. And so, I picked on them for this example. I wanted to calculate rates of crime by victim race, sex, age, type of crime and whether or not a firearm was present. For the entire state of Colorado.

And so, this is what that looks like. Here's the incident rate per 100,000 people. And what you can see there again is that sort of heat map functionality, is that rates of firearm violence were particularly high for African-Americans, between the ages of 15 and 34, and particularly victims of handgun violence.

You can then download all of these tables in a PDF or as an Excel file. And then you can create your own graphics with them if you like. So here is that agency-level Monthly Incident Reporting tool and this is probably a feature that I use more than any other because of my use of the data, calculating rates for cities and local areas. I have to pay special attention to whether or not agencies fully reported each month. And what this tool allows you to do is look individually at an agency, and you can compare what they're if, if you need intuition on what reporting looks like, you have multiple years to go back to. So, for example, I know that I put Wichita PD from Kansas on a slide earlier.

I went and looked at their previous years of data and found out that, you know, sometimes they do, you know, have less reporting towards the end of the year. You will start to see agency reporting patterns, you know, a certain behavior with them. And it gives you some important insight and intuition about the data and how to use it and maybe ways you shouldn't use it.

So, we've got a few minutes left for questions and answers, but before we do that, I want to highlight a couple of resources for folks. So, there are several statistical reports and all of these are – their URLs are built into all of these; you will get these slides after today's webinar. But I really want to highlight that second bullet under reports titled NIBRS Estimation and Extract File Creation Methodology Report. That is where you're really going to get a lot of the detail scripts, the tech stack used to create the extract files, and if there is one document that you read either before or after this webinar, and if you're going to use the data, it is the FBI's NIBRS User

Manual. Please read that guide. The next manual will be out next year, in 2027, so the link here is to the 2025 version.

And I also want to put a plug in for a report titled Crime Known to Law Enforcement, 2024. That is our flagship publication each year, showcasing the state and national estimates. And the NIBRS data are used to form those estimates. And then we included a link to an online interactive report that I showed screenshots of earlier on the topic of sexual assault.

And like I mentioned with LEARCAT and calculating rates, we included in that report the most recent year of data and it is 2019. We're working to update that. It's only those states that are full reporters that are included. And so now, you know, circa 2025, we would have a lot more states.

I believe there's 34 maybe now, 35, that we could do state-level analysis on. But that report, I think, is a good example of what Erica talked about earlier. Our work, our, you know, desire to make the data tangible.

You can examine different views of the data. You don't have to look at table after table. Some of these tables, if you really want to get detailed with NIBRS, could be huge tables.

We wanted to show it visually and allow users to look at it in a different way. Maybe either at the incident level or the victim level or from the viewpoint of the arrestee. So, it just provides a nice example of how you can take a NIBRS extract — because we did use the extract files for that report — and create a story. You can take that data and tell a story with it and make it, I think, really relevant to folks.

And then I wanted to talk about or, I'm sorry, provide resources for, additional resources of where to source NIBRS data. So, you see LEARCAT in the extract files over on the right. But I also wanted to mention that the FBI has a crime data API as part of the CDE. And there's a link to it in that slide, and BJS has developed a NIBRS Estimation Program data API.

And then there's also a copy of a webinar we did a couple of years ago on “The Nation's Two Crime Measures” where we discuss the similarities and distinctions between NIBRS being an administrative data collection from, you know, 17,000 plus law enforcement agencies compared to our flagship survey at BJS, the National Crime Victimization Survey. A very different data collection instrument, but also one of the nation's official measures of crime. You know, it's a household survey. It's

quite different. So, that webinar talks about those distinctions and how the two data collections — they're not competing, they're more complementary and overlapping.

And together they tell, I think, the most complete picture of crime. The most complete story and understanding of crime that we've really had to date. So, that concludes my comments today. I know that that was pretty quick. There's a lot of detail to get into. So, with that, I can turn it over, I guess to Koi, for questions and answers.

Erica Smith: I actually think that is for me.

Kimberly Martin: Oh, got it.

Erica Smith: No, that's OK. A couple of questions in the Q&A section, I'm trying to keep up. Some of them were responses to other comments, so I just want to make sure I'm not missing anything.

One of the easier questions I think to address is, someone asked if we could send the links that are on that final slide, since they can't be clicked in the presentation themselves, so yes. There are a number of clickable links that Priscilla Fauntleroy put into the Q&A section. Links to some of these items that you'll see in there, like the NIBRS User Manual, the link to the NACJD, NIBRS extract page where you can find the data files and things like that. So, there are some things here, but rest assured the slides will be available to everyone as part of the follow-up when the entire webinar is posted shortly after we conclude today. So, hopefully you'll be able to address and then if not, please just don't hesitate to get in touch with us and we'll make sure that you get those resources.

Another question. Someone asked, is the data available to the public or only through some kind of login? So, these are publicly available data, so a number of the links that you'll be able to get to from this particular slide that's on the screen will take you to publicly available data.

Those data are, the data that are, that have been sent to the FBI from the state. So, from the locals, as Kim was saying earlier, from the local law enforcement agency reporting up to the state and then from the state over to the FBI. You can download the sort of quote unquote “raw” NIBRS data through the FBI's Crime Data Explorer. They also have an API that you can use for that purpose, and then you can also download the extract files from the NACJD link as well.

Kimberly Martin: Hey, Erica, one thing. Just to piggyback off what you're saying for the questioner.

Erica Smith: Yeah.

Kimberly Martin: One thing I should mention is that if you want to download the long form data from the FBI's API, the CDE FBI or the CDE's API — it is going to only be that data that you see on the CDE. It will not have all of the NIBRS data elements in it, similar to LEARCAT. It was just, it, that the data collection is so large you're just not going to get all of those data elements. If you want those data elements, you're going to find them in the extract files. That would be an example of when you want to turn to the extract files to answer a question. So, I just wanted to mention that.

Erica Smith: No, that's great. That's great context. So, I have a couple of questions for you that I think are a little more in-depth. So, one of the questions is, why are the data not entered more real time?

Kimberly Martin: Mm-hmm. Entered... You mean why are they not released more real time?

Erica Smith: I think it's...

Kimberly Martin: I think so.

Erica Smith: I think it's probably more about the release of it, but probably the response can touch on both of those and if you want to take a crack and then anything that I want to throw in there, I'll do after.

Kimberly Martin: Yeah. No, actually, you probably know more about that, that context than I do. There are some agencies that submit their data on a, I mean — and this gets kind of technical, you know submitting flat files versus XML format files and, you know, I don't get into all that — but some agencies do submit their data, I mean, it could be nightly; for other agencies, it's every few months.

The release of the data, used to be, I mean, there used to be a lag time of — let's see, between March or April to the end of September. And I really have to tip my hat to the FBI. They have undertaken significant efforts to shorten or reduce the amount of time between their ingestion of the data and when it's released, and I think, Erica, correct me if I'm wrong, I think their goal is August this year. Is that accurate?

Erica Smith: I believe so, for the Crime in the U.S. release, yeah.

Kimberly Martin: Yeah, and that is their annual data file. So, that is a more statistical use of the data. So, there is a little bit of lag time. Lots of cleaning, lots of preparation.

But they now have monthly data. They've also already put out their preliminary 2025 figures on their website. And this is all because of, you know, modernizing their data ingestion process. I'm sorry. Do you have anything to add to that, Erica?

Erica Smith: Yeah, I guess I would, I would say that some of it is also related to policies and procedures within the state that the agency is located. So, there are some states that require that they are the point of first release for those data. So, they want to make sure that it's not being sent to the FBI on a rolling basis. So, we do know of agencies that are uploading data in real time.

Either it is happening like as an incident report is entered into the RMS, it, you know, it goes through the, you know, the QC process that's set up at the local level, and then it gets sent to the state. Some agencies are doing sort of these batch loads every night, and we have some states that are then holding those records to do their own type of review. And, it depends on the state how long those data are held. Some of them do just submit big batches of data twice a year. You know every 6 months. And, so, it really is dependent. I don't know that we have, I don't know that we — we know of these things anecdotally, but I admit we don't have this codified anywhere, in particular because the processes can change over time. So...

Kimberly Martin: And one question I know that I've explored in my mind — just to speak to this person's question — is whether, you know, an underdiscussed, underappreciated fact of these data, are that they are voluntary. You know, there is no federal law mandating that, you know, states submit all this data to the FBI. It is voluntary, but there are some states, I know one of my grantees years ago, when we were doing the transition, was Nevada. I worked with Las Vegas metro PD, Reno. They have a state law that mandates that their agencies submit NIBRS data and they — at least the two largest agencies there — they do it on like a nightly basis, or at least I know Las Vegas did. And I've always been curious about whether or not there's a relationship between, you know, how that happens and whether or not there's a state law mandating reporting. I don't know that there is a relationship, but that is one question I have, because there is so much variation. And again, that just speaks to the uniqueness of these administrative data, you know, the timeliness and when they come in. That's an excellent question.

Erica Smith: We have a number of other questions. I'm going to see how many we can get through in the next 30 minutes. I'm having a little bit of trouble seeing all the questions, so if you see me looking in a couple different places, it's because they're being fed to me from a different location. So, technical issues — I, I will work these out as we get more and more used to this, but using the Teams platform for these webinars. But, so, bear with me. Kim, I'm going to see if I can throw a couple more at you.

Kimberly Martin: Oh, no, you're good. Oh, well, while you're doing that, I was going to say I got a question. I get this question a lot, but I actually got a question before the webinar. So, I included a slide here to talk about it.

Nope, apparently I didn't. So — there it is. So, some of the questions that we get frequently at BJS are about anticipated changes to NIBRS. So, one of the data elements that everyone is really eager to, to see is the new injury code of gunshot wound.

In the 2024 extracts that you can download now for ICPSR, you will see a new injury code. I believe it's code 9. That is gunshot wound, and that is really critical because our ability to measure firearm violence is really — it's imperfect.

We can measure, you know, whether or not there was a violent crime. And we can measure whether or not the offender was armed, you know, with a firearm and the type of firearm. But we, up until 2024, there was no mechanism in NIBRS to discern whether or not that firearm was brandished and discharged, whether or not that discharge resulted in a victim being shot. You know, we could discern that pretty clearly from homicide, right, with a firearm.

But the vast majority of all firearm violence is nonfatal. And then the vast majority of that nonfatal firearm violence is aggravated assaults. And, so, we can try to get a handle on how much firearm violence happens. But we don't really know the extent or the seriousness of that firearm violence, you know.

And, so, gunshot wound was added as a victim injury in 2024. You'll see it also in the 2025 extracts, but I want to stress that it hasn't been widely adopted yet. So, some of the questions we frequently get are, hey, I heard that, you know, the FBI is adding this category to this, you know, data element. Well, these agencies, you, you might see some reporting of that data element.

So, in 2024, there's a handful of tribal agencies that submitted information on gunshot wounds. But the vast majority of law enforcement agencies did not submit it yet. It takes several years, and the FBI thankfully gives them time to update their records management system so that they can incorporate that new element. I mean,

lots of agencies are already collecting this information, but having to go in and update your records management system takes time. It requires money and it requires training. You know, officers who are inputting that data, you know, maybe record staff who are verifying that data.

So, what I expect to see in the coming, like, year or so is more agencies submitting data about gunshot wounds. Ditto for the first bullet you see, firearm discharge. In the 2025 extract files, you will finally see an indicator for whether or not a firearm was discharged. But again, it's just like the new injury code of gunshot wound. It's not widely reported yet. Not every agency is reporting. So, there's always kind of like a, a rolling period by which you will see these new data elements or categories in the data that are there in terms of the architecture, but they may not necessarily be widely reported yet, but eventually they will have to be reported. They will be mandatory.

If you want to know what to look out for, what some upcoming changes are to the NIBRS data collection, I want us, you know, encourage everyone to click on the link on this slide. Sign up for the FBI's UCR program newsletter. It comes out every quarter. The most recent one is from April, and in that April newsletter, which you can link to right there, they're going to talk about how they have a working group put together to measure swatting activity.

The offender use of drones one is another new data element, which is kind of interesting, I think. And it shows, you know, NIBRS is a big system. There's so many agencies that are respondents, and it's sort of, you know, when you make changes to a system like that, where it's standardized across 17,000, you know, police departments, it's sort of like trying to stop a submarine, a sub on a dime. You know, it's hard to make those turns and those adjustments, so it does take several years and there's about 25 to 30 changes to NIBRS that are kind of in the pipeline right now. After those are done, there's the FBI. And again, it's in this newsletter. They've announced a 5-year moratorium on changes, and it's to give these agencies some breathing room, you know, to kind of update their systems, make sure everyone is online and reporting as they should be.

Some other changes that are discussed in that newsletter include broadening the number of crimes against law enforcement officers that we track. So, I just want to encourage everyone to sign up for that newsletter. The, you know, what's happening with NIBRS, the way the data is changing — it's not a black box. It's just, a lot of people don't know where to go and get that information. That's a great resource. So, I just wanted to highlight that.

Erica Smith: No, great! Thank you. So, let's, let me keep going here with a number of these questions. I'm trying to get them sort of organized here, but one of the questions is about reiterating when the 2024 and 2025 extracts will be available. I know earlier this week the 2024 extract files went live and Kim, I'll let you. So, those are already available on NACJD. So, Kim, if you want to mention again the projection for when we believe the 2025 files will be available.

Kimberly Martin: Yeah. I mean, obviously we don't have a specific date, or I mean, I do in my mind but we don't announce that. I have, I am verifying the 2025 extract files now. So, we have really reduced the amount of time, you know, a lot of work has gone into sort of re-engineering the process by which we create the extract files and, you know, I don't go into it in detail in the webinar but, you know, after 2016, I remember — so, I came to BJS in 2013.

As a graduate student, I used the extract files, like, I really relied on them. I didn't want to get into a raw NIBRS file and have to do all those one-to-many joins. I made my students do it just for fun, but they didn't appreciate that.

But after 2016, there was essentially like a break in series. You know, BJS for years had relied on this wonderful staff at the NACJD to create the extract files for us. And, you know, there was a couple of departures and retirements and, you know, it lagged. You know, we didn't have anyone, really, who was as intimately familiar with the programming and the work required to do it.

And, so, for about 4 years, maybe 3 or 4 years, we had no extract files after 2016. So, then we were like, OK, we need to do this. We need to keep putting out these extract files. But we didn't have any documentation of how to do it. So, we had to kind of step into that process and develop it and that's what that report is that I put up on one of the slides that I encourage everyone to read — the estimation methods and extract file methods report that BJS published last year, I think it was last year. So, with that, the process that's laid out in that report, we, so last year, 2024, was a bit of an anomaly. But what the cadence looks like now is we get that data in April. We have developed processes that really automate. I mean, I can't just push a button and get an extract file, but pretty close to it.

We've now gotten down to, gosh, the 2025 extracts were developed in less than a month. Less than a month. And now I didn't spend 2 weeks validating it, you know, updating the codebook that goes along with it and that is one of the resources I don't think I put up on the screen.

Please, if you go and you download the extract files — even if you don't — one of the quickest like, think of it as CliffsNotes. If you want a CliffsNotes to NIBRS and all that's in there, there is an Excel file that is downloadable with the 2024 extracts. It contains every variable that are in the extracts, almost every key variable that's in NIBRS.

But what we've done is, we've really started to document some of these unwritten but ad hoc, knowable things that we have figured out. So, for example about populations and how you have to go beyond population 1. We may have notations, basically a notes section, in that Excel file, that actually explains what some of this is. You know, it's not, it's not just a codebook, maybe, that you would get from ICPSR that just says this is the record length and it's numeric and, you know, it, it actually really goes into a little bit of detail about what some of these data elements are and how they're related to each other. So, I encourage people to go and look at that, even if you're not using the extract file. So, for 2025, I will be, I will be submitting that to ICPSR, the NACJD for processing in about a week. And they are intimately familiar with these extract files. I mean, they're experts. They're pros.

They take maybe no more than you know, 4 to 5 weeks. I mean, barring anything unusual happening, right, to process the data and then they're released. So, my goal is a release in, you know, no later than early September. That's the goal.

Erica Smith: Yeah. And some of the releases for 2025 will be dependent on the release of the larger data files from the FBI as well. So, we'll have to be coordinating on that, but that's one of the reasons why we want to, Kim is talking about getting it to NACJD so quickly, so that everything is sort of ready to go when we're able to, you know, hit the publish button. Another one of the questions that we received — and I think I can take this one pretty quickly — is asking if there's a particular pattern to the, about 10% of agencies that are not currently using NIBRS and are they localized in specific states or are they primarily a specific type or type of or types of law enforcement agencies?

Kimberly Martin: It's a good question.

Erica Smith: So, it's about, it's a little over 15% of agencies that are not reporting and about 10% of the US population covered by those agencies. And you're absolutely spot-on with this question, that they are tending to coalesce in a handful of states. So, we have lower reporting in — a lower percentage of agencies reporting, in the state of Florida, in the state of Pennsylvania, in Mississippi, and New Jersey.

California is actually doing quite well. I just looked at this yesterday and I do not remember the numbers, but we are well above 70% of their population covered. I just don't remember the percentage of agencies, so that state is actually doing, doing pretty well, but there are still a number of agencies not reporting from California, as well, that we've been working with.

So, yes, they're definitely not, randomly not reporting, which is one of the struggles that we have with, you know — not struggles, but it's one of the challenges that we needed to overcome with the NIBRS Estimation Program, which, as Kim mentioned, we'll have a webinar on in another month-and-a-half or so. Because it, because of the missing, the nonreporting agencies and the other forms of missingness, they're not missing at random. We needed to figure out different ways to account for the bias that is inherent in the reporting structure and the agencies that do report.

To my knowledge, there's not any specific type of law enforcement agency that's not reporting. In, you know, in Pennsylvania, they'll be mostly considered as municipal agencies, but they're often — fun fact, there are over 1,500 law enforcement agencies in the state of Pennsylvania because many of the small townships will have their own police agency that is considered to be UCR-eligible for reporting purposes. They might not even have one full-time officer. So, that's the kind of situation where it's a little bit more difficult to make inroads with these small agencies who have very limited resources and, you know, trying to get to, trying to get them the information that they need for the various types, for various options they have for reporting NIBRS data. Oh, Kim.

Kimberly Martin: Go ahead.

Erica Smith: I was going to say, I think you can take this one. Is there a way to determine if your state is a full NIBRS reporting state?

Kimberly Martin: Yes, that's an excellent question. So, at BJS, I can tell you how we determine that. You know, this goes back to our statistical use of the data. I would love to just use all the data, right? But if you want to, let's say, come up with state rates or, you know, something that's representative of all crime known to law enforcement in that state, you do have to choose a of, what we call a full reporter state, and the way we've determined that, in our state.

So, I mostly use the extract files and the as-reported data in my work, right? So, for that sexual assault report that I had up earlier, that was when we really started setting some standards about what we're going to consider representative of a, of a state and that our criteria were that 80%. So, it's actually three-pronged: 80% of the

law enforcement agencies in that state have to be reporting. And when I say 80%, it, it has to include the, the largest agency in that state for sure. And 90% or more of that state's population has to be covered by a NIBRS reporting agency. That is how we determine "full reporter."

And it's tricky because, you know, I had a slide up earlier that showed our county-level analysis of the Bakken oil production region. Those states — so, the Dakotas and Montana — they are long-time consistent, excellent submitters of NIBRS data, strictly NIBRS. And even those states, they still have some agencies that are summary only. You know, it, it still happens.

And the FBI is still accepting summary data, I believe, for this year. And, so that's, you know, that is something that you have to look out for. So, just because, let's say, a state has only the NIBRS crime data reporting standard, there may be some states who, or some agencies within that state who don't report at all, which is what we ran into with that Bakken oil production region violent crime report.

We had to do imputation and weighting procedures to address that. So, you do have to look out for that, and that is also where I go to that NIBRS or, I'm sorry, the Monthly Incident Reporting Tool Module in LEARCAT. I can select a state and every agency in that state, and then I can look at that agency's report patterns from 2016 — assuming they go back that far up — to the most recent year of data, which in LEARCAT is 2024, and you can kind of get a sense of, you know, if that state's agencies are fully reporting. Don't rely on whether or not all of the agencies are certified in a state because just because they're certified does not mean that they're actually reporting or reporting a full year of data.

So, there's two ways to think about it, you know. Are most of the agencies certified to report NIBRS? That's the first, you know, the necessary, but not necessarily sufficient criteria, right. So, that has to come first.

And then, of those certified agencies, are they actually reporting? And that's where you want to go into that module and look and see, hey, did they submit complete data each month of the year? But, yeah, that 90% pop coverage is really what our criteria is.

Erica Smith: And this is where in addition to the agency, the monthly reporting tool that Kim mentioned from LEARCAT, that landing page for LEARCAT, will also give you a snapshot for each of the states, so. I know we have a little bit of a struggle changing the screen sharing right now where it could kind of mess things up. So, I'm

not going to do that, unfortunately, but if you go to that landing page on LEARCAT you can see that, for example...

Kimberly Martin: I have it up on a slide.

Erica Smith: I'm trying to find a good one. In Michigan, you'll — you'll pop — yes, it's really tiny. But you'll see in Texas, the percent of agencies reporting and then the percent of their population covered by NIBRS reporting agencies, what Kim has there on the screen. So, you can use that as kind of your first, like, landing point for figuring out if a state is a full reporter. And then, if you also want to see if the largest agencies are reporting, then you can use that monthly lookup tool as well. So, that's a good way to do that.

Kimberly Martin: And I want to just, yeah, just to add a little bit more detail to what you just said, Erica. I want to stress to folks that when you go to that landing page map, you know, the reason why we have the population coverage and agency coverage over each state is so that you can understand which states you can calculate rates for. You know, we only do it for those dark blue, full-reporter states.

However — this gets to the distinction that I just talked about — those statistics you see over the state of Texas that looks at certified, so, and it's so tiny, I can't tell right now because of the way the presentation, the way the PowerPoint is on my screen right now, but the percentage of agencies that you'll see for Texas — that is certified agencies, OK, so, and that is the population covered by those certified agencies. You then need to take an extra step, go to that NIBRS Monthly Reporting Tool Module and see: are they actually reporting? So, that's the only thing that I would add there.

Erica Smith: Yeah. And to reiterate, too, someone asked — apologizing in case they missed it — But what percent? What percentage of law enforcement agencies are reporting to NIBRS? So, as of the 2024 data, which are the most recent, the most recent that are currently publicly available, that percentage was, I believe 81%. And it has ticked up slightly for 2025. I'm not recalling the exact number, but it's a little bit above 81%. So, yeah, it's somewhere back there.

Kimberly Martin: I'm going to find it.

Erica Smith: It's very far back.

Kimberly Martin: There it is.

Erica Smith: There we go. So, yeah, so that, and again these slides will be available moving forward. Also, you know, once we finalize all of the webinar recording and whatnot, we'll be able to make these available.

Kimberly Martin: And these numbers are available in the CDE. Also, if folks want to go to the FBI's CDE, they'll see a section up at the top that says preliminary 2025 figures. They have, right at the top of that page, the number of agencies and percentage of agencies that submitted data for 2025.

Erica Smith: Quick question about the ability to download the NIBRS extract files from ICPSR, NACJD. You, you do need a login. It's not very extensive. These data are not part of — they're not under any sort of, like, restrictions for access.

So, there you, really just need to put your e-mail address in and then certify that you're not going to use these for nefarious purposes, I think, is essentially what you, what you have to promise, and then you should be able to get the file. So, if you have any trouble with that, please let us know. Certainly, I know that there's a, like a help e-mail that's on the NACJD site for anyone who's having trouble accessing the files. But, you know, just keep us posted if that ends up being some sort of long-term struggle to get the data or not.

Let's see. A couple other questions. Do you have any suggestions for cost-friendly tools that can be used with the NIBRS extracts that can create visual graphics or maps or representations of the data?

Kimberly Martin: Yes. I don't plug any particular product. But there are a host of options available for folks. It's, you know, they range from fairly sophisticated and expensive options all the way down to, you know, almost no-cost options.

So, if you look at LEARCAT, that is mostly Tableau-native. And Tableau is nice because, you know, I got into Tableau and I was able to really learn about it and start playing with it for free. And there's a huge user community, lots of training that they put out and OJP, you know, has a license for Tableau.

But there's also — I don't want to like mention any specific products but I would encourage folks to check out the graphics that are used by an organization called the Criminal — it's the Council on Criminal Justice, CC, yeah, CCJ. They have a really interesting visualization package they use that is low-cost, very — I think — user-friendly and approachable for non-technical folks who, you know, maybe don't do statistical analysis day in and day out. They make beautiful charts and I've seen CCJ use the NIBRS data with that package, but almost every statistical software package

now allows visualizations. I mean, even SPSS has expanded the types of visualizations that that package can do, and it's incorporated mapping.

You know, SAS Viya has a product. Most of the commercial off-the-shelf software packages now are going to have visualizations – visualization capabilities, I should say. At BJS, we mostly use Tableau. We've used SAS Viya.

One thing I should mention is that for that sexual assault report, you're going to see, that was almost exclusively done with JavaScript. You know, it was kind of a first-of-its-kind, a pilot effort. And, so, there were lots of requests and customizations, you know, from leadership at the time. And, so, we went with a JavaScript route because it, you can customize anything. There's nothing you can't do with it, but it also requires a lot of know-how and technical expertise to do that.

Erica Smith: Yeah, and I'll also say there are some native, well, I guess nothing is native in open source, but there are some available packages through R and R-Shiny that will, the shiny applications that also will enable visualizations and maps and other types of graphics. I know that that has a little bit of a steep learning curve. I will also put a plug in for some of the AI tools. I know a number of folks on this, on this webinar may be restricted in what they're allowed to access, but a number of the tools that are out there now, like VS Code where you can connect to different AI, to different LLMs I guess, is how I'll put it — large language models that will support you in developing programs written in, like, Python as a free language. And then you would, you're able to see those visuals straight away. So, we've had some internal success, anyway, in generating those types of things using these data and it's able to kind of move things around relatively quickly.

I know we're running short on time, so I'm going to make sure that we hit on another, one other question, at least, that was submitted by a couple of different people and that is specific to the data element of ethnicity. So, one of the questions was: Why is it not mandatory? And then another question was, is there a plan to make it mandatory in NIBRS?

And, so, what I can tell you from a sort of a broader perspective is that there is good enough reporting. Actually, that's a terrible way of saying it. But, like, better than good enough, I guess, to enable the generation of national- and state-level estimates of Hispanic origin for victims, at least.

We're still in the process of evaluating Hispanic origin for, for the offender data, the alleged offender data. And we may be able to release estimates of Hispanic origin for arrestees, persons arrested. So, that's a little bit more to come on that as we kind of,

as we move forward. We do have those estimates right now, and I believe at the state level, they're relatively strong, except for, in a couple of those states where reporting is lagging a bit in terms of the percent of population covered.

And, also, where we're missing a couple of the larger agencies in the state. So, to my knowledge right now, the APD has not taken up any plans yet to require Hispanic origin, you know, to, in the NIBRS data collection. But if that were to happen, I think that UCR newsletter is probably your best way to find that out.

And if there's, if any of you on the webinar today want to know a little bit more about the Hispanic origin data, NIBRS data in your particular state, please feel free to reach out and we can kind of point you to where, you know, some of our data assets are relative to that specific question. So, now I'm cognizant of the fact that we have one minute left. So, we really, really appreciate you all for joining us today and submitting all of your questions. I apologize if I wasn't able to get to your question, but if we have the opportunity to do some specific follow-up, we will definitely do that. And, so, with that, Koi, I will pass it over to you to do the final wrap-up.

Ekokoi Gouahinga: Thank you, Erica, and thank you, Kim, for that very thorough presentation. I'd like to thank all of you, attendees, for showing up today and for your very thoughtful questions. I just want to throw out a couple of reminders. One is that we'll post a recording of this event on our website and then we'll send an e-mail so that people know that it's available. It's not just the recording, it's also the transcript and the slides that were shared today.

Soon you'll receive an invitation to take a short survey from us. It's just something that helps us better refine our event, So, it's voluntary and totally anonymous. So, but you'll get an e-mail about that. So, you just click on the survey, it takes maybe 3 to 5 minutes, no more than that.

And finally, I encourage you to go to our website, bjs.ojp.gov/subscribe. When you get there, there's like a subscription sign-up form, and this is how you can keep up with our events and other announcements. With that being said, this concludes our first workshop on NIBRS. We are pleased that you were able to join us today. There's a second workshop that's coming up soon and please be on the lookout for that. It will focus in on the NIBRS Estimation Program. So, there's going to be a separate e-mail that's coming out for that. With that, I want to say thank you to everyone and I hope you enjoy the rest of your day. Goodbye.

Kimberly Martin: Thank you.