

State of Wisconsin

SENATE CHAIR
Howard Marklein

316 East, State Capitol
P.O. Box 7882
Madison, WI 53707-7882
Phone: (608) 266-0703



ASSEMBLY CHAIR
Mark Born

308 East, State Capitol
P.O. Box 8952
Madison, WI 53708-8953
Phone: (608) 266-2540

Joint Committee on Finance

MEMORANDUM

To: Members
Joint Committee on Finance

From: Senator Howard Marklein
Representative Mark Born

Date: December 15, 2021

Re: s. 16.515/16.505(2), Stats. Request

Attached is a copy of a request from the Department of Administration, received December 15, 2021, pursuant to s. 16.515/16.505(2), Stats., on behalf of the Department of Justice.

Please review the material and notify **Senator Marklein** or **Representative Born** no later than **Wednesday, January 5, 2022**, if you have any concerns about the request or if you would like the Committee to meet formally to consider it.

Also, please contact us if you need further information.

Attachments

HM:MB:jm



STATE OF WISCONSIN
DEPARTMENT OF ADMINISTRATION

Tony Evers, Governor
Joel Brennan, Secretary

Date: December 15, 2021

To: The Honorable Howard Marklein, Co-Chair
Joint Committee on Finance

The Honorable Mark Born, Co-Chair
Joint Committee on Finance

From: Joel T. Brennan, Secretary *JTB*
Department of Administration

DEC 15 2021
J. Finance

Subject: s. 16.515/16.505(2) Request(s)

Enclosed are request(s) that have been approved by this department under the authority granted in s. 16.515 and s. 16.505(2). The explanation for each request is included in the attached materials. Listed below is a summary of each item:

<u>AGENCY</u>	<u>DESCRIPTION</u>	<u>2021-22</u> <u>AMOUNT</u>	<u>FTE</u>	<u>2022-23</u> <u>AMOUNT</u>	<u>FTE</u>
DOJ 20.455(2)(gb)	Gifts and grants.	\$48,900*	0.0	\$0	0.0

*Expenditure authority would be one-time for fiscal year 2021-22 and not ongoing.

As provided in s. 16.515, the request(s) will be approved on January 7, 2022, unless we are notified prior to that time that the Joint Committee on Finance wishes to meet in formal session about any of the requests.

Please contact Kirsten Grinde at 266-1353, or the analyst who reviewed the request in the Division of Executive Budget and Finance, if you have any additional questions.

Attachments

Date: December 14, 2021
To: Brian Pahnke
From: Michael R. Schmidt
Subject: Section 16.515 Request

Attached is a s. 16.515 request analysis for your approval and processing. Listed below is a summary of each item:

DOA RECOMMENDATION:


<u>AGENCY</u>	<u>DESCRIPTION</u>	<u>2021-22</u>		<u>2022-23</u>	
		<u>AMOUNT</u>	<u>FTE</u>	<u>AMOUNT</u>	<u>FTE</u>
DOJ 20.455(2)(gb)	Gifts and grants.	\$48,900*	0.0	\$0	0.0

* Expenditure authority would be one-time for fiscal year 2021-22, and not ongoing.

AGENCY REQUEST:

<u>AGENCY</u>	<u>DESCRIPTION</u>	<u>2021-22</u>		<u>2022-23</u>	
		<u>AMOUNT</u>	<u>FTE</u>	<u>AMOUNT</u>	<u>FTE</u>
DOJ 20.455(2)(gb)	Gifts and grants.	\$48,900*	0.0	\$0	0.0

* Expenditure authority would be one-time for fiscal year 2021-22, and not ongoing.

BP APPROVAL  (FORWARD TO TRACY WILLIAMSON)



STATE OF WISCONSIN
DEPARTMENT OF ADMINISTRATION

Tony Evers, Governor
Joel Brennan, Secretary
Brian Pahnke, Administrator

Date: December 14, 2021

To: Joel Brennan, Secretary
Department of Administration

From: Michael R. Schmidt
Executive Policy and Budget Analyst

Subject: Request under s. 16.515 from the Department of Justice for increased expenditure authority to analyze national crime reporting elements.

Request:

The Department of Justice requests additional expenditure authority of \$48,900 PR in fiscal year 2021-22 in the gifts and grants appropriation under s. 20.455(2)(gb). The requested expenditure authority would be for a one-time basis in fiscal year 2021-22, and not ongoing.

Revenue Sources for Appropriation(s):

The program revenue appropriation for gifts and grants under s. 20.455(2)(gb) is funded from revenue received by the department from gifts and grants to its Division of Law Enforcement Services and Division of Criminal Investigation. Revenue for this request would be supported by a grant from RTI International.

Background:

The department was awarded a \$52,722 competitive Joint Statistical Analysis Center Program grant from RTI International. During fiscal year 2020-21, pursuant to s. 16.515, the department requested additional expenditure authority based primarily on this grant. On March 10, 2021, the Joint Committee on Finance approved the department's request to increase expenditure authority in the gifts and grants appropriation under s. 20.455(2)(gb) by \$53,100 in fiscal year 2020-21. The department spent \$3,823.63 of the Joint Statistical Analysis Center Program grant award in fiscal year 2020-21. Since this is an annual appropriation, the expenditure authority for the unencumbered balance of the grant reverted to \$0 at the end of fiscal year 2020-21. This request for \$48,900 PR in expenditure authority represents the award's remaining balance to complete the project in fiscal year 2021-22.

The department's Joint Statistical Analysis Center Program grant was awarded to test whether National Incident-Based Reporting System data elements statistically predict whether an incident has been cleared by arrest (e.g., characteristics of victim, offender or offense). The Federal Bureau of Investigation's (FBI) Uniform Crime Reporting program collects and publishes national crime statistics on an annual basis, which includes offense and arrest data. Under s. 165.845, the department collects this information from Wisconsin law enforcement agencies and other criminal and juvenile justice system agencies. On

January 1, 2021, the FBI transitioned to only collecting National Incident-Based Reporting System data for the Uniform Crime Reporting program. The National Incident-Based Reporting System collects detailed incident-level information regarding offenses and arrests, and the system presents data tools describing each arrest. RTI International, a nonprofit research institute, has partnered with the U.S. Department of Justice Office of Justice Programs and Bureau of Justice Statistics to improve the utility and relevance of law enforcement incident-based crime data. For these grants, RTI International subawards federal funding to state Statistical Analysis Centers and State Uniform Crime Reporting programs.

The current expenditure authority in the gifts and grants appropriation under s. 20.455(2)(gb) is \$0 in fiscal year 2021-22.

Analysis:

Under the grant, the department's costs are reimbursed after meeting certain milestones. The department spent \$3,823.63 of the award in fiscal year 2020-21, which included salary and fringe benefit costs. RTI International has reimbursed the department for these costs.

According to the department, the project started behind the original, anticipated schedule due to the expenditure authority process in fiscal year 2020-21. Table 1 below includes the updated milestones, deliverables, estimated costs and approximate timeline of the project. It should be noted that the original milestone, *Complete Research Proposal*, was divided into two parts (*Project Start-Up Work* and *Submitting Research Proposal*).

**Table 1. Joint Statistical Analysis Center Program
Milestones and Timelines**

Milestone and Deliverables	Costs and Estimates	Anticipated Timeline
Project Start-Up Work Working on Research Proposal draft and initial submission.	\$3,824*	Oct. 1, 2020 – June 30, 2021
Submitting Research Proposal Submitting revised Research Proposal to the Bureau of Justice Statistics.	\$10,283*	July 1, 2021 – Sep. 30, 2021
Analytical Work Creating syntax files (i.e., text file containing command instructions) and final datasets that would be used for the regression model and tables.	\$9,618	Oct. 1, 2021 – Apr. 30, 2021
Draft Report Including methods, results and discussion of the developed tables.	\$13,180	May 1, 2022 – June 15, 2022
Final Report and Dissemination Materials Creating a static infographic that illustrates results and an interactive dashboard.	\$15,817	June 15, 2022 – June 30, 2022

*The department has been reimbursed for these costs.

Joel Brennan, Secretary
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December 14, 2021

The revised final research proposal was submitted to the Bureau of Justice Statistics on November 2, 2021, and the project has moved to the *Analytical Work* phase. The project is currently anticipated to be completed by June 30, 2022, which is within the project timeline with the Bureau of Justice Statistics and RTI International. The department notes that it could request extending the project, if necessary, but does not anticipate needing to do so.

The costs involved with each milestone would include the associated personnel and rent expenses for their development. Also, completing the research proposal would include costs for an advanced SPSS Statistics license. The project would be conducted by existing staff otherwise funded by federal grants and state administrative funds. The department indicates the associated personnel costs would be administered through the task profile reporting functionality of PeopleSoft. The department indicates that if costs are higher than estimated, the department would likely use another funding source; and if lower, either decline funds or get approval from RTI International to permit another use. In addition, if the request is not approved, the department would need to identify alternative funding sources for any project-related costs, which it may have incurred to date.

Recommendation:

Approve the request.



STATE OF WISCONSIN
DEPARTMENT OF JUSTICE

Josh Kaul
Attorney General

Room 114 East, State Capitol
PO Box 7857
Madison WI 53707-7857
(608) 266-1221
TTY 1-800-947-3529

November 23, 2021

SENT VIA EMAIL (briand.pahnke@wisconsin.gov)

Brian D. Pahnke
Division of Executive Budget and Finance
Department of Administration
101 E. Wilson Street, 10th Floor
Madison WI 53702

Re: Request for Program Revenue Expenditure Authority

Dear Administrator Pahnke:

Pursuant to Wis. Stat. § 16.515, the Department of Justice respectfully requests a supplement of \$48,898.37 in the Law Enforcement Services Gifts and Grants appropriation under Wis. Stat. § 20.455 (2)(gb) in state fiscal year 2021-22 (FY22) to expend a federal grant awarded to the department through a nonprofit association.

Background

The department was awarded a competitive Joint Statistical Analysis Center Program (JSAP) grant in the amount of \$52,722 from RTI International, a nonprofit research organization. In partnership with the U.S. Department of Justice Office of Justice Programs and Bureau of Justice Statistics, RTI has received federal funding to subaward to state Statistical Analysis Centers (SAC) and State Uniform Crime Reporting (UCR) programs to improve the utility and relevance of law enforcement incident-based crime data. Wisconsin's UCR and SAC functions both reside in the Bureau of Justice Information and Analysis (BJIA) in the Division of Law Enforcement Services.

In March 2021, the department received Joint Committee on Finance approval of an expenditure authority supplement in FY21 to expend this grant. During FY21, the department spent \$3,823.63 of the award with the remaining \$48,898.37 carried forward into the 2021-23 biennium. The department requests expenditure authority

Brian D. Pahnke
November 23, 2021
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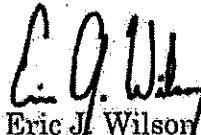
to fully expend the grant during FY22 in order to complete the analysis of the national crime reporting data elements that may statistically predict whether an incident has been cleared by arrest. The department's request and the Joint Committee on Finance approval of the prior request are included for your information.

Appropriation and Revenue

Non-federal grants awarded to the Division of Law Enforcement Services are deposited as program revenue in the Law Enforcement Services Gifts and Grants appropriation under Wis. Stat. § 20.455 (2)(gb). This is an annual sum certain appropriation with no expenditure authority in the Chapter 20 schedule.

Thank you for your consideration of this request. If you have questions or require additional information, please contact Michelle Gauger at gaugermc@doj.state.wi.us or (608) 267-6714.

Sincerely,



Eric J. Wilson
Deputy Attorney General

EJW:MCG:alm

Joint Statistical Analysis Program (JSAP) 2020 Application: Wisconsin

Section A: Point of Contact and Statement of Agency Support

Individual Point of Contact: Ashley K. Billig, Ph.D.

Organization: Wisconsin Department of Justice, Bureau of Justice Information and Analysis

Mailing Address:

Wisconsin Department of Justice
Attn: BJIA
17 W. Main Street
Madison, WI 53703

Email Address: billigak@doj.state.wi.us; veitenheimerdj@doj.state.wi.us

Phone Number: 608-266-2659; 608-630-6563

I certify that the head of my agency supports the submission of this application.

I agree

I do not agree

Section B: State Overview

1. *When was your state certified to report NIBRS data?*

Wisconsin was certified by the FBI as a NIBRS contributor in January 2005.

2. *Is your state considered to be a full NIBRS reporter, with 80% of the state population represented by LE agencies that report data to NIBRS? If not, (a) what proportion of local LE agencies in your state submit NIBRS-compliant data, and (b) what proportion of state residents are covered by local LE agencies that report NIBRS data?*

Wisconsin is not yet a full NIBRS reporting state, and instead is considered a hybrid state. The Wisconsin UCR program has its own certification process, in which agencies are required to take a quiz, complete an orientation phone call, review functions within their records management system (RMS), and submit several months of Wisconsin Incident-Based Reporting System (WIBRS) data which is reviewed by an analyst for specific data and data element quality. The agency receives feedback based on the review and is asked to correct and resubmit incidents that have been flagged as problematic. After the agency makes corrections, the data is re-reviewed by the UCR team. After the agency acknowledges the accuracy of their data, the agency becomes a certified WIBRS reporter and the data is sent to the FBI in NIBRS format. As of July 2020, there are 443 active UCR-reporting agencies in the state, and approximately 49% (218) of those agencies are NIBRS/WIBRS certified; approximately 19% (85 agencies) are in the NIBRS/WIBRS testing process. Based on 2019 agency populations, the 218 NIBRS/WIBRS certified agencies cover about 70% of the state's ~5.8M population, and the agencies in the

testing process cover about 16% of the population. Although Wisconsin's first agency transitioned to NIBRS/WIBRS more than 15 years ago, the most growth has been over the last five years – from less than 50% covered to 70%. If the agencies currently testing are certified before the 2020 reporting deadline, the state will be considered a full NIBRS/WIBRS reporter with approximately 86% of the population covered as of the end of 2020.

3. Does your agency receive incident-based data from local LE agencies? If so, how frequently are data received (e.g., submitted quarterly, monthly, or by transaction)?

Yes, the Wisconsin UCR program and the Wisconsin Statistical Analysis Center (SAC) are both within the Bureau of Justice Information and Analysis (BJIA) at the Wisconsin Department of Justice. The UCR program receives incident-based data in WIBRS format directly from local law enforcement agencies on a monthly basis. Agencies are expected to submit their monthly file by the 15th of the next month (i.e. a June file would be expected by July 15). The monthly file is submitted via flat .txt files through a secure website built in-house. The data is processed overnight through an in-house system that follows the FBI validation errors and warnings, and the data is then stored in a SQL database. Research analysts within BJIA are familiar with WIBRS/NIBRS data structure, SQL, and data extraction and restructuring techniques.

4. Does your state require local LE agencies to collect and submit supplemental data elements in addition to the NIBRS-required elements? If so, what additional data elements are required by your state?

Yes, there are additional data elements required in WIBRS that are not required by NIBRS, but these additions are minimal:

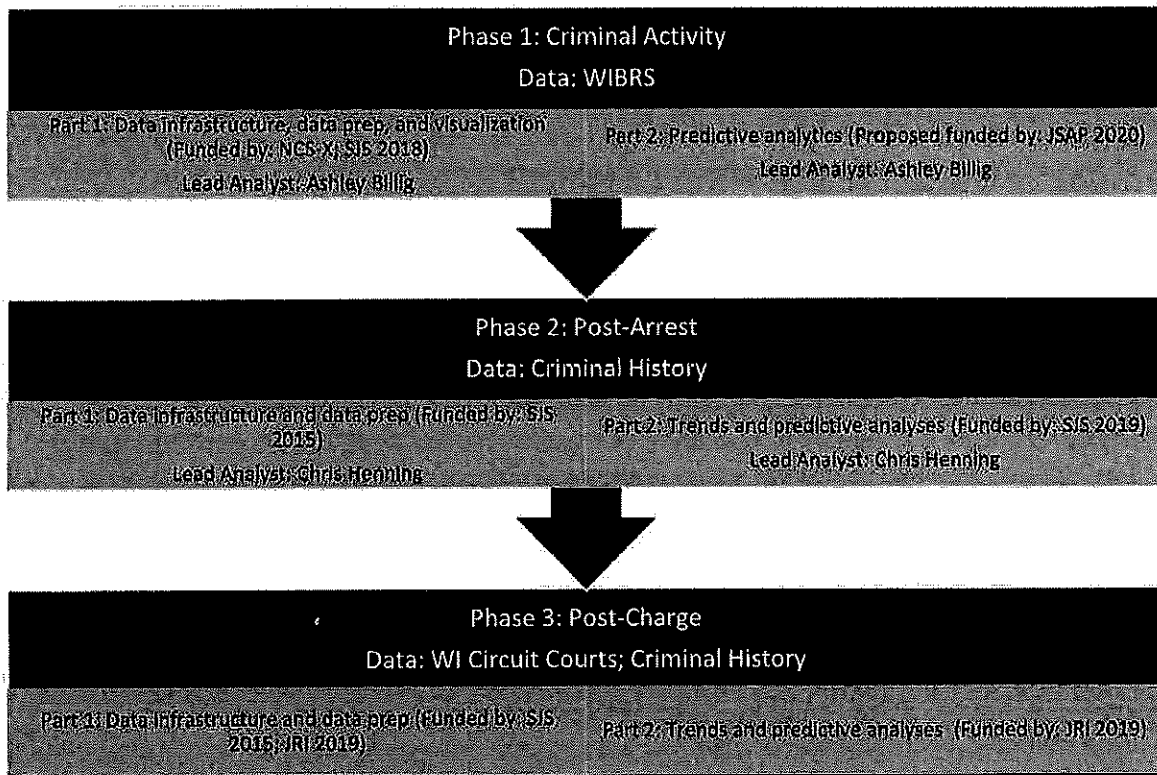
- Report date – WIBRS collects both the incident date and the report date, along with the report date indicator. This allows analysts to review how long it might have taken for a crime to be reported to law enforcement after it happened. The report date is expected to be the date the incident was reported to the agency, but data quality work has helped identify agencies where this is not necessarily true (i.e. the “report date” is not necessarily the date it was reported to the agency, but rather the date the incident was created in the agency’s RMS. Those two dates would logically be the same, but in some instances the date an incident was reported to an agency is not when the agency opened the incident within the RMS.)
- Unfounded – the Wisconsin UCR program expects incidents that have been determined to be “unfounded” to still be submitted to the WIBRS program. These are flagged as “unfounded” on a WIBRS-specific admin segment data element and are stored along with all other incidents in SQL. The unfounded incidents are filtered out of SQL analysis views, agency counts, and publications, and are not sent to the FBI.
- Motor Vehicles Recovered in Another Jurisdiction – instead of collecting how many vehicles were recovered anywhere, WIBRS separates the recovery into two different fields – recovered in local jurisdiction and recovered in another jurisdiction. These two fields are then combined into one recovery field when sent to the FBI in NIBRS format.
- SID – State ID is a unique identifier given to an arrestee the first time he/she is arrested for a crime that requires fingerprints to be submitted to criminal history. Once a person is assigned a State ID, they keep the same State ID throughout all future criminal

involvements. SID is an optional field on the arrestee segment, as many arrestees will not be fingerprinted and may not have a State ID. This field is used to assist analysts when reviewing whether the “multiple arrestee indicator” field is being used correctly by an agency during the certification process, because State ID is the only field that can uniquely identify a person.

Section C: Research Topic and Statement of the Problem

1. What is your proposed research topic Please describe the specific problem your research will address and what you expect to accomplish with your analysis.

Being in the unique position as both the Wisconsin SAC and Wisconsin UCR Program, the Bureau of Justice Information and Analysis has been working on grant-funded projects for a number of years that fit within a broad spectrum of criminal justice research utilizing various datasets from different points within the criminal justice system. An outline of these projects is shown in the figure below.



Since BJIA analysts are almost entirely grant-funded, we look for opportunities that allow us to complete projects that fit within this criminal justice framework and utilize data we have direct access to either due to being the collection agent or through data sharing agreements with other criminal justice agencies. Previous grants have allowed us to develop technological data infrastructure, explore and understand data systems and table structure, and begin to visualize data with the use of both Tableau and Power BI. This proposal fits within the Criminal Activity

Phase of the framework and allows us to move on to the next part of this phase – predictive analytics using WIBRS/NIBRS data.

Specifically, this project aims to test whether (and which) NIBRS/WIBRS data elements (alone or in combination) statistically predict whether an incident has been cleared by arrest. Knowing an offender has been arrested may have a positive impact on a victim and may bring a sense of security to the community, but an arrest could also have a negative effect on the arrestee if he/she is left with a public arrest record for a crime they are ultimately never charged with or convicted of (e.g. for arrestees who are not familiarized with the expungement request process or when expungement of one arrest charge is not possible due to how the arrest event was entered into criminal history). Certainly there are some types of offenses with lower arrest clearance rates due to the fact that the identity of the suspect is not known; however, when the suspect's identity has been established, what other elements of the crime are significantly related to whether the incident will be cleared by arrest? For example, if a victim is visibly injured, does the injury increase probable cause, leaving the officer on the scene more likely to arrest the suspect? If two identical crimes are committed by two suspects of different demographics in the same jurisdiction, is one more likely to result in arrest than the other? One local agency may arrest on the spot with probable cause regardless of a prosecutor's decision to bring a case to trial, whereas another agency might wait to determine whether the DA will prosecute the case before arresting the offender. These are the types of questions we aim to answer with this project.

2. Why is your topic important to study at the subnational level?

Although this topic has been explored using NIBRS data before (Drawve, Thomas, & Walker, 2014), previous analyses have utilized NIBRS data as a whole without a subnational exploration. Some of these previous studies have also focused on a subset of offenses (Addington, 2006; Pattavina, Buzawa, & Hirschel, 2007; D'Alessio & Stolzenberg, 2003) or a narrow offender population (Pope & Snyder, 2003; Eitle, 2005). States and local agencies all have different policies and procedures in place in which someone may or may not be arrested based on circumstance, so it is important to address this question at the state, county, and local agency level (where possible) in order to better understand what, if anything, might contribute to differing results. For example, some counties have pre-booking/pre-arrest programs in which law enforcement, in consultation with the District Attorney's Office and treatment provider, believe the offender would be better served in an alcohol/other drug (AOD) program and allows the person to enter the program and avoid being arrested and/or charged with a crime with successful completion of the program. These programs differ from traditional drug courts and diversion programs in that those programs are post-arrest, whereas the pre-booking program point of intervention is pre-arrest. Logically, areas with pre-arrest programs with high success rates would likely show fewer drug-related incidents cleared by arrest (and more cleared exceptionally due to prosecution declined), depending on the circumstances of the drug crimes and whether the offender was eligible for the pre-booking program. The criteria for such programs vary, and offenses that are eligible in one agency or county may not be the same as the eligible offenses in another program. This is just one example of how a local jurisdiction's policies could lead to differences in arrest clearances in NIBRS data; other reasons might include the surrounding political climate and/or mayoral initiatives. It is important to explore this research topic at the subnational level, as differences based on location could be related to differences in explicit

agency policies. Furthermore, an exploration of agencies with the same policies may show different predictors of arrest clearances, which may suggest differences in implicit procedures and biases worth further exploration.

3. What are the primary research questions that will be addressed if funded?

Because different NIBRS elements are required depending on the type of offense, we have structured the research questions based on offense type:

- RQ1: For person crime offenses, do any characteristics of the victim, offender, or offense predict whether incidents with known offender(s) were cleared by arrest?
- RQ2: For property crime offenses, do any characteristics of the offense, offender, or property involved predict whether incidents with known offender(s) were cleared by arrest?
- RQ3: For drug violation offenses, do any characteristics of the offense, offender, or type(s) of drug involved predict whether incidents with known offender(s) were cleared by arrest?
- RQ4: For weapon law offenses, do any characteristics of the offense or offender predict whether incidents with known offender(s) were cleared by arrest?

4. Is the proposed topic and analytic design replicable with NIBRS data from other states? Specifically, will it be possible for BJS to use data from other NIBRS contributors to address the same research questions and populate replica table shells and/or graphics?

This topic is replicable with NIBRS data from other states, as none of the WIBRS-specific fields will be used in the overall model. Specifically, the WIBRS-specific Report Date field will not be used as a predictor, but the report date indicator NIBRS element will be used to flag incidents in which the NIBRS incident date was actually the report date. "Unfounded" incidents will be removed from WI statewide analyses and the unfounded data element will not be used as a predictor, as presumably an unfounded incident is one in which a crime did not happen. The WIBRS-specific Motor Vehicles Recovered in Another Jurisdiction field will not be used as a predictor, but will be used in combination with the vehicles recovered in local jurisdiction field to calculate the total vehicles recovered, in the same way NIBRS counts vehicle recoveries. State ID will not be used as a predictor, but will be used, when available, to help with data prep (see methodological limitations section below).

Syntax will be created and shared for this project that will connect, restructure, and code raw NIBRS data from the FBI's Crime Data Explorer. The syntax will include notes for each step, and the overall structure and coding will also be available in the final report for states and other agencies to use who store data differently but want to replicate the methodological design.

5. How will NIBRS data uniquely inform research on your topic? Are there necessary data elements collected through NIBRS that are unavailable through other public data sources? If so, which of these unique data elements are needed to conduct the proposed research?

NIBRS data elements are needed for this analysis because the elements of a crime are included with NIBRS whereas Summary-Based UCR reporting does not include these details. It is known

which NIBRS incidents have been cleared and how they were cleared, whereas summary UCR clearances are in aggregate and cannot be connected to a specific incident. Other criminal justice data such as criminal history will not be used in this analysis, as the crime information available in criminal history is limited to statutory language describing the crime the offender was arrested for and/or charged with, and most statutes do not include the type of specificity a NIBRS incident would. For example criminal history data might show someone arrested for a sexual assault statute that describes the age discrepancy between the victim and offender, but the type of sex offense, the specific ages and other demographics of people involved, injuries, location type, and other crimes involved in the same incident are not possible to extract from criminal history data. NIBRS data will be the most useful in predicting crime disposition (cleared by arrest or not), and criminal history data is useful in predictive analyses based on what happens post-arrest and pre-sentencing (Phase 2 of the framework above).

While final methodology and data elements used in the model will be determined in collaboration with BJS, the NIBRS elements expected to be utilized include victim demographics, offender demographics, offense type, relationship between victim and offender, weapons involved, injuries sustained, suspected drug type(s), type of criminal activity involved, whether property was recovered, and the total estimated dollar amount stolen associated with the property crime. Due to known data quality issues, it is unlikely that seized drug quantities or specific hours of day will be utilized.

Section D: Proposed Methodology

1. Will your research design be cross-sectional or longitudinal?

In order to answer the proposed research questions regarding the predictive capability of NIBRS data elements as they relate to arrest clearances, we will utilize a cross-sectional design of Wisconsin Incident-Based Reporting System (WIBRS) data. We intend to use all WIBRS data 2015-2019 from all agencies that were certified WIBRS reporters during that timeframe. This will include a different number of agencies in each year and different population covered, as Wisconsin is currently a hybrid state, adding more agencies the WIBRS system each year. Depending on the aggregate results, the analysis is intended to be re-modeled for counties and single agencies.

2. Will your analysis use publicly available NIBRS data or data from another source? If data are from another source, what is the source of data and how will the data be accessed?

WIBRS data is sent to the Wisconsin UCR program through a data submission website open to law enforcement agencies in Wisconsin through a secure Justice Directory login. The data is submitted monthly in flat .txt files, processed overnight, and stored in a secure relational SQL Server database. WIBRS follows all NIBRS program rules and collects only a few additional data elements that are unique to WIBRS and not included in NIBRS data. Since the Wisconsin UCR program is situated within BJIA, all BJIA analysts have direct read access to WIBRS data through SQL Server management Studio (SSMS), accessible through Windows authentication. The WIBRS data is stored in separate relational tables based on NIBRS segment (e.g. admin

segment data is stored in a table separate from victim segment data). Analysts are familiar with the structure of NIBRS and have utilized syntax to extract data from the SQL Servers to join tables together, recode, restructure, deduplicate, and perform a variety of other functions. Much of the work to explore data counting methodology has been done with the State Justice Statistics 2018 grant BJIA received, which supported the creation of WIBRS data dashboards using Tableau. Furthermore, syntax has already been developed to piece together NIBRS data publicly available on the FBI's Crime Data Explorer (CDE). Some of this work was presented at the 2019 ASUCRP/JRSA Conference. WIBRS data directly accessed internally will be used for the purpose of testing the model (because WIBRS data will be up-to-date as opposed to the publicly available NIBRS data which will be at least a year behind), but will be replicable using publicly available NIBRS data.

3. In addition to NIBRS, do you plan to use data from other sources? If so, what other sources of data will be used to address your research questions?

NIBRS/WIBRS data is the primary source of data that will be utilized for this project; population data and employee data for local agencies may also be utilized. A syntax file for WIBRS will be created showing the steps from extracting data from the SQL server database tables, piecing them together, and data prep. A separate syntax file for NIBRS will be created showing those same steps using the NIBRS extracts available on the CDE. These data prep syntax files will likely be created in SPSS, and the modeling syntax will be created likely in both SPSS and R. All syntax will be made available for others who might want to replicate the preparation and modeling.

4. What is your proposed methodology for addressing the research questions identified in Section C.3? Please outline the steps you plan to take to analyze each research question.

For this specific project, syntax will be created to extract WIBRS data from internal SQL Server tables, join, recode, and prep for statistical modeling. The various NIBRS data elements would be narrowed down with BJS assistance into a set of predictor variables, likely following a similar coding methodology as Pope and Snyder (2003) in which many NIBRS elements were dichotomized into a binary yes/no structure. The agencies that submitted each incident will be re-coded based on population, and the arrest table would likely be deduplicated and dichotomized such that each incident was flagged as either cleared by arrest or not.

This final dataset will then be split into four different sets: 1) only person crime offenses and the variables applicable to person crimes, 2) only property crime offenses and the variables applicable to property crimes, 3) only drug violation offenses and the variables applicable to drug violation offenses, and 4) only weapon law violation offenses and the variables applicable to weapon law violation offenses, each one to be used for the four different research questions.

The final dataset will then be loaded into a statistical software (either R, SPSS, Power BI, or a combination) and a series of binary logistic regressions will be performed in order to determine whether any of the NIBRS data elements significantly predict an arrest on an incident by themselves or in combination with other data elements. Researchers anticipate running the full model first with all agencies included, and then re-running the model depending on the results of

the first model. For example if rural vs. urban is a significant predictor in the model, the model would be re-ran for rural agencies separately from urban agencies to determine which variables within each group (if any) are most significant.

5. Have you identified potential issues or concerns related to reliability, validity, or data quality (e.g., coverage, missing)? If so, please explain issues and methods for addressing concerns.

Due to the outcome being whether an incident was cleared by arrest, and because any arrest will clear an entire incident, careful consideration will be made when re-coding the offender and arrest data given those two segments do not include personally identifying information. For example, one incident might include two offenders (one was the victim’s boyfriend and the other was an acquaintance, for example) with one of the offenders being arrested and the other not arrested (shown in the table below). The variable of whether each offender was arrested is important to the interpretation of results. If the final model showed that “boyfriend” significantly predicts an incident being cleared by arrest, consideration needs to be given to the scenario below in which the incident involved a boyfriend and was cleared by arrest, but the boyfriend was not arrested. Creating this variable (“This Person Arrested?”) will be a challenge given no PII data or FBI requirement that the offender ID number needs to match an arrestee ID number. For example, in the scenario below, the person arrested is offender ID #2, and sometimes this would result in the arrestee ID number being #2 to match; other times offender ID #2 below will appear as arrestee ID #1 (depending on the vendor and how each RMS works). In many cases it will be obvious which offender was the arrestee based on demographics. Syntax can be created to loop through demographics and determine whether the Offender ID number matches the Arrestee ID numbers, but this is an anticipated challenge we look forward to working through with BJS.

Incident	Offender ID	Relationship to Vic	This Person Arrested?	Case Cleared by Arrest?
Sample 1	1	Boyfriend	No	Yes
Sample 1	2	Acquaintance	Yes	Yes

Additional concerns have already been identified with previous work relating to offenders being tied to incidents they should not be tied to based on NIBRS reporting rules (i.e. incidents that break the FBI’s “acting in concert” rule). For example, analysts have identified a number of incidents in which the victim of a crime also committed a different crime, and the victim was included as an offender of the same incident they were a victim of. The victim was arrested for the secondary crime and that arrest was tied to the original incident, resulting in the victim’s arrest incorrectly clearing their own victimization. For example, a trafficking victim who possessed drugs; the trafficked victim was arrested, and both the trafficking offense and drug violation offense were included as one incident. The trafficked victim was arrested for drug possession, and that arrest cleared the incident – including the trafficking offense. This results in a trafficking victim looking like a trafficker, and a trafficking offense cleared that should not be cleared. This has been brought to agencies’ attention, and training has been conducted for this specific issue; however, some agencies either cannot or will not split incidents due to their internal policies instructing them to keep all relevant information together under the same case

number to send to the DA's office. Prior to work on this project, we'd want to investigate more comprehensively how often a victim's arrest might be clearing the offense they were a victim of.

Furthermore, we'd want to discuss with BJS the best options for incorporating population and coding counties as either rural or urban; one option would be to use the FBI's population file. Another option is the Wisconsin Department of Administration official population file that other state agencies usually incorporate into their projects.

Other data limitations include Wisconsin not being 100% NIBRS; the offense year will likely be difficult to include as a predictor due to having more data added each year with the addition of more WIBRS agencies each year; the largest urban agencies have been submitting WIBRS data for longer, whereas the newer agencies onboarding each year tend to be more rural. For this reason, a longitudinal design is likely not possible at a state-level. However, the model should be created such that it can be replicated per county and per agency (if possible) rather than just for the state as a whole, although some agencies will not have enough data for sufficient statistical power for a regression model. The predictors for the state (if any) might be different than the predictors for a given region or municipality, which is an aspect this project intends to explore.

6. How do you plan to display and disseminate results? Indicate if you anticipate the product being a traditional static report (i.e., PDF or Word document), an online report, an interactive dashboard or tool, or some other type of format.

The result of this project will include a final written report in which the model is discussed at a statewide level accompanied by a simple static infographic. Furthermore, this project would be an exciting addition to the current WIBRS data dashboard in which a user could select a specific agency to see what the results were for a specific jurisdiction or county. As discussed previously, our SJS 2018 grant funded the development of WIBRS dashboards using Tableau, and we would like to add this as a topic (if funded) to the existing WIBRS dashboards (see Appendix A for WIBRS dashboard screenshots). The way this would likely function is for the topic to be added to the menu, and once in the new dashboard, a user could select either by county or by specific agency and select the RQ they want to see the answer to. The predictive (if any) elements for that county and/or agency will display, with a link to the statewide infographic and report available on the dashboard.

Section E: Capabilities and Competencies of Project Staff

1. Provide justification that the project staff have the necessary qualifications and experience to conduct project tasks and fulfill the project goals. Describe how proposed staff's skills will enable them to successfully complete project deliverables.

As the Bureau Director of BJIA, Derek Veitenheimer is both the UCR program manager and the SAC director, and has more than ten years of experience with the WI UCR program. He has thorough knowledge of the operations and functions of the program, has extensive data management and analysis experience, and has been instrumental in the efforts in recent years to enhance and improve the functioning of the UCR program. Derek has recently been participating on the FBI's Use of Force Task Force and is the UCR Advisory Policy Board representative for

the Association of State Uniform Crime Reporting Programs (ASUCRP). Derek holds a BA in Public Policy and Administration with an emphasis in Criminal Justice Administration.

Dr. Ashley Billig earned her doctorate in experimental psychology and has been with BJIA since 2016. Ashley is very familiar with WIBRS/NIBRS data elements, structure, and validation rules and serves on two FBI subject matter expert discussion groups relating to NIBRS and the Beyond 2021 Initiative. She is the lead researcher assigned to the State Justice Statistics 2018 grant, for which she developed the soon-to-be released WIBRS crime dashboards in Tableau. As part of SJS 2018, she also designed methodology along with Dr. Henning that connects sexual assault kit crime lab data to UCR sex offense data for the purpose of reviewing data discrepancies and improper NIBRS reporting. She recently presented at the 2019 ASUCRP conference highlighting the importance of understanding how NIBRS data elements are connected and restructured for the purpose of data visualization and analysis. Dr. Billig is most proficient with SPSS (including writing data cleaning syntax), SQL Server Management Studio, and Tableau.

Dr. Chris Henning earned his doctorate in criminal psychology and has also been with BJIA since 2016. Chris has conducted a variety of criminal justice research and is currently the primary researcher on the Sexual Assault Kit Initiative (SAKI), and worked to develop a unique process of measuring recidivism as part of the State Justice Statistics 2015 grant. Building off SJS 2015, Chris is now responsible for the SJS 2019 grant, which aims to analyze trends in the state's criminal history data based on demographics of arrestees, geographic distribution of arrests, and final dispositions of arrests. Dr. Henning is proficient with SSMS, Tableau, Microsoft Power BI, and R.

If funded, Ashley will be the primary analyst working on this project, in consultation with Chris and oversight by Derek.

2. Submit resumes for all key project staff as a separate file.

See attached separate file.

Section F: Impact Statement

1. What individuals or groups will benefit from the proposed research?

Several stakeholders will benefit from the results of this research. First, policymakers and leaders within local law enforcement agencies will know whether their agency's patterns in arrest clearances are in line with similar agencies, or whether there are variables of a crime that uniquely predict arrest clearances for their agency but not for other agencies, and this knowledge would help inform policy discussions. State and local government officials would also benefit from this research for the same reasons. Furthermore, advocacy groups will gain an understanding of law enforcement decision-making, which could uncover implicit policies or biases (or the lack of) held within local law enforcement agencies. The general public will have a better understanding of multiple factors that may have been involved in an incident that led to the clearance, or lack of, which could help manage the public's expectations of law enforcement.

The results will also help researchers develop more specific research questions and ideas for future research focusing on what specific factors may predict whether a person will be arrested.

2. Will research results be meaningful in the criminal justice community? Do research findings have the potential to improve our understanding of crime prevention, response to crime, or NIBRS data quality? If so, how can results of the study be implemented?

This work will benefit the criminal justice community by improving our understanding of the quality of NIBRS data as well as law enforcement response to crime. Through previous work in the Wisconsin UCR program, many WIBRS incidents have been flagged by analysts as being non-logical while still passing through all NIBRS validations successfully. This project will likely continue to assist with finding logic errors, as well as data quality issues relating to the completeness of data. For example, if an offender has not been arrested at the time the incident is first submitted, but is later arrested, this project could help uncover inconsistencies in the way local agencies resubmit the incident to attach the arrest/clearance information. We have already developed a WIBRS dashboard that contains a clearance visualization (included in Appendix A) in which a user can select one agency/year and view the percentage of each offense, by offense type, that occurred in that year that have been cleared by that agency at any point. The type of clearance and how long each offense took to clear are also available to view. There are some differences in the clearance data that are visually apparent agency by agency on the dashboard, and this project will help illuminate those differences and start a discussion on the possible explanations for those differences.

3. Do you foresee any innovations or insights that could emerge as a result of this research?

This project will hopefully add to the discourse surrounding arrests and crime clearances. First, this is a timely topic given the current social environment regarding law enforcement behavior and will help show whether there are differences in how law enforcement responds to different types of incidents from a data perspective rather than relying on incident-by-incident anecdotes. In other words, this research will statistically show whether an incident is more likely to result in an arrest based on characteristics of the incident overall, and whether one agency would be more likely to clear a specific type of incident by arrest more frequently than another agency. The addition of agency-specific results to the existing interactive WIBRS dashboard, in combination with a statewide report, will allow consumers of criminal justice data the ability to further explore what may be driving those differences (if there are any). The agency-specific display will also allow the public more insight into what factors are associated with arrest clearances, which will increase the public's understanding of law enforcement arrest decision-making.

Section G: Project Implementation

1. What are your specific project goals?

One goal is to create syntax in both SPSS and R that will join WIBRS data (from our internal databases) together, restructure, recode, and create a final dataset in a format that all NIBRS data can be fit to (using a separate syntax file created specifically using the NIBRS data downloads available on the FBI's Crime Data Explorer) on a consistent, ongoing basis. After the final

dataset has been finalized, the next goal is to complete a binary logistic regression analysis determining what variables, if any, statistically predict incident arrest clearance, and to create additional syntax to re-run the model by county and by specific agency. The statewide (partial, as Wisconsin is still a hybrid state) results will be included in a final written report and infographic made available to the public and submitted for presentation at either ASUCRP/JRSA or a JRSA regional conference. Finally, the county and agency-specific results will be imported into a Tableau dashboard and included as a new topic on the existing WIBRS data dashboard.

2. In addition to a published, analytic report, what are the deliverables associated with the goals and objectives listed in Section G.1?

In addition to a final written report describing results for all WIBRS data, the syntax created will be included as a deliverable along with the final dataset that was used for the analysis. A one-page static infographic explaining the results will be created for dissemination, and a dashboard built in Tableau (or Power BI) will be created that includes results for specific agencies.

3. What is your timeline for completing key project milestones and deliverables?

If funded, we anticipate signing the agreement in October 2020 and beginning in January 2021 (after special conditions have cleared) with a kickoff meeting with BJS and RTI. The next four months are anticipated to be spent reviewing all WIBRS data elements that will be included in the model for any data quality issues that may need attention and finalizing structure and coding decisions with BJS. In spring and early summer 2021, we anticipate creating the syntax for the model as a whole and for each county/agency, and performing the regression before reviewing results with BJS in mid-summer 2021. We expect the most time for this project to be spent preparing the data in SPSS and R and ensuring the final dataset is created and modeled the same in both software programs. A draft of the final written report is expected to be complete by November 2021 (13 months after service agreement). The one-page infographic based on the final report results, along with the Tableau (or Power BI) dashboard showing agency-level results, is expected to be drafted in late 2021, with all products finalized by March 2022 (17 months after agreement is signed). This timeline could shift forward depending on when the agreement is signed. See Appendix B for timeline.

4. How much will the project cost to complete? Summarize costs and include a Budget Detail Worksheet with Narrative (see Appendix C).

The total cost for this project is estimated to be \$54,452.00, with most costs associated with this project being salaries, as both Ashley and Chris are in entirely grant-funded positions and do not receive state funding. Both Ashley and Chris already have Tableau licenses along with the availability of R and Power BI (if needed). The one SPSS license requested includes the add-ons that allow for logistic regression modeling, whereas the current SPSS licenses BJIJA holds do not contain that functionality. We hope to offer both an SPSS and R syntax file to share widely as products, which will not be possible without the elevated SPSS license. The travel funding is for one person (likely Ashley) to attend either the ASUCRP/JRSA 2022 conference, or for one person to attend a JRSA regional conference in 2022 (both with logistics TBD) with the hopes of

presenting the results and products associated with this project. See Appendix C for budget detail.

5. *What is your strategy for collaborating with BJS and providing project updates to RTI?*

If funded, we plan to organize a project kickoff virtual meeting with BJS staff in which the overall plan and timeline will be discussed along with high level methodological decisions. After, on a monthly basis, we would plan a shorter call with BJS to discuss methodology specifics and roadblocks. We anticipate those shorter monthly calls to include the sharing of coding, syntax, and results when needed. We will create the agenda for those shorter calls, take notes, and will submit both the agenda and notes from those calls, including action items and progress updates, to RTI on a monthly basis.

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