January 2022

**SUPPORTING STATEMENT**

**NAHMS Bison 2022 Study**

**OMB Control No. 0579-0420**

# Justification

The Animal and Plant Health Inspection Service (APHIS) is requesting approval for a reinstatement of an information collection which supports the National Animal Health Monitoring System’s (NAHMS) Bison 2022 Study, hereafter referred to as the Study.

This Study will consist of two phases. In the “NASS Phase,” The National Agricultural Statistics Service (NASS) will first mail a producer selection letter and a survey launch sheet with study background and benefits information to all of the approximately 2,000 bison producers on the NASS list frame in all 50 states. After notifying producers of their selection in the study, NASS will mail a survey packet that includes a description of the study timeline and biologics benefits, a paper survey along with a link to the web version of the survey, forms describing participation in the Biologics Phase of the Study, educational materials (an informational incentive), a field flyer, VS Form 21-326 - NAHMS Bison 2022 Producer Evaluation, and a guide to assist producers in answering the self-administered survey. NASS will mail a reminder card in the middle of the self-enumeration period to remind selected producers of their opportunity to participate. NASS data collectors will perform a follow up contact to any non-respondents of the paper-assisted self-interview (PASI) and computer-assisted self-interview (CASI) modes and attempt to administer a computer-assisted telephone interview (CATI) mode of the survey. In all 3 modes of the survey (PASI, CASI, and CATI), respondents will be asked if they would like the opportunity to participate in the Biologics Phase of the Study. A thank you card will be sent to all producers who complete the NASS Phase.

The “Biologics Phase” is a biologics sampling opportunity in which producers will collect samples on their operations using APHIS-provided test kits and will receive biological testing results for bison and/or forage on their farm. The test kits will be sent to each producer who consents to participate in the Biologics Phase of the Study and will include detailed instructions of how to collect and ship samples. Shipping costs will be incurred by APHIS. There will be no expense to the producer. For the biologic CERs that require reference cards, producers will also receive the antibiotics reference card and/or the anthelmintic reference card included in this submission.

This data collection supports the following general study objectives:

* Describe status and changes in the U.S. bison industry from 2014 to 2022, including operation characteristics (such as inventory, size, and type), production purposes, and marketing practices.
* Describe current U.S. bison industry production practices and challenges, including animal management and welfare, nutrition and range management, and environmental stewardship.
* Describe health management and biosecurity practices on U.S. bison operations.
* Describe producer-reported occurrence of select health problems, associated management practices or actions, and causes of bison mortality.

Analysis of the information collected through the Study will generate descriptive reports and information sheets. APHIS will disseminate these deliverables to producers, other industry members, academia, veterinarians, and any other interested stakeholder physically and electronically, to include posting publicly on the NAHMS website. The benefits to the bison industry from the Study include scientifically valid national estimates of health and management practices of the nation’s bison industry. The data collected will also be used to measure change over time from the NAHMS Bison 2014 Study for select parameters. Participation in this survey is voluntary. It is up to the individual producer to decide whether to participate.

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

Collection and dissemination of animal health data and information is mandated by 7 U.S.C. § 391, the Animal Industry Act of 1884, which established the precursor of the APHIS, Veterinary Services, the Bureau of Animal Industry. Legal requirements for examining and reporting on animal disease control methods were further mandated by 7 U.S.C. § 8308 of the Animal Health Protection Act, “Detection, Control, and Eradication of Diseases and Pests,” May 13, 2002. This collection of bison data is consistent with the APHIS mission of protecting and improving American agriculture’s productivity and competitiveness.

In connection with this mission, the NAHMS program includes periodic national commodity studies to investigate current issues and examine general productivity, health, and management practices used on farms and their economic impact. These non-regulatory, voluntary studies are driven by industry and stakeholder interest. The national estimates obtained by these studies are not available from any other source. Information about health and management practices on U.S. bison operations is useful to various parts of the bison industry as well as many Federal and State partners.

A request from the National Bison Association that APHIS conduct a second bison study is driving the need to collect this information at this time. APHIS proposed that the study be carried out in 2022.

Since NAHMS conducted its first bison study in 2014, the variety of study stakeholders has grown along with the need for updated baseline national estimates regarding health and management of the national herd. Bison industry groups and Tribal entities have stated this need. These national estimates have been used to answer research questions posed by industry groups and academicians, and now these estimates can be used in trade negotiations as a transparent snapshot of the US bison industry’s health status and structure. As trade agreements have resulted in additional revenue to producers, studies of this type need to be continued. VS is responding to the bison industry’s need by continuing these studies and by using the resulting data to focus resources and make scientifically based policy decisions.

APHIS staff completed a needs assessment which was a collaborative effort with producers, researchers, extension veterinarians, Federal and State personnel, Tribal representatives, and clinicians. Nearly 200 stakeholders responded to the needs assessment, and information gathered informed the study objectives.

**2. Indicate how, by whom, how frequently, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.**

The data collected, analyzed, and interpreted are disseminated to a wide variety of stakeholders. Producers, including Tribal entities, can compare their operation’s animal health and productivity with other herds regionally and nationally. Producer groups, academicians and extension specialists, state and federal animal health officials, and veterinarians will use summary estimates of disease and associated operation characteristics to improve health management, disease prevention measures, disease response measures, and information outreach efforts. Pharmaceutical and biologics companies could use vaccine and medication use estimates to develop research projects and marketing strategies for their products. State and Federal officials responsible for regulatory veterinary medicine will use estimates reflecting disease and disease prevention to gain a more complete picture of animal health as a basis for program planning and funding. Research scientists will also use summary point estimates to design their research efforts. Veterinary and agricultural students in universities will use the reports for training in health management, animal welfare, nutrition, and other agriculturally based careers. Additionally, students might be able to participate in biological sample analysis, furthering their training. Industry representatives will use these estimates as a transparent reference guide to the U.S. bison industry in trade negotiations.

APHIS will use the data collected from the study to address the following goals.

* Update knowledge of national and regional health management and production practices and develop estimates for producer, veterinary, and industry reference;
* Provide factual information on fencing and confinement, processing and marketing, and movement for U.S bison operations;
* Detect national and regional trends in disease emergence and movement such as the producer reporting of clinical signs of *Mycoplasma bovis*, malignant catarrhal fever, internal parasitism, and respiratory and enteric disease in bison;
* Provide information useful to disease-spread models; and
* Provide information on internal parasitism in bison, on antimicrobial resistance among isolates obtained from feces, and on pasture forage nutritional quality.

Data from the 2014 study provided valuable national baseline information to the bison industry and have helped focus research efforts within the industry and academia. Gaps in knowledge identified by the study have been addressed directly through educational efforts by the National Bison Association. Subsequently the National Bison Association has been working with APHIS to further monitoring of herd health, traceability, and bison management.

**NAHMS Bison 2022 Study - Survey (VS Form 21-320); Private Sector**

A survey that will be completed through either PASI, CASI, or CATI modes. For the PASI or CASI, the survey will be self-administered by the bison producer. For the CATI, a NASS enumerator will contact and attempt to administer the survey to any bison producers who did not complete either the PASI or CASI. For the CATI, NASS data collectors can also contact producers by e-mail or text. This survey collects data on bison inventory and operation characteristics; biosecurity and other management practices; reproduction; diseases, parasites, and health management; disease testing practices; and outreach. Producers will receive a postage-paid envelope in the survey packet; this envelope is pre-addressed to a NASS office for data entry. NASS will receive paper forms and enter any data on those forms into an electronic dataset that will be combined with the electronic datasets from the CASI and CATI collections. NASS will securely transfer the dataset along with any requested, completed paper surveys (without producer contact information) to APHIS. APHIS will store the dataset and surveys in a controlled-access data lab.

**NAHMS Bison 2022 Study - Producer Informed Consent (VS Form 21-321); Private Sector**

This is a separate paper form included in the survey packet and will be available in an electronic format for producers to reference, for example, while completing the NASS Phase survey via CASI or CATI. This form will provide the producer with complete information regarding the requirements and data protections regarding their potential participation in the Biologics Phase of the Study. If the producer consents to the opportunity to participate in the Biologics Phase, they will indicate their consent on VS Form 21-320 (NAHMS Bison 2022 Study Survey). Upon completion of the NASS Phase, NASS will securely transfer an electronic dataset to APHIS that contains the information needed for APHIS to complete the Biologics Phase of the Study. APHIS will contact participants if and only if they have consented to be contacted for the Biologics Phase. APHIS will not know the identities of producers who do not consent to the sharing of their information in order to participate in the biologic phase.

**NAHMS Bison 2022 Study - Enteric Microbe Collection Record (VS Form 21-322); Private Sector**

A paper form that will be self-enumerated by the bison producer and details the collection of fecal samples from individual bison. The form collects characteristics about individual bison sampled such as gender and vaccination status. Detailed instructions on sample collection and shipping information are provided to the producers, including a pre-printed and pre-paid label for shipping their samples. The samples will be sent to a public university under cooperative agreement that will be selected prior to final submission or to a USDA laboratory for analysis. Test results will be returned to APHIS for analysis and reporting.

**NAHMS Bison 2022 Study - Pre-Deworming Fecal Parasite Kit A Collection Record**

**(VS Form 21-323); Private Sector**

A paper form that will be self-enumerated by the bison producer and details the collection of fecal samples from individual bison. This form and the requested fecal samples are collected *before* deworming of the producer’s bison takes place. Like the enteric microbe form, this form collects characteristics about individual bison sampled such as gender, deworming status, and grazing history. Detailed instructions on sample collection and shipping information are provided to the producers, including a pre-printed and pre-paid label for shipping their samples. The samples will be sent to a public university under cooperative agreement that will be selected prior to final submission or to a USDA laboratory for analysis. Test results will be returned to APHIS for analysis and reporting.

**NAHMS Bison 2022 Study - Post-Deworming Fecal Parasite Kit B Collection Record**

**(VS Form 21-324; Private Sector**

A paper form that will be self-enumerated by the bison producer and details the collection of fecal samples from individual bison. This form and the requested fecal samples are collected *after* deworming of the bison takes place. Like the pre-deworming fecal parasite form, this form collects characteristics about individual bison sampled such as gender and grazing history. Detailed instructions on sample collection and shipping information are provided to the producers, including a pre-printed and pre-paid label for shipping their samples. The samples will be sent to a public university under cooperative agreement that will be selected prior to final submission or to a USDA laboratory for analysis. Test results will be returned to APHIS for analysis and reporting.

**NAHMS Bison 2022 Study - Forage Collection Record (VS Form 21-325); Private Sector**

A paper form that will be self-enumerated by the bison producer and details the collection of forage samples from the producer’s operation. The form collects characteristics of forage sampled such as grazing source and forage type. Detailed instructions on sample collection and shipping information are provided to the producers, including a pre-printed and pre-paid label for shipping their samples. The samples will be sent to a public university under cooperative agreement that will be selected prior to final submission or to a USDA laboratory for analysis. Test results will be returned to APHIS for analysis and reporting.

**NAHMS Bison 2022 Study - Participant Survey (VS Form 21-326); Private Sector**

A short paper survey sent in the initial survey packet that elicits producer’s opinions and experiences of participating in the Study.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology (e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection). Also describe any consideration of using information technology to reduce burden.**

APHIS will use electronic technologies to help promote and administer the Study. Producers will learn about the Study via industry association meetings, paper or internet mailings via association membership lists, notices posted on industry web sites, notices published in trade magazines, trade magazine emails, or other agricultural publications. All producers will receive the NAHMS Bison 2022 Study Survey (VS Form 21-320) in a hard-copy (paper) survey, but respondents will have the option to complete the survey electronically via CASI or over the telephone via CATI. These additional means of collection are being used to expand access to the study survey for people who need or prefer electronic or telephone options for participating in the study; providing these means will reduce burden for producers who would have difficulty or limited time for completing and mailing back a paper survey. No automated, electronic, or mechanical techniques will be used to collect biologic information.

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose described in “item 2” above.**

APHIS staff performed literature searches for existing data relevant to the Study. Available data were reviewed and compiled from all known sources. Sources reviewed include cooperative state research, private industry and professional publications, diagnostic laboratories, other Federal and State agencies, universities, and the National Bison Association. APHIS staff consulted employees from federal agencies, industry representatives, and academicians to identify areas of potential duplication. Based on this effort, APHIS is convinced that no other entity/source is collecting and analyzing this type of nationally representative information regarding health and management of the U.S. bison industry with publicly available results.

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

The bison industry is not as well studied as larger livestock commodity industries, and publicly available NASS data on indicators of the size of bison operations is not explicitly available. We use the total sales value of bison farms collected every 5 years in the NASS Census of Agriculture (last collected in 2017) as a baseline for assessing impacts to small businesses ([NASS 2017 Census of Agriculture - Bison](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/st99_1_0032_0034.pdf)). The Small Business Administration’s Federal Government standards outlined in the North American Industry Classification Systems Codes defines a small agricultural business as having annual business receipts of $750,000 or less.

The NASS 2017 Census of Agriculture indicates that 1,775 farms in the U.S. had at least one bison, but only 1,049 farms reported sales of bison or bison products. We assume that the 726 farms that did not report any sales of bison are small businesses because we would expect any non-small business to have some sales in a calendar year period. The 1,049 farms that had sales had a total sales value of $120,186,000 in calendar year 2017, which is an average of $114,572 total sales value per farm. Given the skewed nature of business size commonly observed in other livestock commodities (i.e. a small number of massive businesses with a large number of small businesses) and counterbalanced by the previous assumption that all the bison farms without sales are small farms, we assume that 90% of the 1,049 farms with sales are small businesses, which equals 944 farms. Adding this to the 726 farms without any recorded sales totals to 1,670 estimated small businesses out of the 1,775 farms with any bison inventory. We account for possible growth in the number of farms from 2017 (the previous NASS Census of Agriculture data collection) to 2022 (the Study’s data collection) by estimating a total of 2,000 farms with any bison inventory in 2022. Proportionally adjusting the total farms with any inventory from 1,775 to 2,000 brings the estimated total number of small businesses impacted by the Study from 1,670 to 1,882, or about 94% of the study population.

The Study is designed to collect data from selected producers who are willing to participate and thus not burden producers who feel they do not have the time to participate. Producers who choose to participate will be able to complete the survey by whichever mode (PASI, CASI, or CATI) is most convenient for them, which will minimize potential impacts on business operations. In addition, the Study doesn’t require any enumerator to set foot on a producer’s operation, so producers do not need to set aside time and physical space to meet face-to-face with enumerators. Industry and producer input into the survey has been solicited to ensure that information collected is relevant, timely, and of appropriate complexity. Response to any portion of the Study is voluntary.

**6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

Eight years have passed since the last NAHMS bison study and an updated look at the health and management practices of the industry is needed. The Study will collect nationally representative information on bison inventory and operation characteristics; biosecurity and other management practices; reproduction; diseases, parasites, and health management; disease testing practices; and outreach not available from any other source.

Without this type of national data, the United States’ ability to detect trends in management, production, and health status, either directly or indirectly, would be diminished. The possibility of assessing the reduction of risk to human health from food borne pathogens and zoonotic diseases due to management changes based on NAHMS data would also be diminished. Furthermore, the ability to respond to domestic and international trade issues involving the health status and production practices of the U.S. bison population would be severely reduced, potentially impacting the global marketability of animals, meat, and byproducts. Disease spread models would not have the necessary parameters to more accurately predict spread of an outbreak.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with the general information collection guidelines in 5 CFR 1320.5, such as:**

* **requiring respondents to report information to the agency more often than quarterly;**
* **requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
* **requiring respondents to submit more than an original and two copies of any document;**
* **requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than 3 years;**
* **in connection with a statistical survey, that is not designed to produce valid and reli­able results that can be generalized to the universe of study;**
* **requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**
* **that includes a pledge of confidentiality that is not supported by authority estab­lished in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
* **requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

No special circumstances exist that would require this collection to be conducted in a manner inconsistent with the general information collection guidelines in 5 CFR 1320.5.

**8. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting form, and on the data elements to be recorded, disclosed, or reported. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, soliciting comments on the information collection prior to submission to OMB.**

The following people were consulted during planning and development of the Study:

Mr. Jim Matheson, assistant director of the National Bison Association, 8690 Wolff Ct, #200, Westminster, CO 80031. Mr. Matheson reviewed draft versions of the needs assessment survey as well as the study survey and provided feedback about questions about disease and health management, as well as in-depth knowledge about the industry.

Dr. Mike Hildreth, Biology & Microbiology-Box 2140D, University Station, Brookings, SD 57007. Dr. Hildreth reviewed early aspects of the needs assessment survey and parts of the study survey and provided feedback about developing questions and possible sampling efforts, especially those related to internal parasitism and associated health issues, as well as in-depth knowledge of parasites of bison.

Dr. Kristi Cammack, College of Agriculture, Food and Environmental Sciences,711 N Creek Dr, Rapid City, SD 57703. Dr. Cammack reviewed the needs assessment survey and parts of the study survey and provided feedback about developing questions on processing and marketing.

USDA NASS was consulted and assisted APHIS with collection instrument design.

APHIS also published in the Federal Register on June 14, 2021 (see 86 FR 31477) a 60-day public comment notice for this new information collection request. The notice received one comment opposing the domestic management of bison but it did not provide any specific comments relevent to the activities in this request.

**9. Explain any decision to provide any payment or gift to respondents, other than reenumeration of contractors or grantees.**

APHIS will provide no direct payments or gifts to respondents. The biological sampling provided to producers completing the Biologics Phase does have a monetary value, valued at approximately $3,000 ($2,000 for enteric microbes, $350 for fecal parasites pre-deworming, $350 for fecal parasites post-deworming, and $300 for feed/forage testing) per farm if producers were to independently perform these tests. However, APHIS gets a reduced cost on laboratory testing compared to any individual producer due to APHIS signing cooperative agreements with publicly funded laboratories for testing in bulk; this is why the laboratory test costs on form APHIS-79 are cheaper per test than the estimates cited in this paragraph.

This sampling is a means of gathering valuable information concerning the presence and prevalence of important bison parasites and enteric microbes, as well as quality of pasture forage, that cannot be provided via other means, but the sampling can also be seen as an incentive to participate as it can be used by the producer to gain a better understanding of the disease status of their animals and inform management decisions. Additionally, the enteric microbe testing will look for some economically important microbes that can be pathogenic, such as *E. coli*, *Salmonella,* and *Campylobacter;* this information will be helpful for the industry in providing national baseline numbers.

Communication back to respondents will include a thank you card sent by NASS to those who complete the survey, providing them with an information product from the survey and letting them know that aggregate survey results are available. Additionally, NASS will send e-mails to respondents letting them know where to find aggregate results from the study, and results of the biological testing will be securely returned to the individual producers so that they can use the information in the management of their herd.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

The NASS Phase of the Study will be collected under the Confidential Information Protection and Statistical Efficiency Act (CIPSEA). Only the NASS enumerators will have direct knowledge of the NASS Phase participant’s identity and the participant’s survey information. However, APHIS will have knowledge of the participant’s contact information if they elect to participate in the Biologics Phase, as APHIS will mail the testing kits to the producer directly. This information is collected in the last section of the questionnaire. The NASS Phase dataset at APHIS will refer to the respondent by a numeric code only, which is assigned by NASS. Any completed surveys and any data containing PII will be stored securely in a secured, air-gapped data lab.  APHIS staff will print shipping labels outside of the data lab from a secure APHIS network printer and will return the list to the room as soon as the labels are generated.

The biological sample collection in the Biologics Phase will not be protected under CIPSEA; however, it will be protected as Confidential Business Information (CBI) as defined in 19 CFR 201.6. Respondent information will be protected by ensuring that no identifying information is linked to the data. The key linking the unique participant ID with respondent information will be used only to mail biological collection kits and biological testing results to participants. The key will be transferred over a secure electronic connection from NASS to APHIS; will be stored in a secured, air-gapped data lab; and will be destroyed as soon as possible after data validation. Samples sent to cooperating labs will only have a unique participant ID and nothing else to identify where the sample came from. Additionally, the study participant survey will be protected as CBI.

Only summary estimates based upon the inference population will be reported. While every effort will be made to ensure respondent confidentiality, it is possible that information could be released as required by a Freedom of Information Act, or in the case of required disease reporting. However, names, addresses, and personal information will not be linked with survey or biological testing information. These confidentiality limitations will be explained to producers on the NAHMS Bison 2022 Producer Informed Consent Form (VS Form 21-321).

NASS has statutory protection that allows them to keep on-farm data (such as producer name and address information) confidential. Several U.S. Codes apply to data collected by NASS:

* Title 7, Section 2276 - Confidentiality of Information.
* Title 18, Section 1902 - Disclosure of Crop Information and Speculation Thereon.
* Title 18, Section 1905 - Disclosure of Confidential Information Generally.

NAHMS has statutory protection that allows for the protection of respondent data through the Confidential Information Protection and Statistical Efficiency Act (CIPSEA):

* Title V of E-Government Act of 2002, Public Law 107-347, Section 513. Fines and Penalties.
* Title V of E-Government Act of 2002, Public Law 107-347, Section 512. Limitations on Use and Disclosure of Data and Information.

Every NASS and APHIS employee or other individual that may handle a survey, or data coming from a completed survey, is required to sign a form governing certification and restrictions on use of unpublished data. Furthermore, once data are published, individuals are limited to the use of aggregate data files. Access to individual data files is restricted to maintain respondent confidentiality.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior or attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

There are no questions of a sensitive nature used in this collection activity.

**12. Provide estimates of the hour burden of the collection of information. Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated.**

* **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**

See APHIS Form 71. The respondents in this study are bison owners and producers providing an estimated 3,741 burden hours to complete the Study over the collection period. A detailed burden estimate has been included on the enclosed APHIS 71 Form.

* **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.**

APHIS estimates the total annualized cost to the above respondents to be $128,144**.** APHIS arrived at this figure by multiplying the 3,741 hours of estimated burden by the estimated average hourly wage of first line supervisors of farm workers (SOCC 45-1011, $24.08), and then multiplying the product by 1.4225 to capture benefit costs.

The average hourly wage was obtained from the U.S. DOL Bureau of Labor Statistics occupational employment statistics website http://www.bls.gov/ current/oes\_stru.htm.

According to DOL BLS news release USDL-21-0581, dated March 31, 2021 (<https://www.bls.gov/news.release/pdf/ecec.pdf>), benefits account for 29.7 percent of employee costs, and wages account for the remaining 70.3 percent. Mathematically, total costs can be calculated as a function of wages using a multiplier of 1.4225.

**13. Provide estimates of the total annual cost burden to respondents or recordkeepers resulting from the collection of information (do not include the cost of any hour burden shown in items 12 and 14). The cost estimates should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life; and (b) a total operation and maintenance and purchase of services component.**

There are no capital/startup costs or ongoing operations and maintenance costs for respondents or record keepers associated with this information collection. Questions in this study may reference operation records, but APHIS does not require producers to maintain or provide these records to answer questions.

**14. Provide estimates of annualized cost to the Federal government. Provide a description of the method used to estimate cost and any other expense that would not have been incurred without this collection of information.**

See APHIS Form 79. The annualized cost to the Federal Government is estimated at $1,115,587.

**15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-1.**

This request is for a reinstatement of a previously approved information collection request to investigate current issues and examine general health and management practices of bison operations. The estimated number of respondents is 2,000, estimated number of responses is 6,515, and estimated total burden is 3,741 hours.

**16. For collections of information whose results are planned to be published, outline plans for tabulation and publication.**

APHIS will summarize information from this survey immediately following the data collection and validation phases. The PASI and CASI portion of the NASS Phase data collection is planned to take place in 2022, and the CATI portion of the NASS Phase will be administered to non-respondents of the PASI and CASI modes. The Biologics Phase biologics collection is planned to take place in 2022-2023. NASS and APHIS employees will enter data into electronic databases for the NASS Phase and the Biologics Phase data, respectively. APHIS statisticians will perform statistical calculations such as descriptive statistics including frequency distributions, prevalence, and point estimates. APHIS statisticians will calculate variance measures and confidence intervals for the point estimates to describe the precision of the descriptive statistics generated. APHIS statisticians will utilize SAS survey procedures, SUDAAN and/or R software to correctly calculate the standard error to account for the complex study design. Standard errors and point estimates will be published for aggregated statistical measures.

APHIS plans on releasing the data from the NASS Phase of this study in 2024. Additionally, trends data comparing NAHMS data from the Bison 2014 Study with the Bison 2022 Study NASS Phase data will be released in 2024. Informational sheets using descriptive statistics and manuscripts using descriptive statistics and inferential statistics on data collected in both the NASS Phase and the Biologics Phase will be released during and after 2023.

APHIS strives to reduce the time between the end of data collection and release of a final publication. Tableau dashboard visualizations and hardcopy information from the study will be made available to bison producers, universities, researchers, practitioners, animal health related industries, Federal agencies, legislators, and any other interested parties. Any published summary data will be available by following the “Bison Studies” link at: <https://www.aphis.usda.gov/nahms>.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

APHIS is not seeking an exemption to display the OMB approval expiration date.

**18. Explain each exception to the certification Statement in the "Certification for Paperwork Reduction Act."**

APHIS is able to certify compliance with all provisions in the Paperwork Reduction Act.