DHS OBIM

SUPPORTING STATEMENT – PART A

Office of Biometric Identity Management Biometric Data Collection

OMB Control No.: 1601-NEW

A. JUSTIFICATION

1. Need for the Information Collection

The Office of Biometric Identity Management provides biometric compare, store, share, and analyze services to DHS and mission partners. In order to serve its mission partner, OBIM is focused on delivering accurate, timely, and high assurance biometric identity information and analysis. To achieve OBIM's overall goals and priorities, OBIM continually works to improve biometric services by keeping up with advancing biometrics in terms of new modalities, capabilities, and safeguard. OBIM is constantly investigating new developments to keep up with the speed of relevance and to support DHS operational missions.

Because OBIM is congressionally mandated to house the biometric repository that is used to identify and verify individuals crossing U.S. borders, it is mandatory for homeland security that the types of biometrics used, the technologies that capture them, and the way we safeguard them are advancing at a pace that keeps in front of bad actors.

Per the Office of Biometric Identity Management Authorization Act of 2019 or the OBIM Authorization Act of 2019:

> This bill establishes within the Department of Homeland Security (DHS) the Office of Biometric Identity Management Directorate, which shall be administered by a director with significant management experience and experience in biometrics and identity management.
>
> The director shall have specified duties, including:
>
> - leading DHS's biometric identity services to support efforts and activities relating to anti-terrorism, counterterrorism, border security, credentialing, national security, and public safety.
> - managing the operation of DHS's primary biometric repository and identification system.
> - maximizing interoperability with other federal, state, local, and foreign biometric systems; and
> - ensuring the activities of the office are carried out in compliance with the policies and procedures established by the Privacy Officer.

Thus, OBIM is constantly working to improve biometric use, capture, and storage through investigation of the latest industry or academic advancements and how research findings can help improve performance of systems and policies that surround the use of the system. As OBIM aims to continue to improve their biometric services, they have identified a need to understand the performance of new

sensors, as the technologies are continuously evolving, and the inherent impact on the performance with the operational biometric matchers leveraged by the OBIM biometric repository. OBIM engages with JHU APL, NIST, and DHS S&T to collaborate and leverage the subject matter expertise available at each entity on biometric sensor evaluation to assess the performance of emerging biometric technologies.

2. Use of the Information – what collecting and purposes

OBIM is interested in seeking an OMB number with the plan of implementing relevant biometrics collection projects so that OBIM can collaborate with partners (JHU APL, NIST, and DHS S&T) to take on various biometric collection projects that will help to understand biometric collection device performance in various operational settings. These performers include academic and other research centers to design and execute studies that involve collection of different biometrics depending on the need and/or research question. Since OBIM operates and maintains the single DHS Biometric repository responsible for store, share, and compare of different types of biometrics (face, finger, iris, and future biometrics) it is imperative that OBIM understand biometric collection device performance so that we are better able to do the sharing and comparing portion of our homeland security mission. Because authentication/identification accuracy depends on the reliability of the equipment used to capture data, OBIM is developing guidance on biometric capture quality, to enable implementation of new capabilities that enhance national security and public safety.

OBIM has tasked JHU APL, DHS S&T, and NIST to help in this effort based on their extensive experience with biometric image collection and analysis developed from previous studies. The performers anticipate conducting several small-scale human research studies to support OBIM program goals. OBIM is interested in gathering more information in the following biometric modalities: face, fingerprint, palm print, iris, and voice. Its purpose is (1) to evaluate the current state of the art in biometrics and biometric capture, and (2) to provide insights on likely future developments in biometrics and identity intelligence technologies for OBIM. The goal is to aid in the elaboration of a multi-year strategy for both research and development for future technologies.

As OBIM is not an academic institution and does not engage in research studies, OBIM relies on academic and other research centers to design and execute studies that involve collection of different biometrics (depending on the need and/or research question). These performers develop research questions and protocols to solve questions and provide information and guidance for OBIM to better influence capture, share, match, and store of biometrics.

3. Use of Information Technology

OBIM aims to continue to improve biometric services within DHS and the necessary guidance associated with the implementation of these biometrics. The primary objective of the studies and use of information technology is to compare the performance of biometric sensors. Specifically, understanding the parameters that impact the quality of biometric image collection, which in turn, impacts the performance of downstream comparison algorithms.

OBIM will assess new sensors, as the technologies are continuously evolving, and the inherent impact on the performance with the operational biometric matchers leveraged by the OBIM biometric

repository. To perform these assessments, biometric collections will occur using emerging commercial off the shelf sensors (e.g., finger, face, iris, scanner, using a platen, clamshell, mobile application, etc.). The assessment and potential future implementation of advancing biometric sensors aims to improve the biometric collection experience for the customer and the agent to ensure quality biometrics are collected in an easy to use and time efficient manner to reduce burden on the customer and agent involved in the collection while still providing quality biometric images to allow for accurate comparison for mission decision support.

Advancing technology will look to reduce burden by:

- Contactless modes of collection, reducing hygienic burden to individuals as a result of the current practices of touching the same surface.
- Simultaneous collection of multiple biometrics, reducing the burden to the customer and agent by eliminating multiple devices and increase time for each additional biometric to be collected.
- Mobile collection sensors, reducing time burden of customer by eliminating the need to travel from site of encounter to a collection site.

4. Non-duplication

This is an evaluation of various biometric image capture technologies. Over the course of the program, we anticipate evaluation of face, finger, voice, palm, and iris biometric sensors. The questions being asked will focus on the performance of the emerging technologies for these collections, and the quality of the biometrics collected by these technologies. Therefore, prior datasets may not meet the parameters of the current studies.

As these collections focus on emerging technology there is no current datasets that can be leveraged to assess the performance of these technologies with existing/operational matchers.

In addition, these collections will focus on parameters that could adversely impact the quality of the biometrics captured by the emerging technology. These parameters vary between the scenario and operational setting and consistent/comparable datasets do not exist for all parameters to assess the emerging technology baseline performance.

The above statements are for all the biometrics planned: face, finger (contactless and contact), iris, palm, and voice.

JHU APL, NIST, DHS S&T will collect finger (contact and contactless) face, iris, palm, and voice features to develop and train different machine-learning algorithms for the biometric modalities to evaluate their performance and identify potential paths for solutions.

5. Burden on Small Business – no impact

If any small businesses will be involved in the collections, study, or testing that are conducted surrounding biometric devices or matching performances, OBIM will work to ensure that guidance is streamlined and clear for all participants and all the time limits put forth for collection and testing are limited.

No requests of performers, vendors, or participants will be made that will be prohibitive to the participation of small businesses.

6. Less Frequent Collection

In accordance with the authorities identified in Question 3, OBIM is required to provide accurate, timely, and high assurance biometric identity services. As technology continues to advance at a rapid speed, new biometric collection devices and techniques continue to emerge. Variations in the technology leveraged in these new devices/sensors may impact the interoperability with the existing operational biometric comparison algorithms leveraged by DHS OBIM. Depending on vendor, assessments of these technologies do not account for the impact on the legacy biometric information within the OBIM Biometric repository and provides skewed performance results on emerging technology. Less frequent collections will impact the ability to identify impact on the performance of the operational comparison algorithms with emerging biometric collection technologies and potentially impact the biometric comparison results for mission decision points.

7. Paperwork Reduction Act Guidelines

OBIM agreed that biometric collection and other project work will be collected and/or executed in a manner consistent with the guidelines of 5 CFR 1320.5(d)(2). OBIM is partnering with JHU /APL, DHS S&T, and NIST to conduct multiple studies and is interested in gathering information from the public and seeking their input to analyze emerging biometric modalities.

8. Consultation and Public Comments

The study will be reviewed by an Institutional Review Board (IRB), a group of people that reviews human research studies. The IRB can help answer any questions about an individual's rights as a research participant or if they have other questions, concerns, or complaints about this research study. The IRB can be contacted at 410-502-2092 or jhmeirb@jhmi.edu.

In accordance with 5CFR 1320.8(d), a 60-day notice for public comment was published in the *Federal Register* on July 25, 2024, at 90 FR 60443; and a 30-day notice on May 5, 2025, at 85 FR 18989, at requesting comments from the public. Comments were provided/submitted.

9. Gifts or Payment

To compensate participant in biometric collection studies for the time spent in the collection and contribution to understanding how biometrics can better protect the homeland, voluntary participants will be compensated for the time spent in biometric collection projects. Non-APL, DHS S&T, or NIST staff participants will be compensated upon full completion of the test session completed at the JHU APL ODIN Lab. Compensation may be in the form of gift cards (e.g., Visa, Amazon) which will be clearly communicated to interested participants during the consent process. Compensation will be based on

the Bureau of Labor Statistics average hourly pay rate for administrative tasks in the Washington, DC area.[1] The compensation amount will be carefully selected such that it is enough that if any time were taken off from jobs to take part in the collection a participant's time would be appropriately compensated.

Per JHU /APL, NIST, and DHS S&T policy, participants will not be paid outside of their normal compensation for doing their job. APL, NIST, and DHS S&T staff participants will be given a budget to charge for their time spent participating in this study.

10. Confidentiality

There are no confidentiality assurances associated with this collection. However, coverage for the collection of this information is provided under SORN and PIA:

SORN
DHS/ALL-041 External Biometric Records (EBR) System of Records, April 24, 2018, 83 FR 17829; DHS/ALL-043 Enterprise Biometric Administrative Records (EBAR) System of Records, March 16, 2020, 85 FR 14955

11. Sensitive Questions

No sensitive questions will be asked. Basic demographic information collected from participants will be analyzed to determine if any of the data collection systems have a bias for/against individuals with certain characteristics. Specifically, evaluation of the influence of age, gender, race/ethnicity.

If an individual agrees to be in this study, we will ask them to do the following things:

- Comply with the performers safety protocols which the study team will review prior to the start of any research activities.
- Complete a brief questionnaire.
- Have their biometric profiles taken on several biometric sensors or undergo image capture for matching systems.
    - The images will be digitized and then post-processed. The post-processing is done to make the image better suited to matching to stored biometric data.
        - It may include adjustment of the overall brightness and contrast, cropping of the raw image to exclude parts of the image that do not contain the biometric of interest.
        - This post-processing is usually performed automatically in the collection device itself.

[1] Bureau of Labor and Statistics in the Washington DC – average hourly rate of administrative assistance in Washing DC area. https://www.bls.gov/oes/current/oes_47900.htm

- As the data collection is designed to determine the factors that impact image quality, the individual will visit the sensor stations to present their biometrics multiple times.

Each presentation will have a different variable, e.g., low lighting, variable distance from the sensor, or commercial hand lotion recently applied for fingerprint collection. These variables will be described in advance of testing, and the individual may choose to opt out of a presentation if they are uncomfortable.

As part of this research, we are requesting the individual's permission to create and use their biometric images to help answer the research question. The biometric images will not be used for advertising or non-study related purposes. Individuals should know that:

- They may request that the collection of biometric images be stopped at any time.
- If they agree to allow the collection of biometric images and then change their mind, they may ask us to destroy that imaging. If the imaging has had all identifiers removed, we may not be able to do this.
- The performers will only use these biometric images for the purposes of this research.

12. Respondent Burden, and its Labor Costs

a. Estimation of Respondent Burden – average of burden per year

This submission will recruit a maximum of 3000 participants over the course of 3 years (average of 1000 per year). There will be no repeat collections or submissions, but participants may be asked to participate in follow-on collections that investigate additional parameters. These follow-on collections will not be mandatory for the same participant base, allowing the participants to select the extent of participation within the three-year period.

Depending on the number of collection devices or the collections and submissions, participants will spend 90 mins on average in these collection processes. While different biometric collection devices and procedures may be used in biometric collection processes, the collection(s) and biographic questionnaires will take on average 90 minutes. The burden will be 1500 annual hours.

Operators are cognizant of collection time and participants are made aware of the time ceiling in the collection process prior to their written consent/approval.

b. Labor Cost of Respondent Burden

Discuss Opportunity Cost here. Participants will be given gift cards in amounts that come out to 25 dollars per hour (based upon the above 90 min average, participants will be given on average $37.50). See rationale for compensation in the section.

Annualized Burden to Respondent

Type of Respondent		No. of Respondents	Annualized Number of Responses per Respondent	Avg. Burden (in hours)	Total Annualized Burden (in hours)	Avg. Hourly Wage Rate	Total Annualized Respondent Cost
Other Respondents (e.g., Direct Service Providers, Educational Institutions, etc.)		1000	.67	1.5	1500	$57.96	$86,940
Total		1000	.67	1.5	1500		**$$86,940**

13. Respondent Costs Other Than Burden Hour Costs

There are no direct costs imposed on respondents.

14. Cost to the Federal Government

Annualized Burden to Federal Government – Staffing Expenses

Staff Type	Total number of staff	Hourly Rates	Wage Rate Multiplier	Estimated Annual Burden to Fed. Gov't (in hours)	Total Annualized Cost to Fed Gov.t
Contractor (Analyst)	3	91.45	N/A	1,728	$158,025
Contractor (Administrative)	2	65.94	N/A	1,152	$75,962
FTE -GS15 (Program Management)	1	84.55	1.4	576	$48,700
FTE -GS14 (Submission	1	71.88	1.4	576	$41,402

Review)					
Total	7			4,032	$324,089

The above table shows the estimation for a single biometric (face, fingerprint, iris, palm, voice) collection.

DHS estimates staff supporting the collection to include 3 analyst contractors at an hourly rate of $91.45 each providing a total of 1,728 hours annually of submission review support and related work; 2 administrative contractors at an hourly rate of $65.94 each providing a total of 1,152 hours annually of submission intake, processing, and related work; 1 FTEs at the GS-15 level at an hourly rate of $84.55 each providing 936 hours annually of program management and development work; and 4 FTEs at the GS-14 level at an hourly rate of $71.88 each providing a total of 576 hours annually of submission review work. All hourly rates for FTEs have been multiplied by a wage rate multiplier of 1.4 (contractors rates reflect what the vendor is paid). Based on these estimates, DHS estimates the total annualized cost to the Department for staffing will be **$324,089.**

For each additional collection, the table would need to be doubled. It is expected two collections would occur per year. If two collections occur the breakdown will be:

Staff Type	Total number of staff	Hourly Rates	Wage Rate Multiplier	Estimated Annual Burden to Fed. Gov't (in hours)	Total Annualized Cost to Fed Gov.t
Contractor (Analyst)	6	91.45	N/A	3,456	$316,051
Contractor (Administrative)	4	65.94	N/A	2,304	$151,925
FTE -GS15 (Program Management)	2	84.55	1.4	1,152	$97,401
FTE -GS14 (Submission Review)	2	71.88	1.4	1,152	$82,805
Total	14			8,067	$648,182

Special equipment, contractors, any employee percentage – JHU, DHS S&T, NIST

For a collection of biometric study with different biometric collection devices in a setting the average amount supplied to performers would be 350k for performers, support, and administrative assistant. Federal employee will spend just approximate 520 hours per year on this project planning and execution.

15. Reasons for Change in Burden

This is a new collection.

16. Publication of Results

If the results of the information collection will be published for statistical use, there will be an outline plan for tabulation, statistical analyses, and publication. A timeline will be provided for the entire project including the beginning and ending dates of the actual collecting of information, estimated completion date of the report, its publication date, as well as any other scheduled actions.

The people who may request, receive, or use the information include the researchers and their staff who may be a part of JHU, NIST, DHS S&T, and OBIM FI.

By signing the consent form, the individual is giving permission to the research team to share their information with others outside of the research teams. This may include the sponsor of the study and its agents or contractors, outside providers, study safety monitors, government agencies, other sites in the study, data managers and other agents and contractors used by the study team.
Sharing data is part of research and may increase what we can learn from this study. Often, data sharing is required as a condition of funding or for publishing study results. It also is needed to allow other researchers to validate study findings and to come up with new ideas. The data gathered may be shared with researchers at other institutions, for-profit companies, sponsors, government agencies, and other research partners. The data may also be put in government or other databases/repositories. Any results produced will be leveraged as government products and not published as academic peer review journal articles.

17. Non-Display of OMB Expiration Date

DHS will display expiration date.

18. Exceptions to "Certification for Paperwork Reduction Submissions"

DHS does not request an exception to the certification of this information collection.