SUPPORTING STATEMENT A

Fellowship Management System (FMS)

OMB Control No. 0920-0765

Revision

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- **Goals**: To help CDC meet the training needs of voluntary applicants who seek to meet the needs of a continually evolving public health workforce.
- **Intended Use:** To aid in the efficient and effective review of fellowship applications, fellowship host site assignment proposals, and alumni experiences; and to monitor ongoing fellowship activities to ensure compliance with fellowship

OMB APPROVAL IS REQUESTED NO LATER THAN APRIL 1, 2020 TO ALLOW USE OF FMS ENHANCEMENTS FOR THE 2020 EIS PROGRAM INFORMATION COLLECTION

JUSTIFICATIONS

1. Circumstances Making the Collection of Information Necessary

This information collection request (ICR) is for the revision of a currently approved information collection (0920-0765, exp. January 31, 2021). Approval is requested for 3 years. This collection of information and data from nonfederal respondents is authorized by the Public Health Service Act §301, Title 42 U.S.C. §241(a): Research and Investigations Generally (Attachment 1, Authorizing Legislation).

The mission of CDC's Division of Scientific Education and Professional Development (DSEPD) is to support the development of a competent, sustainable, and empowered public health workforce. Professionals in public health, epidemiology, medicine, economics, information science, veterinary medicine, nursing, public policy, and other related professions seek opportunities through CDC fellowships to broaden their knowledge and skills to improve the science and practice of public health.

Currently, fellowship programs are managed by two units within CDC: DSEPD, which is located in CDC's Center for Surveillance, Epidemiology and Laboratory Services (CSELS) in the Office of Public Health Scientific Services (OPHSS); and the Center for State, Tribal, Local and Territorial Support (CSTLTS). Fellowship programs assign fellows to host (work) sites in both federal and nonfederal public health agencies and organizations. Assignments include state, tribal, local, and territorial public health agencies, and operational divisions of HHS, including CDC, the Centers for Medicare & Medicaid Services and the Indian Health Service. Nongovernmental assignments include academic institutions, tribal organizations, and private, public health organizations. These assignments provide opportunities for CDC fellows to build and sustain public health capacity both during and after their fellowships.

In 2008, CDC obtained OMB approval to collect information through the Fellowship Management System ("FMS"). FMS is a web-based, flexible, and robust data management system that allows CDC to electronically collect and process fellowship applications, host site assignment proposals, and fellowship alumni information from nonfederal persons. FMS also supports and monitors ongoing fellowship activities and compliance with fellowship requirements.

Over the years, CDC has enhanced the FMS resulting in improved accuracy, readability, timeliness, completeness, and consistency of information submitted in a streamlined, standardized format across multiple fellowship programs. Through Revisions and Change Requests, CDC has adapted the FMS to reflect changes in the demand for fellowship

opportunities, to improve alignment and tailoring of questions for each fellowship program's eligibility criteria, and to clarify questions and instructions in response to user feedback.

The data collected in FMS optimize CDC's ability to provide continuous fellowship service delivery that builds and sustains public health capacity, helps to save lives, and protects people from health threats. Critical components of FMS help improve the matching process of fellowship assignment proposals with qualified fellowship applicants by matching interests and skills of qualified fellowship candidates with host (work) site needs. The best matches between fellows and assignments typically lead to long-term employment and the sustained public health capacity of state, tribal, local and territorial public health agencies and organizations, thus strengthening the pipeline to the public health workforce. Approximately 85% of CDC fellowship program graduates obtain jobs working in public health. Many of them remain in the same host programs that provided applied, on-the-job learning in their fellowship experiences.

The FMS also includes a current alumni database, generating fellowship program reports and documenting the impact of fellowships on alumni careers and the public health workforce. Through the FMS Alumni Directory, CDC can identify alumni possessing mission-critical skills to respond to a national public health emergency or an urgent public health need.

In this Revision request, CDC seeks OMB approval to (1) update to a new technology platform that will increase the system's flexibility and efficiency, (2) add a new respondent group who will provide references for applicants, (3) add a new component for activity tracking of the fellows' work experience, (4) add a new respondent group of fellowship applicants, (5) increase the number of host site assignment proposals for some fellowship programs, and allow nonfederal host sites the ability to select the applicants within FMS, and (6) enhance the alumni directory with new surveys and questions to better describe the career progression and leadership roles that fellows assume post-fellowship, and provide insights into how graduates apply the skills they acquired during their fellowships.

The proposed changes will contribute significant enhancements and provide CDC with an efficient, effective, and secure electronic mechanism for collecting, processing, and monitoring fellowship information. All FMS data collections align with HHS's strategic goal to strengthen nation's health and human services infrastructure and workforce (U.S. Department of Health and Human Services Strategic Plan, Foster a 21st Century Health Workforce).

2. Purpose and Use of Information Collection

The FMS consists of four modules. Each module has specialized functionality.

The FMS Application Module (**Attachment 3**) is used to collect the information from applicants needed to match them with appropriate fellowship opportunities (e.g., skills, interests, and qualifications). Currently, eight programs use FMS:

1.   Epidemic Intelligence Service (EIS);
2.   Epidemiology Elective Program (EEP)
3.   CDC Steven M. Teutsch Prevention Effectiveness (PE) Fellowship
4.   Public Health Associate Program (PHAP)
5.   Public Health Informatics Fellowship Program (PHIFP)
6.   Science Ambassador Fellowship (SAF)

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7.   Preventive Medicine Residency and Fellowship (PMR/F)
8.   Population Health Training in Place Program (PH-TIPP)

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Three programs will be added upon approval of this Revision request:

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9.   CDC E-learning Institute (ELI),
10.   Laboratory Leadership Service (LLS), and
11.   Future Leaders in Infectious and Global health Threats (FLIGHT).

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Use of each data collection module can differ among fellowships; for example, the Public Health Associate Program (PHAP) uses only a portion of the application module. In addition, a subset of EIS applicants submit writing samples through the FMS. In response to a prompt, the applicant responds to one of three possible questions (see **Attachment 3a**) in a timed format. The writing samples assessment is conducted due to the importance of written communication skills for successful EIS officers. On average, CDC collects FMS data yearly, as most fellowship cycles occur once during the calendar year. There are some exceptions, for example, Epi-Elect (EEP) collects applications in fall and spring cycles.

Upon approval of this Revision, CDC will begin using the FMS Application Module to collect information from a new group of respondents: applicant references. This respondent group includes former professors, supervisors, mentors, and deans of academic institutions where the applicant attended school. Standardized information will be collected regarding applicants' performance, skills, expertise, and work experience. The use of standardized letters of reference is becoming the industry standard for universities, medical schools, and residency applications because this approach has been shown to provide more accurate and useful information for participant selection. In the past, individuals providing applicant references were provided only general guidance and asked to provide a non-standardized letter of reference.

The FMS Alumni Directory (**Attachment 4**) is used to collect information from alumni. Alumni who voluntarily participate in the Alumni Directory have the option of providing updates when their information changes, on average approximately once every three years. Alumni may use the directory for maintaining professional networks for finding jobs, staffing jobs, collaborating, and interacting with other alumni. Alumni have two options for the level of information they wish to be visible to other alumni who have access to the directory. They have the option of displaying only their name and fellowship year or all of the information they entered. The default is to display only the name and fellowship year; this information is already in the public domain.

Surveys were added to the Alumni Directory to help fellowship programs understand the career progression and leadership roles that the fellows assume post-fellowship. Other survey questions added were to support the programs to learn how the fellows are applying competencies and skills acquired during their fellowship and in their new positions.

The FMS Host Site Module (**Attachment 5**) is used to collect information from employees of nonfederal public health agencies. For this revision, we will be increasing the number of fellowship programs that seek to receive host site assignments from nine or more nonfederal respondents and allowing nonfederal host sites the ability to select the applicants that they wish to interview and to provide their ranking scores directly in FMS to facilitate the match process.

The FMS Activity Tracking Module (**Attachment 6**), which is a new component, will allow field supervisors the ability to contribute fellows' learning assessments directly into FMS (twice

yearly). This allows fellowship staff to review and monitor fellows' learning outcomes and ensure that fellows are achieving program competencies and are on track for fellowship completion and graduation. Having one designated secure space for activity tracking in the system will allow the fellowship programs to monitor fellows' learning outcomes throughout the fellowship cycle as part of routine program improvement efforts and allow assessment of whether programs are meeting the expected outcomes of competency-based training programs.

Information collected in all modules is also used to generate fellowship program reports and document the impact of fellowships on alumni careers and the public health workforce. The electronic database allows CDC and other data users to easily manipulate the information collected through input interfaces into useful reports. For example, completed applications and host site assignment proposals for the different fellowships are converted into electronic reports for online review by CDC reviewers in the Reviewer Module of FMS. Through the FMS Administrator Module, fellowship administrators and programmatic staff can process applications and host site assignment proposals, compile their reviews, schedule interviews, select candidates, and match candidates to selected host site assignments. Both fellowship staff and applicants can track this process and the status of the onboarding process through FMS.

3. Use of Improved Information Technology and Burden Reduction

FMS is a secure electronic data management system that collects and processes information for CDC's fellowship programs. FMS includes technology that validates completeness of data entry. Using an electronic system for fellowship application and host site assignment proposals saves time associated with reviewing for completeness, as compared to the amount of time associated with processing a paper-based system. CDC fellowship staff use the information submitted to review and evaluate the applications and host site assignment proposals for the selection of quality candidates, fellow assignments at public health agencies, and to improve matching between fellows and host sites by allowing both fellows and host site to enter interview rankings during the selection and matching process. FMS offers practical utility to users by allowing easy, secure submission of applications and host site assignment proposals as compared with paper-based, postal delivery systems. FMS also provides increased efficiency and accuracy to fellowship programs to what would be an otherwise cumbersome, inefficient, tedious, and complicated task of manually collecting, sorting, and computing, information from paper submissions when electronic technology is available to complete these tasks more quickly and accurately.

FMS provides more effective and efficient submissions, reviews, selections, and matching processes. Applicants to fellowships and public health agencies proposing to host fellows for one or more CDC fellowships, or in subsequent years, will enter their information only once and update as necessary. Alumni who choose to participate in the Alumni Directory have the option of providing updates when their information changes, which occurs, on average, every three years. One hundred percent (100%) of the information and data, all submitted voluntarily by applicants and agencies, are collected electronically, through FMS (Attachments 3–6). The use of technology for electronic submission eliminates cumbersome paper processing and reduces errors. Furthermore, the update to the technology platform will facilitate the use of

administrative data collections for program improvement and evidence building activities across CDC and other federal agencies to evaluate program effectiveness.

This revision also supports the transition of FMS to a modernized, state-of-the art platform, replacing a more complicated, burdensome, and resource-intensive system. The new platform means the system is easier to update, including incorporating new fellowship programs; thereby increasing the efficiency of the system to run; enhances data management functionality within a single system, which increases overall data security; and substantially decreases the maintenance and operations costs, resulting in savings to the government. Because this system can be more easily made available to other fellowship programs for their use, there may also be a decreased existence of redundant systems developed and maintained at the agency.

The FMS information and data collection system assures compliance with the Government Paperwork Elimination Act (GPEA), Public Law 105-277, title XVII, 1998; lowers the burden to the respondents, as compared with paper-based systems; allows respondents to submit information to CDC electronically; and provides capabilities for CDC to maintain secure electronic records.

4. Efforts to Identify Duplication and Use of Similar Information

Information collected through FMS is for the completion of fellowship-related submissions and is not available from any other source. Data are requested via FMS only; no other CDC component requests this information. There are no duplications of these data.

5. Impact on Small Businesses or Other Small Entities

No small businesses have been, are, or will be involved in FMS data collection. For the FMS Application Module (Attachment 3), the FMS Alumni Directory (Attachment 4) and the new FMS Activity Tracking Module (Attachment 6), data are collected from medical and veterinary students, physicians, dentists, veterinarians, nurses, epidemiologists, educators, pharmacists, attorneys, economists, statisticians, graduates of MPH programs, and others. These respondents represent the majority of the target audience of fellowship candidates and alumni who enter information into FMS. Applicants submit applications as individuals rather than representatives of their place of employment. The information requested is necessary for those who choose to apply to a fellowship and is voluntary for the Alumni Directory. Host site assignment proposals for the FMS Host Site Module (Attachment 5) are collected from employees of public health agencies including physicians, veterinarians, epidemiologists, public health educators, public health managers, and others. Data collected from employees in public health agencies are required only from those interested in hosting a fellow. Only the minimum data required for use are collected.

6. Consequences of Collecting the Information Less Frequently

The timeliness of data collection during the fellowship application process (Attachment 3, FMS Application Module) is critical. Applications are collected through FMS annually, once per fellowship cycle; all fellowship cycles occur once per calendar year except for EEP, which has a fall and a spring rotation. However, the timeliness of data collected during the alumni tracking process (Attachment 4, FMS Alumni Directory) is less critical. The timeliness of data collected

from public health agencies submitting host site assignment proposals (Attachment 5, FMS Host Site Module), is for an agency to be selected to host a fellow during a given fellowship year. Host site assignment proposals submitted after fellows have been selected are not considered for that fellowship year. Host site assignment proposals are collected through FMS annually, once per fellowship cycle. Public health agencies have the opportunity to resubmit proposals with updated information in subsequent years if they wish to continue hosting fellows. Fellows' learning assessments (Attachment 6, Activity Tracking) will be collected twice yearly.

There are no legal obstacles to reduce the burden.

7. Special Circumstances Relating to the Guidelines of CFR 1320.5

This request fully complies with the regulation 5 CFR 1320.5.

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

A. The agency's notice of proposed revision to the existing data collection was published in the Federal Register on August 23, 2019 (Vol. 84, No. 164, pp 44313-44314, see Attachment 2). CDC received no comments in response to the notice.

B. Individual fellowship programs collect information from their stakeholders (e.g., fellowship directors, fellowship applicants, supervisors at host sites, and fellowship alumni) after each annual information collection cycle, and this information is used by DSEPD and the Management Analysis and Services Office to drive the ongoing improvement of information collection in the new platform.

9. Explanation of Any Payments or Gifts to Respondents

There are no payments or gifts provided to respondents.

10. Protection of the Privacy and Confidentiality of Information Provided by Respondents

CSELS/DSEPD's Information Systems Security Officer has reviewed this request and determined that the Privacy Act does apply. The applicable System of Records Notice (SORN) is 09-20-0112, "Fellowship Program and Guest Researcher Records. HHS/CDC/AHRC" and the Privacy Impact Assessment (PIA) is included as (Attachment 8). FMS collects only the minimum data elements necessary to satisfy the requirements for application submission and processing (Attachments 3–5). All FMS modules operate on WizeHive Zengine™ web servers and are front-end web pages with a backend cloud database, automating existing manual processes. The data for the Application Module, Host Site Module, Activity Tracking, and Alumni Directory are submitted through the Internet. FMS modules were developed using WizeHive's Zengine™ platform. Data are stored and regularly backed up on WizeHive's Zengine™ SQL Azure database. Access to information on WizeHive's Zengine™ SQL Azure database is available only through FMS for DSEPD programmatic personnel and IT staff. Data are password protected and reside on a server managed by WizeHive under strict physical security. WizeHive personnel has access to the physical server. Registrant data will not be sold,

rented, or shared with third parties for their promotional use. All data are maintained behind a strict firewall with security protection.

Security provisions for data storage meet all requirements established by the CDC's Information Council Executive Committee.

CDC fellowship staff use the information that is voluntarily submitted by applicants (Attachment 3, FMS Application Module), public health agencies (Attachment 5, FMS Host Site Module), and alumni (Attachment 4, FMS Alumni Directory) to process applications, select qualified candidates and quality assignments, match fellows to host site (work) assignments, and maintain a current alumni database to document the impact of the fellowships on alumni careers. In this revision, we are adding a new component for activity tracking to allow field supervisors the ability to contribute to fellows' learning assessments directly into FMS (Attachment 6, Activity Tracking). This data collection has little to no effect on the privacy of the public health professionals and staff of public health agencies, who voluntarily submit information through FMS. No sensitive information is collected.

Personally identifiable information (PII) is stored on WizeHive's Zengine™ SQL Azure database and will be stored and retrieved by appropriate CDC fellowship staff, but will not be published. Programmatic data from FMS are reported in aggregate to provide program reports on programmatic processes, trends, performance information, and facilitate evidence-building activities to drive programs across CDC and other federal agencies.

Information in identifiable form (IIF) collected from the FMS Application Module (Attachment 3) is needed to process application data and select qualified candidates. IFF collected from applicants includes name, mailing address, telephone numbers, e-mail address, education records, visa information, employment status, and information crucial for assessing eligibility of and communicating with applicants. After logging in to apply, applicants are informed immediately that their administrative information will be shared with CDC and other federal agencies for program improvement and evidence-building activities. Consent is implied by voluntary participation. Non-IIF includes fellowship entry year, work experience, volunteer activities, research grants, presentations, publications, interests, skills, and abilities. No PII from the Application Module (Attachment 3) will be shared beyond the purpose of processing, selecting, and matching candidates.

IIF collected from the FMS Alumni Directory (Attachment 4) includes name, mailing address, telephone numbers, e-mail address, education records, visa information, employment status, and information crucial for communicating with alumni. Participation in the Alumni Directory is voluntary, and program graduates are encouraged to participate in their fellowship's Alumni Directory after graduation. Each time alumni log on to their fellowship Alumni Directory, they are asked if they wish to share their information with other alumni who have access to the alumni directory. (See Electronic Consent Statement in Attachment 4, FMS Alumni Directory). If a respondent consents, his or her information will be visible to other alumni who participate in the fellowship alumni directory. If a respondent does not consent, only his or her name and fellowship year, which already are in the public domain, will be visible to other alumni who participate in the fellowship alumni directory. All data are merged from the FMS's Fellowship Application Module into the Alumni Directory for each alumnus. Editing data does not require data reentry. All the fellowship programs will use the FMS Alumni Directory to collect

information from graduates and alumni. Alumni who choose to participate in the Alumni Directory have the option of providing updates when their information changes.

No PII from the Alumni Directory (Attachment 4) will be shared beyond the purpose of professional networking among alumni and to present opportunities for alumni with mission-critical skills to respond to a national public health emergency or an urgent public health need.

IIF collected from public health agencies from the Host Site Module (Attachment 5) include the agency's name, location, type of public health agency, mailing address, telephone numbers, e-mail address, and name, and titles of primary and secondary supervisors or mentors. Consent is implied by voluntary participation in this non-research information collection. Agency employees are immediately informed that their information will not be shared and used only by the fellowship to which they are submitting the host site assignment proposal during the initial review and selection process. Data collected for the host site module is needed to select quality assignments and to match fellows with host sites that provide the fellow with the best possible fellowship experience and can result in long-term careers and sustainable contributions to public health and its body of knowledge. Non-IIF includes activities the fellows will engage in, type of support and training the fellows will receive, extent of mentorship and supervision for the fellows, and additional professional development opportunities and collaborations that might be available for fellows. No PII from the Host Site Module (Attachment 5) will be shared beyond the purpose of processing, selecting, and matching candidates to host sites.

IIF that will be collected for the new Activity Tracking Module (Attachment 6) will include name, mailing address, telephone numbers, e-mail address, educational records, professional licensure, and employment status. No PII from the Activity Tracking Module (Attachment 6) will be shared beyond the purpose of generating administrative evidence for building activities to drive program improvement. All fellowship programs will use the FMS Activity Tracking Module (Attachment 6) to collect information from fellows twice yearly. No PII from the Activity Tracking Module (Attachment 6) will be shared beyond the purpose of fellowship activity tracking

IFF that will be collected from the new respondents group (applicant references), in the FMS Application Module (Attachment 3) is needed to provide accurate and useful information for participant selection. IFF collected from applicant references includes name, job title, and e-mail address. Applicant references who wish to submit a reference for an applicant do not require consent. No PII from the Application Module (Attachment 3) about the applicant references will be shared beyond the purpose of processing and selecting candidates.

The first time that an applicant applies for the fellowship or a designated employee of a public health agency submits a host site assignment proposal electronically through FMS, the applicant or employee will receive a secure and unique login and password that allows them to enter their information only once. When additional applications are submitted to the same or other CDC fellowships in subsequent years, the applicant or the public health agency employee will use the same login and password to access application data in FMS. FMS will also allow applicants to copy, revise, and submit updated versions to one or more fellowships. Data are stored indefinitely and maintained securely in FMS so that applicants and host site representatives can update their information when they wish to apply to other fellowships. Alumni data is also stored

indefinitely through the secured FMS to track and document the impact of the fellowships on alumni careers, provide alumni an opportunity to network with each other, and present opportunities to alumni to respond to a national public health emergency or an urgent public health need.

FMS also includes information that is not in identifiable form. Collected information from applicants and alumni that are not IIF include fellowship entry year, work experience, volunteer activities, research grants, presentations, publications, interests, skills, and abilities. Collected information from employees of public health agencies that are not IIF include activities the fellow will engage in, type of support and training the fellow will receive, and additional professional development opportunities and collaborations that might be available for the fellow.

11. Institutional Review Board (IRB) and Justification for Sensitive Questions

This information collection includes sensitive and identifiable information on the applicant's identity, contact information, educational records, and citizenship or visa status. Although the information may be considered sensitive, its collection is required to determine the eligibility of applicants for fellowship opportunities. Safeguards are in place to ensure that sensitive, identifiable information is protected.

This data collection is not considered research, and approval by the CDC Institutional Review Board (IRB) is not required (Attachment 7, Research Determination Memorandum).

12. Estimates of Annualized Burden Hours and Costs

Pilot tests were conducted with fewer than nine respondents for all the modifications to improve usability and determine response times.

The respondent types included in the burden estimates for this ICR are nonfederal applicants, alumni, and employees of public health agencies. The target respondent universe for each data collection differs for each fellowship program. Annualized burden hours and costs presented include only the burden of respondents who are not federal employees or entities.

Use of each data collection module differs among fellowships; for example, PHAP uses only a portion of the Application Module (Attachment 3). The calculated annualized burden and costs for each data collection module take into consideration the variances for each fellowship, the increase in voluntary submission of applications by applicants and employees of public health agencies each year, and an adjustment for increased cost of living in respondents' estimated salaries.

A. Estimated Annualized Burden Hours

The FMS Application Module (Attachment 3) for the applicant component reflects an average of 1 hour per response for an estimated 2,216 applications. The FMS Application Module will also be used for a new information collection: application references. The new addition of applicant references reflects an average of 15 minutes per response, and 4,412 reference letter writers are expected to complete reference letters, each responding once per year. The Alumni Directory (Attachment 4) reflects an average of 25 minutes for an estimated 1,732 respondents each responding once per year. The FMS Host Site Module (Attachment 5) reflects an average of 1 hour for an estimated 448 respondents each responding once per year. The new Activity Tracking Module (Attachment 6) reflects an average of 25 minutes for an estimated 350 respondents each responding twice per year.

A maximum of 200 EIS applicants are invited to participate in Interview Day each year. During Interview Day, these applicants will log into their FMS application module and respond to a single prompted question during a timed, 30-minute session (Attachment 3a).

The total estimated annualized burden hours for applicants, reference letter writers, alumni, and public health agency or organization staff is 4,881. These data collection instruments (Attachment 3-6) resulted in the estimated increase of respondents and burden since 2017.

Following is a table showing the average total response burdens for current FMS application modules by respondent type.

Estimated Annualized Burden Hours*

Type of respondents	Form	Number of respondents	Frequency of Response	Average Burden Time per Response (in hours)	Average total Response Burden (in hours)
Fellowship applicants	FMS Application Module	2216	1	1.00	2216
Reference Letter Writers	FMS Application Module (12.2 – 12.3.3)	4412	1	15/60	1103
Subset of FMS Fellowship Applicants**	FMS Application Module (13.6)	200	1	30/60	100
Public Health Agency or Organization Staff	FMS Activity Tracking Module	350	2	25/60	292
Fellowship alumni*	FMS Alumni Directory	1732	1	25/60	722
Public Health Agency or Organization Staff	FMS Host Site Module	448	1	1.00	448
Total		9358			4881

* Some alumni are deceased or cannot be located. Response burden assumes response from one responding alumnus, on average, every 3 years (which is likely an overestimate of frequency).
** Subset of the total 2216 applicants that are invited to participate in Interview Day each year.

B. Estimates of Annualized Cost to Respondents

There is no cost to respondents other than their time to complete the data collection. The following sources were used to determine the average salaries of fellowship applicants, alumni, and reference letter writers:

- Graduate Student Intern Salaries in USA, http://www.indeed.com/salary?q1=GRADUATE+STUDENT+INTERN&l1=US
- Salary Table GS, 2019, https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/19Tables/html/GS_h.aspx
- US Department of Labor, Bureau of Labor Statistics http://www.bls.gov/oes/current/oes_nat.htm
- HigherEd Jobs Senior-Level Administrator Median Salaries by Title and Institution Type https://www.higheredjobs.com/salary/salaryDisplay.cfm?SurveyID=16

The following source was used to determine the average salaries of employees of public health agencies who submit host site assignment proposals:

- US Department of Labor, Bureau of Labor Statistics
  http://www.bls.gov/oes/current/oes_nat.htm

The calculation for average hourly wage rate takes into consideration an adjustment for cost of living since 2017 as well variations among respondent demographics (e.g., level of education and employment categories. The base wages were then doubled to account for fringe benefits and overahead. The annualized cost burden calculation considers the percentage of respondents represented by fellowship programs.

Estimated Annualized Burden Costs*

Type of respondents	Form	Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Average Hourly Wage Rate	Total Respondent Cost
Fellowship applicants	FMS Application Module	2216	1	1.00	$61.80	$136,948.80
Reference Letter Writers	FMS Application Module (12.2 – 12.3.3)	4412	1	15/60	$181.72	$200,437.16
Subset of FMS Fellowship Applicants**	FMS Application Module (13.6)	200**	1	30/60	$61.80	$6,180.00
Public Health Agency or Organization Staff	FMS Activity Tracking Module	350	2	25/60	$126.52	$36,901.67
Fellowship Alumni	FMS Alumni Directory	1732	1	25/60	$157.52	$113,676.93
Public Health Agency or Organization Staff	FMS Host Site Module	448	1	1.00	$126.52	$56,680.96
Total		9,358				$550,825.52

* Some alumni are deceased or cannot be located. Burden assumes one alumnus responds every 3 years is likely an overestimate of frequency. Average hourly wage rate takes into consideration an adjustment for cost of living since 2017, as well variance among respondent types (e.g., level of education and employment categories).

** Subset of the total 2216 applicants that are invited to participate in Interview Day each year.

13. Estimate of Other Total Annual Cost Burden to Respondents or Record Keepers

There are no other capital or maintenance costs to respondents.

14. Annualized Cost to the Government

Changes to FMS since 2017 include updating to a new technology platform, accommodating new respondents, adding and deleting questions for different program needs, reformatting and modifying instructions to minimize burden, and updating and tailoring technical functions. Costs are based on FMS current requirements and modifications identified by fellowships to ensure that information collection supports the necessary evolution of fellowship implementation and management.

The estimated annualized costs to operate and maintain the system are $465,000. No additional development costs are anticipated for FMS over the next 3-years

Item	Cost Categories	Annualized Cost to Federal Government
Operations & Maintenance (O&M) Cost	Project Management	$46,000
	Program Staff*	$93,000
	System Maintenance and IT Support*	$326,133
Total O&M Cost		$465,133

*Contractor Costs

15. Explanation for Program Changes or Adjustments

In this Revision CDC seeks changes that will result in a net increase of 225 annualized burden hours. Requested revisions are to (1) update to a new technology platform, (2) add a new respondent group who provides references for applicants, (3) add a new component for activity tracking of the fellows' work experience, (4) add a new respondent group of nonfederal applicants, (5) increase the number of host site assignment proposals for some for the fellowship programs, and allow nonfederal host sites the ability to select the applicants within FMS, and (6) enhance the alumni directory with new surveys and questions to better describe the career progression and leadership roles that fellows assume post-fellowship, and provide insights into how graduates apply the skills they acquired during their fellowships.

These changes will contribute significant enhancements and provide CDC with an efficient, effective, and secure electronic mechanism for collecting, processing, and monitoring fellowship information. These changes will accurately reflect evolving fellowship eligibility requirements, provide clarification of existing questions, efficiently and effectively accommodate the changing needs of the fellowship programs. A 3-year revision will allow all fellowship applicants, public health agencies that host fellowship participants and fellowship alumni the continued use of FMS for the submission of electronic data.

The impact on each row of the burden table is described below:

I.   Fellowship Applicants (modified)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Fellowship applicants	FMS Application Module	Current Approval	1,991	1	1.75	3,485
		Revision Request	2,216	1	1.00	2,216
		Net Change	+225	-	- 0.75	-1,269

The revised estimate reflects an adjustment for 225 new fellowship applicants, which includes approximately 75 nonfederal applicants for the following three programs which are being added to FMS: CDC E-learning Institute (ELI), Laboratory Leadership Service (LLS), and Future Leaders in Infectious and Global Health Threats (FLIGHT). Science Ambassador applicants, previously enumerated under "PMR/F Fellowship Applicants," are being incorporated into the general information collection for **Fellowship Applicants**. The estimated burden per response will decrease due to updates in the streamlined and improved FMS platform. Testing of the new information collection forms were tested by 18 program staff, and the average completion time was used to calculate burden. The net effect is a reduction in total burden for the FMS application module.

II.   Letters of Reference (new)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Reference Letter Writers	FMS Application Module	Current Approval	-	-	-	-
		Revision Request	4,412	1	15/60	1,103
		Net Change	+4,412	1	+15/60	+1,103

CDC will include a new group of respondents (applicant references) from whom standardized data collection will be requested regarding applicants' performance, skills, expertise, and work experience. The use of standardized letters of reference is becoming the industry standard for universities, medical schools, and residency applications because this standardized approach has been shown to provide more accurate and useful information for participant selection. This respondent group includes former professors, supervisors, mentors, and deans of academic institutions where the applicant attended school. In the past, individuals providing applicant references were provided only general guidance and asked to provide a non-standardized letter of reference. This change adds 4,412 respondents and 1,103 burden hours to the Revision request.

III.   Interview Day participants (no change)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Subset of FMS Fellowship Applicants**	FMS Application Module	Current Approval	200	1	30/60	100
		Revision Request	200	1	30/60	100
		Net Change	-	-	-	-

Each year a subset of fellowship applicants are invited to participate in Interview Day. There are no changes to this information collection.

IV.   Activity Tracking (new)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Public Health Agency or Organization Staff	FMS Activity Tracking Module	Current Approval	-	-	-	-
		Revision Request	350	2	25/60	292
		Net Change	+350	+2	+25/60	+292

We will establish a new component for activity tracking to allow field supervisors the ability to contribute to fellows' learning assessments directly into FMS. Having one designated secure space for activity tracking in the system will allow the fellowship programs to monitor fellows' learning outcomes throughout the fellowship cycle as part of routine program improvement efforts and allow assessment of whether programs are meeting the expected outcomes of competency-based training programs. In this module field, supervisors will have the ability to contribute to fellows' learning assessments directly into FMS twice yearly. This will allow fellowship staff to review and monitor fellows' learning outcomes, and ensure that fellows are achieving program competencies and are on track for fellowship completion and graduation.

V.   Alumni Directory (modified)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Fellowship Alumni*	FMS Alumni Directory	Current Approval	1,382	1	15/60	346
		Revision Request	1,732	1	25/60	722
		Net Change	+350	-	+10/60	+376

As fellowship programs continue to grow, more graduates are updating their information via the FMS Alumni Directory. In addition, the Presidential Management Fellowship (PMF) program fellows will be added to the FMS Alumni Directory. We added surveys to the Alumni Directory to help fellowship programs understand the career progression and leadership roles that the fellows assume post-fellowship. Other survey questions added were to support the programs to learn how the fellows' are applying competencies and skills acquired during their fellowship and in their new positions. We are therefore increasing our estimates for the number of alumni

respondents, burden per response, and burden hours associated with information collection for alumni.

VI.   Host Site Proposals

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
Public Health Agency or Organization Staff	FMS Host Site Module	Current Approval	408	1	1.5	612
		Revision Request	448	1	1.00	448
		Net Change	+40	-	-30/60	-164

Based on current trends, we anticipate an increase in the number of fellowship programs that seek to receive host site proposals from nine or more nonfederal host site applicants. Changes to the Host Site Module will provide nonfederal host sites with the ability to select fellowship applicants that they wish to interview and to provide their ranking scores directly in FMS for the match process, thus streamlining the match process for the respondents. Efficiencies in the updated FMS platform and streamlining of some of the questions for the position assignment descriptions resulted in significant timesaving. This, in turn, decreased the estimated burden per response from 1.5 hours to 1.0 hours. The net impact will be a reduction of 164 annualized burden hours.

VII.   Science Ambassadors (incorporated into the Fellowship Applicants Row of the burden table)

Type of respondents	Form		Number of respondents	Frequency of Response	Average Burden per Response (in hours)	Total Response Burden (in hours)
	FMS Application Module for Science Ambassadors	Current Approval	150	1	45/60	113
		Revision Request	-	-	-	-
		Net Change	-	-	-	-

This item was included in the previous approval, and it was listed as a separate row in the burden table. For this revision request, the nonfederal Science Ambassador applicants have been rolled into the Fellowship Applicants row in the burden table as a result of the more efficient user interface. Thus, deleting them as a separate row in the burden table as previously submitted.

16. Plans for Tabulation and Publication and Project Time Schedule

Internal reports will be generated using available FMS data elements to provide trends and program data for DSEPD leadership and fellowship managers. Staffs from each fellowship program collect the information and compile them for inclusion in program reports documenting fellowship progress and performance; only aggregate data are reported. Programmatic data from FMS reported include trends and program data such as the number and types of applicants and host sites, the number of selected and matched candidates and host site assignments, demographics of alumni (e.g., employed in private or government sector), and continuous activity tracking. The data elements for the Application Module (Attachment 3), the FMS Alumni Directory (Attachment 4), the FMS Host Site Module (Attachment 5), and the FMS activity Tracking Module (Attachment 6), are documented with screenshots and dedicated tables indicating the additional data elements collected by other specified fellowship programs.

Timeline of Key Events following Receipt of OMB Approval to ICR

Key Events					Timeline
Continue collecting **Host Site Assignment Proposals** from nonfederal public health agencies for EIS, LLS, PEF, PHAP, PHIFP, and PMR/F.					Once per year for three years
Continue collecting **Application** information for all fellowships from nonfederal applicants.					Once per year for three years
Fellowship	**Start Collection**	**End Collection**	**Eligibility and Review**	**Selection process**	
EIS	March 1	June 6	June 6-Aug 13	Sep 11–May 8	
ELI	Sep 15	Oct 30		Jul 1-Oct 15	
EEP	Feb 1	Mar 31	Apr 1–Apr 30	May 1 – Jun 30	
FLIGHT	Aug 20	Sep 3	Sep 3- Sep 13	Sep 13 – Nov 20	
LLS	April 1	July 5	July 22 - Aug 12	Aug 13 - Nov 15	
PEF	Sep 1	Feb 1	Oct 1–Feb 15	Feb 15 – Apr 15	
PHIFP	Jul 1	Dec 15	July 1–Dec 15	Mar 1 – May 15	
PHAP	April 1	Oct 13	April 8-May 31	May 22-August 5	
PMR/F	May 1	Oct 15	May 1–Oct 15	Oct 15–Feb 15	
SAF	Nov 15	Jan 15	Jan 16–Jan 31	Feb 1–Mar 31	
Check **Alumni Directory** data for completeness for all fellowships					Every three months for 3 years
Begin collecting **Activity Tracking** information for all fellowships					Immediately upon receipt of approval
End data collection or obtain extension from OMB					3 years after receipt of approval

17. Reasons Display of OMB Expiration Date is Inappropriate

CDC is not requesting an exemption from displaying the expiration date.

18. Exceptions to Certification for Paperwork Reduction Act Submissions

No exceptions to certification apply to this request.