FY 2019 HERD Survey Population Screening Methodology

For the FY 2019 cycle of the Higher Education Research and Development (HERD) Survey, the National Science Foundation will again field two versions of the survey: a version for institutions expending \$1,000,000 or more for research and development (R&D) and a shorter version for institutions spending between \$150,000 and \$999,999 for R&D. This document outlines the specifics for how each population will be defined and identified.

Defining the Populations

For both FY 2019 surveys, the HERD and the HERD Short Form, the population is made up of public and private nonprofit academic institutions in the United States that offer an accredited bachelor's degree or higher and are headed by a president, chancellor or equivalent. The population for the HERD survey is those institutions that expended \$1,000,000 or more for R&D in FY 2018. The population for the HERD Short Form is institutions that spent at least \$150,000 but less than \$1,000,000 for R&D in FY 2018.

Frame Construction

We will compile a list of institutions that includes all institutions in the FY 2018 HERD population or population review, all public or private nonprofit institutions in the Integrated Postsecondary Education Data System (IPEDS) that grant bachelor or higher degrees, and all institutions included in the Higher Education Publication (HEP) Higher Education Directory (HED) that are public or private nonprofit and grant bachelor's degrees or higher. Specific guidelines for downloading IPEDS data from the Department of Education website will be followed. A list of all accredited, degree-granting institutions in the U.S. will be purchased from HEP. Included in the data obtained from IPEDS and HEP will be research expenditures, information about highest degree offered, type of control (e.g., public, private), title of the senior administrator, whether the institution is part of a system, and institution city and state. Data files from all stages of frame construction will be stored for quality control reviews. The majority of the frame will be a subset of institutions included in the list. The frame will include:

- 1) All institutions reporting \$1,000,000 or more on the FY 2018 HERD. These institutions will be included the surveyed population for the FY 2019 HERD survey without additional review.
- 2) All institutions reporting \$150,000 or more but less than \$1,000,000 on the FY 2018 HERD survey. These institutions will be included in the surveyed population for the FY 2019 HERD Short Form survey without additional review.
- 3) Institutions that were part of the FY 2018 HERD population and imputed with R&D expenditures over \$150K. Unlike the institutions in the previous two groups, these institutions will be sent a population review screener as a way of confirming our assumptions about their FY 2018 expenditures.

- 4) Institutions reporting greater than \$0 for research on the 2017 IPEDS finance survey¹.
- 5) Institutions that did not report expenditures to IPEDS but based on the name, location, administration and system membership appear to be a branch of an institution already included in the frame.
- 6) U.S. Service institutions.

Institutions reporting less than \$150,000 on the FY 2018 HERD survey will be excluded from the frame. These institutions have already indicated that they do not meet the population criteria. Additionally, institutions who projected in last year's population review that they would have less than \$150,000 for FY 2018 will also be excluded from the frame. If an institution is part of a multi-campus university, we will review the administrative structure to determine what campuses should be considered individual reporting units. The system and administration information available in HEP, IPEDS and HERD will inform much of this decision making but we will also be reviewing institution websites and contacting institutions as needed. We will also exclude those that are surveyed but inactive.

Research Institutions

Within the frame we want to capture two types of research institutions that may be missed under other frame criteria -1) research institutions that are not typically considered universities or colleges but do house a program for granting advanced degrees and 2) research institutions that are part of a university system, are not independent degree-granting institutions, and do not fall under the financial management of one of the degree-granting campuses.

- Research institutions that house a graduate degree program will be identified by reviewing
 the list of accredited masters or doctoral granting institutions that are included in the list
 described above, did not report research expenditures to IPEDS, and are not already included
 in the frame based on other criteria. We will review the website of these institutions for
 indications that they are preforming research.
- Identifying research institutions within a university system that are not already included in
 the survey data of a current HERD institution is a little more difficult. These institutions are
 not separately accredited and do not appear in HEP files or IPEDS. Data collection staff will
 review the websites of all state-level university systems and attempt to identify research
 centers managed separately from an academic campus.

Population Review Screener

All institutions that are included in the frame and are not already considered part of the survey population (see 1) and 2) under Frame Construction) will be screened for inclusion in survey population. A draft of the FY 2019 population review screener is included in Appendix A. The

¹ The IPEDS Survey collects expenses by function and by accounting standards (Financial Accounting Standards Board (FASB) and Governmental Accounting Standards Board (GASB)). Current year total expenses for research from the FASB and GASB versions of the survey will be used. Data from the 2015 IPEDS Finance survey is the most recent data available.

screener questions was changed this year to ask for expenditure ranges for FY 2018 and FY 2019. In recent years, up to 75% of institutions sent the population review screener had also been contacted and disqualified from inclusion in the population in the previous year. Asking for R&D expenditure amounts for two years, reduces burden to the population by allowing us to limit contacts to every two years.

Population Review Procedures

We propose two types of procedures for the population review. For typical, stand-alone degree-granting institutions, we will follow a standard set of procedures with form e-mail and letters, which is described below. For institutions where we need to determine whether the institution meets our criteria for inclusion in the population as a unit separate from a parent institution, the population review will be conducted through individualized e-mails and phone calls completed by experienced HERD data collection staff and directed by the project director.

Appendix B includes a proposed calendar and contacts for the standard FY 2019 population review contacts. If an institution responded to the screener last year and the respondent was not the president, chancellor or equivalent, we will go directly to that respondent again this year to request information. These contacts are labeled as version 1 in latter sections. If the institution is new to the frame this year, was a nonrespondent last year, or the president was the respondent, then we will contact the senior administrator's office. These contacts are labeled as version 2 in latter sections. Version 1 and version 2 are identical except for the recipient. A third set of contacts (version 3) will be sent to institutions where an e-mail for the president, chancellor or equivalent cannot be found. Again, this version is very similar to others except it is formatted as a letter with a hard copy version of the survey enclosed and the time between contacts is longer to allow extra time for mail delivery. We expect the group of institutions without identifiable e-mail addresses to be very small.

After two reminder e-mails, we will contact institutions during two rounds of phone calls. After two rounds of calls, we will send a reminder via 2-day FedEx to all institutions that have not completed the screener. The package will include a letter, a hard copy version of the screener and a postage-paid return envelope.

Once the data collection team believes that no additional institutions are going to respond to the population review, we will send NSF a list of all nonresponding institutions. NSF then decides which institutions should be included as a part of the FY 2019 population.

Appendix A Population Review Screener

(see attachment 4: FY 2019 HERD Survey population review questionnaire in the OMB submission documents)

Appendix B Collection Schedule and Contacts

Contact	Date	Description/Message	Mode	From
1	Monday, 5 August 2019	Screener launch email	Email or Fed Ex	Michael Gibbons of NCSES
2	Monday, 19 August 2019	Nonresponse reminder 1	Email	Michael Gibbons of NCSES
3	Tuesday, 3 September - Friday, 6 September 2019 and Monday, 16 September - Friday, 20 September 2019	 Nonresponse reminder 2 and 3 Version 1 for calls to primary contact from last year Version 2 for senior administrator 	Phone	ICF staff
4	Monday, 30 September 2019	Nonresponse reminder 4	Fed Ex	Michael Gibbons of NCSES
	I	Post Response Contacts for Eligible Institutions		
5	As completed	 Thank you for eligible institutions Version 1 email to senior administrator copying designated point of contact Version 2 letter to senior administrator with copy sent to designated point of contact 	Email or Letter	Michael Gibbons of NCSES
	1	ost Response Contacts for Ineligible Institutions) (' 1 1 1
6	As completed	 Thank you for ineligible institutions under threshold Version 1 email to senior administrator copying designated point of contact Version 2 letter to senior administrator with copy sent to designated point of contact 	Email or Letter	Michael Gibbons of NCSES

Contact 1, version 1

Population Screener Launch Email

To: Primary contact email

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Attachment: HERD survey screener PDF

Dear [[firstname]] [[lastname]]:

I am writing to request your assistance in helping the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) measure nationwide spending on research and development (R&D) at colleges and universities. By answering five short questions (see attached questionnaire), you will help us update our list of institutions for NSF's Higher Education Research and Development (HERD) Survey. Even if your institution has no R&D, it is still very important that we hear from you so we can take your institution off our list.

To complete the questionnaire please 1) enter your responses into the attached file, 2) save it to your desktop, 3) reply to this email and attach your saved questionnaire.

The NSF HERD Survey is an annual survey of U.S. institutions with annual R&D expenditures of \$150,000 or more. It covers nonprofit institutions that offer an accredited bachelor's or higher degree. NSF is the federal agency responsible for compiling and reporting the total amount spent on R&D within the United States from all sources of funding, both private and public. The published statistics from our surveys are used to show the contribution of U.S. academic institutions to research. Your assistance will help us make sure that our list of institutions performing R&D is complete and accurate. Institutions are often included in this review because they have reported having research expenses in their previous year's IPEDS report, which indicates they may qualify to participate in the upcoming HERD survey.

I would appreciate very much if you could return your response via email by **Friday**, **August 16**, **2019**. If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Contact 1, version 2

Population Screener Launch Email

To: Senior administrator email

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Attachment: HERD survey screener PDF

Dear [[adminsalutation]] [[adminlastname]]:

I am writing to request your assistance in helping the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) measure nationwide spending on research and development (R&D) at colleges and universities. By answering five short questions (see attached questionnaire), you will help us update our list of institutions for NSF's Higher Education Research and Development (HERD) Survey. Even if your institution has no R&D, it is still very important that we hear from you, so we can take your institution off our list.

To complete the questionnaire please 1) enter your responses into the attached file, 2) save it to your desktop, 3) reply to this email and attach your saved questionnaire.

The NSF HERD Survey is an annual survey of U.S. institutions with annual R&D expenditures of \$150,000 or more. It covers nonprofit institutions that offer an accredited bachelor's or higher degree. NSF is the federal agency responsible for compiling and reporting the total amount spent on R&D within the United States from all sources of funding, both private and public. The published statistics from our surveys are used to show the contribution of U.S. academic institutions to research. Your assistance will help us make sure that our list of institutions performing R&D is complete and accurate. Institutions are often included in this review because they have reported having research expenses in their previous year's IPEDS report, which indicates they may qualify to participate in the upcoming HERD survey.

I would appreciate very much if you could return your response via email by **Friday**, **August 16**, **2019**. If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Contact 1, version 3

Population Screener Launch Letter

On HERD letterhead. Hard-copy of screener and postage paid envelope included. Sent via Fed-Ex 2-day

Date letter is to be sent

[[adminfirstname]] [[adminmiddlename]] [[adminlastname]] [[admintitle]] [[instnameletters]] [[adminaddr]] [[admincity]], [[adminstate]] [[adminzip]]

Dear [[adminsalutation]] [[adminlastname]]:

I am writing to request your assistance in helping the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) measure nationwide spending on research and development (R&D) at colleges and universities. By answering three short questions (see enclosed questionnaire), you will help us update our list of institutions for NSF's Higher Education Research and Development (HERD) Survey. Even if your institution has no R&D, it is still very important that we hear from you so we can take your institution off our list.

The NSF HERD Survey is an annual survey of U.S. institutions with annual R&D expenditures of \$150,000 or more. It covers nonprofit institutions that offer an accredited bachelor's or higher degree. NSF is the federal agency responsible for compiling and reporting the total amount spent on R&D within the United States from all sources of funding, both private and public. The published statistics from our surveys are used to show the contribution of U.S. academic institutions for research. Your assistance will help us make sure that our list of institutions performing R&D is complete and accurate. Institutions are often included in this review because they have reported having research expenses in their previous year's IPEDS report, which indicates they may qualify to participate in the upcoming HERD survey.

I would appreciate very much if you could respond by **Friday**, **August 30**, **2019**. Please return the enclosed questionnaire in the postage-paid return envelope or fax it to 866-936-9376.

If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Sincerely,

Michael Gibbons

National Center for Science and Engineering Statistics

National Science Foundation

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Contact 2, version 1

Nonresponse Reminder 1

To: Primary contact email

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Attachment: HERD survey screener PDF

Dear [[firstname]] [[lastname]]:

We need your response as soon as possible to a short set of questions for the Higher Education Research and Development Survey conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF). Please complete and return the attached PDF questionnaire. We would very much like to have your institution's information so that our coverage of academic institutions will be complete.

I would appreciate very much if you could return your response via email by **Friday**, **August 30**, **2019**. Even if your institution had no FY 2018 or FY 2019 R&D expenditures, we still need to hear from you. NSF is the federal agency responsible for estimating the total amount spent on R&D within the U.S. Your institution's response helps us provide complete and accurate national statistics.

To complete the questionnaire please 1) enter your responses into the attached file, 2) save it to your desktop, 3) reply to this email and attach your saved questionnaire.

If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Contact 2, version 2

Nonresponse Reminder 1

To: Senior administrator email

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Attachment: HERD survey screener PDF

Dear [[adminsalutation]] [[adminlastname]]:

We need your response as soon as possible to a short set of questions for the Higher Education Research and Development Survey conducted by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF). Please complete and return the attached PDF questionnaire. We would very much like to have your institution's information so that our coverage of academic institutions will be complete.

I would appreciate very much if you could return your response via email by **Friday**, **August 30, 2019**. Even if your institution had no FY 2018 or FY 2019 R&D expenditures, we still need to hear from you. NSF is the federal agency responsible for estimating the total amount spent on R&D within the U.S. Your institution's response helps us provide complete and accurate national statistics.

To complete the questionnaire please 1) enter your responses into the attached file, 2) save it to your desktop, 3) reply to this email and attach your saved questionnaire.

If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Contact 3, version 1

Nonresponse Reminder 2 and 3

Call the office of the primary contact at each institution that has not responded to the screener.

In-person

Issues to be highlighted during a phone call to a nonrespondent from data collection staff:

- 1. Indicate that you are calling on behalf of the National Science Foundation regarding the Higher Education Research and Development Survey Screener.
- 2. Confirm receipt of the Screener Nonresponse email/letter
 - If the contact does not have a copy of the email, verify their email address and resend the email.
 - If the letter was not received ask if there is an e-mail we can send the letter to expedite the process. If not then confirm the mailing address and resend the letter with attached population review, or ask if they could answer the population review via phone.
- 3. Inform the contact that NSF needs a response within a week.
- 4. Ask if the screener was forwarded to another office and if they can follow up on the status of the institutions response.
- 5. Ask the respondent if he/she has any questions and let them know that if they have any questions in the future, they can send an email to support@herdsurvey.org or call you toll free at 866-936-9376.

Leaving a message

1. If the primary contact's office cannot be reached leave a voice mail identifying yourself and the survey, the purpose of the call, the date of the email/letter referenced, and the action the respondent must take.

Voicemail Example: "Hello my name is [[survey staff]], and I'm calling on behalf of the National Science Foundation about the Higher Education R&D Survey Screener. Please call us at 866-936-9376 and let us know when you will be able to complete the brief five question survey. If you have any questions about the survey or need us to resend survey information, give us a call."

A similar message, with needed revisions, can be left with an administrative assistant or coworker.

2. During a call cycle, typically a week, only one message should be left, but continue to try and contact respondents at different times of day throughout the week-long cycle.

Contact 3, version 2

Nonresponse Reminder 2 and 3

Call the office of the senior administrator at each institution that has not responded to the screener.

In-person

Issues to be highlighted during a phone call to a nonrespondent from data collection staff:

- 6. Indicate that you are calling on behalf of the National Science Foundation regarding the Higher Education Research and Development Survey Screener.
- 7. Confirm receipt of the Screener Nonresponse email/letter
 - If the contact does not have a copy of the email, verify their email address and resend the email.
 - If the letter was not received ask if there is an e-mail we can send the letter to expedite the process. If not then confirm the mailing address and resend the letter with attached population review, or ask if they could answer the population review via phone.
- 8. Inform the contact that NSF needs a response within a week.
- 9. Ask if the screener was forwarded to another office and if they can follow up on the status of the institutions response.
- 10. Ask the respondent if he/she has any questions and let them know that if they have any questions in the future, they can send an email to support@herdsurvey.org or call you toll free at 866-936-9376.

Leaving a message

2. If the senior administrator's office cannot be reached leave a voice mail identifying yourself and the survey, the purpose of the call, the date of the email/letter referenced, and the action the respondent must take.

Voicemail Example: "Hello my name is [[survey staff]], and I'm calling on behalf of the National Science Foundation about the Higher Education R&D Survey Screener. Please call us at 866-936-9376 and let us know when you will be able to complete the brief five question survey. If you have any questions about the survey or need us to resend survey information, give us a call."

A similar message, with needed revisions, can be left with an administrative assistant or coworker.

2. During a call cycle, typically a week, only one message should be left, but continue to try and contact respondents at different times of day throughout the week-long cycle.

Contact 4

Nonresponse Reminder 6

On HERD letterhead. Fed Ex Population Screener Launch Letter to President's Office. Hard-copy of screener and postage paid envelope included.

Date letter is to be sent

[[adminfirstname]] [[adminmiddlename]] [[adminlastname]] [[admintitle]] [[instnameletters]] [[adminaddr]] [[admincity]], [[adminstate]] [[adminzip]]

Dear [[adminsalutation]] [[adminlastname]]:

I am writing to request your assistance in helping the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) measure nationwide spending on research and development (R&D) at colleges and universities. By answering five short questions (see enclosed questionnaire), you will help us update our list of institutions for NSF's Higher Education Research and Development (HERD) Survey. Even if your institution has no R&D, it is still very important that we hear from you so we can take your institution off our list.

The NSF HERD Survey is an annual survey of U.S. institutions with annual R&D expenditures of \$150,000 or more. It covers nonprofit institutions that offer an accredited bachelor's or higher degree. NSF is the federal agency responsible for compiling and reporting the total amount spent on R&D within the United States from all sources of funding, both private and public. The published statistics from our surveys are used to show the contribution of U.S. academic institutions for research. Your assistance will help us make sure that our list of institutions performing R&D is complete and accurate. Institutions are often included in this review because they have reported having research expenses in their previous year's IPEDS report, which indicates they may qualify to participate in the upcoming HERD survey.

I would appreciate very much if you could respond by **Friday, October 18, 2019**. Please return the enclosed questionnaire in the postage-paid return envelope or fax it to 866-936-9376.

If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Sincerely,

Michael Gibbons

National Center for Science and Engineering Statistics

National Science Foundation

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Contact 5, version 1

Thank you to Eligible Institutions (Institutions reporting \$150,000 or more)

To: Senior administrator email

CC: Designated contact (if provided)

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Dear [[adminsalutation]] [[adminlastname]]:

On behalf of the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF), I want to thank [[instnameletters]] for participating in the institution update for the Higher Education Research and Development (HERD) Survey. Based on the information provided, your institution will be included in the FY 2019 HERD Survey. We will send [[firstname]] [[lastname]] information on accessing the survey website when the survey begins for all institutions in November.

If you have questions in the meantime, please do not hesitate to contact me at mgibbons@nsf.gov or 703-292-4590.

Thank you very much for your help with this effort.

Contact 5, version 2

Thank You to Eligible Institutions (Institutions reporting \$150,000 or more)

On HERD Letterhead

Date letter is to be sent

[[adminfirstname]] [[adminmiddlename]] [[adminlastname]] [[admintitle]] [[instnameletters]] [[adminaddr]] [[admincity]], [[adminstate]] [[adminzip]]

Dear [[adminsalutation]] [[adminlastname]]:

On behalf of the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF), I want to thank [[instnameletters]] for participating in the institution update for the Higher Education Research and Development Survey. Based on the information you provided, your institution is now included in the FY 2019 survey. Our survey contractor, ICF, will send [[firstname]] [[lastname]] information on accessing the survey website when the survey begins for all institutions in November.

If you have any questions, please contact our survey contractor, ICF, at support@herdsurvey.org or call toll-free 866-936-9376.

Thank you for your help with this national effort.

Sincerely,

Michael Gibbons Project Officer

Higher Education R&D Survey

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National Center for Science and Engineering Statistics

National Science Foundation

Cc: [[firstname]] [[lastname]]

Contact 6, version 1

Thank You Email for ineligible institutions (Institutions reporting less than \$150,000)

To: Senior administrator email

CC: Designated contact (if provided)

From: NSF Higher Education R&D Survey

Re: NSF Higher Education R&D Review ([[inst_id]])

Dear [[adminsalutation]] [[adminlastname]]:

On behalf of the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF), I want to thank [[instnameletters]] for participating in the institution update for the Higher Education Research and Development Survey. We appreciate your help in providing current information on your institution's R&D activity. According to the information you submitted, your institution spent less than \$150,000 on R&D in FY 2018. Because this does not meet the threshold for the survey population, your institution will not be included in the FY 2019Higher Education R&D Survey.

If you have questions please contact me at mgibbons@nsf.gov, or call me at 703-292-4590.

Thank you again for your cooperation in providing this important information.

Contact 6, version 2

Thank You Letter for ineligible institutions (Institutions reporting less than \$150,000)

On HERD Letterhead

Date letter to be sent

[[adminfirstname]] [[adminmiddlename]] [[adminlastname]] [[admintitle]] [[instnameletters]] [[adminaddr]] [[admincity]], [[adminstate]] [[adminzip]]

Dear [[adminsalutation]] [[adminlastname]]:

On behalf of the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF), I want to thank [[instnameletters]] for participating in the institution update for the Higher Education Research and Development Survey. We appreciate the update on the current status of your institution's R&D activity. According to the information you submitted, your institution spent less than \$150,000 on R&D in FY 2018. Because this does not meet the threshold for the survey population, your institution will not be included in the FY 2019 survey.

If you have questions please contact me at mgibbons@nsf.gov, or call me at 703-292-4590.

Thank you for your help with this national effort.

Sincerely,

Michael Gibbons Project Officer

Higher Education R&D Survey

National Center for Science and Engineering Statistics

National Science Foundation

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Cc: [[firstname]] [[lastname]]