Attachment A – Pilot ECD Survey Contact Strategy Narrative Protocol

Contact Strategies for a Two Stage Data Collection Effort

I. Introduction

This attachment provides a description of the contacting strategies for the two stages of data. In outlining the strategies used in our data collection effort, we note both the approximate timing of events (e.g., when materials are sent or used) and how the materials vary by strategy and/or experimental group. To aid the reviewer we refer to two sets of visual aids: tables that highlight the materials are used for each step with stages of data collection and a corresponding flowchart depicting the sequence of contacts within each stage. The tables and flowcharts are available for review on pages 13-18 of this appendix. Contact materials are provided in the attachments B and C. The attachments correspond to the contact material noted in the tables.

II. Protocols for Institutional Contacting

In the methodological study, we developed and tested an institutional contacting protocol modeled off the protocols used in the O*Net establishment study and leveraging the contacts developed through the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). This protocol was designed to simultaneously maximize institutional participation rates and minimize burden on institutional respondents by recommending List Coordinators (LCs) using the following six institutional attributes:

1. Existence of an Institutional Research Office (IRO),
2. What authority is represented by the offices in which GSS respondents work (e.g., high administrative office such as Provost or another office with less authority),
3. Whether current GSS respondents are approachable,
4. The number of different locations where the requested ECD data reside,
5. Which of the requested data fields are available, and
6. Institutional structure or policies related to data sharing, and amenability to research participation within the relevant institutional hierarchy.

The attributes in (1) – (6) will be used to determine the protocol we will use when contacting the institution. The six contact strategies are summarized in Table 1 below. The rows indicate the possible combinations of GSS respondent in the IRO and their approachability. Similarly, the columns show the combinations of GSS respondents who are in another office, how well placed they are (amount of influence), and their approachability. The cells where the rows and columns intersect define the protocol strata.

Table 1. Strategies for Initial Contact with Institutions

	Other approachable GSS respondent, well-placed	**Other approachable GSS respondent, not well-placed**	**Other unapproachable GSS respondent or no other GSS respondent**
IRO respondent in GSS, approachable	A: Contact IRO GSS respondent to request data or otherwise best contact	A: Contact IRO GSS respondent to request data or otherwise best contact	A: Contact IRO GSS respondent to request data or otherwise best contact
IRO respondent in GSS, unapproachable	C: Contact well-placed GSS respondent to request data or otherwise best contact ***outside of the IRO***	E: Contact best GSS respondent to request best contact	F: Contact high admin office (e.g., President) for permission and to obtain best contact
IRO, but respondent not in GSS	B: Contact well-placed GSS respondent to request data or otherwise best contact	D: Contact the IRO directly to request data	D: Contact the IRO directly to request data
No IRO	B: Contact well-placed GSS respondent to request data or otherwise best contact	E: Contact best GSS respondent to request best contact	F: Contact high admin office (e.g., President) for permission and to obtain best contact

NOTE: IRO = Institutional Research Office

Using available information, academic institutions and FFRDCs will be assigned to a single protocol stratum (A through F) prior to initiating contact. Reassignments to other protocol strata will be made, in some cases however, based upon information obtained either during or after the initial contact. The protocol stratum assignment thus determines the contact strategy and data collection protocol that will be applied to institutions. Institutions that participated in the methodological pilot will retain their LCs.

In addition to being assigned to a protocol stratum institutions will eventually be assigned to one of four groups, referred to as the NSF and the HA (High Authority), HA Opt-in, and HA Opt-out groups. Assignment to the conditions primarily determines the type of communications the ECDs will receive about the Web survey. Under the NSF treatment, ECDs will receive all communications regarding participation to the Web survey from NSF via RTI International. Under the HA treatment, two communications—the initial pre-notification will be sent by an institutional high authority figure (or HA) instead of RTI and a letter of support will be enclosed with the mail reminder from the HA. Under the HA Opt-in group, ECDs will receive an e-mail from the HA requesting permission to provide the contractor with contact information so that survey related communications can be sent. Under the HA Opt-out group, ECDs will be sent a similar e-mail, but will be asked to reply by a given date if they do not wish for their contact information to be shared for survey participation. Therefore, with the exception of the first contact (pre-notification) the communications are the same across the four groups.

Contacting Institutions

For each academic institution and FFRDC we will identify a High Authority (HA) and a List Coordinator (LC) from whom we will seek assistance with the survey. For universities, the HA will often be the president or a provost determined to be in a position recognizable to ECDs. For FFRDCs, the HA will generally be the center director. The LC will be selected using the above protocol.

After sampling them, the process of identifying an institutional HA will begin. As shown in Figure 1, the first communication with institutions is a lead letter that is sent via FedEx to the institutional HAs. With six protocol strategies it is necessary to have multiple versions of this lead letter. Each version provides an outline of the survey and a brief description of what is being asked of the institution. Content of the letters differs, however, based on the protocol strategy to which the institution has been assigned. As can be seen in Table 3 there are four versions (2-1a through 2-1d) of the FedEx lead letter to HAs. LC identification strategies A, B, C, and E all use a GSS contact as a possible LC and thus share a common lead letter. For strategy D, we notify the university HA that we will contact the Institutional Research Office (IRO) to request the stage one data directly. In Strategy F letters we request that the HA assist us with identifying a qualified person to serve as the survey LC. For all institutions that participated in the methodological study, we will simply confirm the prior HA and LC contact information.

Institutional contact materials can be reviewed in Attachment B. The contacts are grouped by contact number and ordered as they would be received. For example, the four versions of the lead letter can be found in Attachment B in pages labeled "Attachment B.1 – *Lead Letter to High Authorities*…." These are followed by the Survey Participation Form and the HA Brochure that complete the first Institutional Contact. HAs are asked to return the Survey Participation Form to RTI, by mail, e-mail, or fax.

Approximately five days after lead letters are sent to HAs, as noted in the timeline provided in the topmost row of Table 3, *follow-up phone calls* (Attachment B.2 – *Institutional Contact 2*) will be made. The purpose of these calls is to 1) determine if HAs have any questions; and 2) gently prompt HAs to provide the requested materials (e.g., approval forms and letters of support). During the HA follow-up call HAs are also asked if they can provide the letter of support, which is mentioned in the lead letter to the HA, to be included in the mail reminder sent by NSF/RTI and to send a pre-notification e-mail later in the survey (Attachment B.3 – *Institutional Contact 3 HA Group*).

During this call HAs can also indicate that they do not wish to e-mail (or have a designee e-mail) sampled respondents about participation. Based on the methodological study, we anticipate that this will happen with a small number of institutions. In such cases, these institutions will be reassigned to the NSF group and asked to provide two letters of support: one to be included in the ECD pre-notification letter and one to be included in the mail reminder to nonresponding ECDs (both in Attachment B.3 – *Institutional Contact 3 NSF Group*). For both letters of support, the HA will be asked to modify the letter as needed to meet their institution's requirements and send it back to RTI on their institution's letterhead.

Based on the methodological study, we anticipate that a small number of institutions will be required by their institutional procedures to seek the permission of sample members to share their contact information before providing it to NSF. Of the 57 institutions that provided lists in the methodological study, only 3 would not provide the contact information we requested without ECD permission. In these cases, we will request the list of ECDs or potential ECDs without personally identifying contact information and sample based on a anonymous identification number generated by the institution. The institution will then send an e-mail to the sample members informing them of their selection and requesting permission to share their contact information. Some institutions will accept implicit permission whereby ECDs are e-mailed by the HA and if they do not reply noting they do not wish to participate their contact information is shared with the survey contractor (HA Opt-out group). Other institutions require explicit permission to share contact information. For these institutions, an e-mail will be sent by the HA requesting a reply if they are interested in participating (HA Opt-in group).

Immediately following receipt of HA approval, or two weeks after the lead letter is sent if no reply is received from the HA, an *introductory call* (Attachment B.4 – *Institutional Contact 4*) is made to the LC. The purpose of this call is to briefly introduce ourselves and the survey, seek to elicit cooperation, and confirm that they are the best person to serve as the LC. This contact will be skipped if the nominated LC already served in this capacity in the methodological study.

Information packets (Attachment B.5 – *Institutional Contact 5*) will be sent within one day of confirming LCs. Enclosed in these packets, LCs will find a cover letter briefly describing what is being asked of them, a brochure similar to the one HAs received, and a document describing the data fields and specifications. Information packets are intended to provide LCs with an adequate understanding of the survey goals and how their participation is critical to meeting those goals. However, due to variations in institutional data structures and policies, as well as LC interest and capabilities, these packets cannot sufficiently communicate all of the desired information.

Addressing limitations of written communications is the reason for making profiling calls (Attachment B.6 – *Institutional Contact 6*) to LCs approximately four days after information packets are sent. On this call the LC and the IL will collaborate to determine the units within an institution that should be included in the data request, the various locations that must be contacted in order to obtain complete data on all ECDs within these units, characteristics of data file(s) that exist, and other information that define the boundaries and scope of the data for the institution.

Immediately following the profiling call, the IL will send a "next steps e-mail" (Attachment B.7). The content of this e-mail will be contingent upon the profiling call—i.e., whether or not the institution has all fields available and/or can share all requested data fields. Accompanying the "next steps e-mail" is a spreadsheet template. Again, two versions of the spreadsheet will be used. One version will be for institutions with all data fields available. It outlines the fields that are the highest priority. LCs from institutions that do not have the highest priority data fields (e.g., year of degree) will be asked to fill in a template with the job titles and departments of possible ECDs. This information will be used to identify job categories that are most likely to employ ECDs. A list of job titles will be returned to the LC and the data fields available for ECDs in these job categories will be filled.

A "*Certificate of Appreciation*" (Attachment B.8 – *Institutional Contact 8*) will also be sent to the LC immediately following the profiling call. The certificate will be accompanied by a cover letter. Reasons for sending this include showing an appreciation for the time we are asking of LCs and getting immediate buy in from them. Even a nominal token of recognition such as this is appreciated and should result in better response from LCs in terms of a) overall willingness to participate; and b) the effort expended in providing quality data on ECDs.

Reminder/help phone calls to LCs (Attachment B.9 – *Institutional Contact 9*) begin approximately 10 days after the *certificate of appreciation* is sent. These calls have two related purposes: (1) to determine if the LC has any questions about data fields, which ECDs should be included in the sample, etc., and (2) to express how LCs participation is critical to the success of the survey and ask when they will be able to provide the requested information. Multiple calls may be necessary, but as with the entire stage one data collection effort we will be as efficient with calls as possible to minimize burden on LCs.

Early in the methodological study, we learned that the time between initial conversations with HAs and when they sent pre-notification e-mails to ECDs led to confusion about those pre-notification e-mails. To alleviate this issue in the pilot survey we will use phone check-ins with HAs (Attachment B.10 – *Institutional Contact 10*) about two months after the initial contact to provide a status update about their list (received or not, sampled or not), determine if there are any questions or concerns with the letter of support template, remind them that we would like the HA to send the pre-notification e-mails and the reasons for this, provide RTI survey team contact information, and thank them for their support and time.

Once the ECD list is provided to RTI and a sample is drawn, we will notify HAs (for the HA group) that we are ready for them to send pre-notification e-mails (Attachment B.11 – *Institutional Contact 11*). However, our experience in the methodological pilot is that a single notification to HA offices is insufficient. We will therefore remind HAs of the availability of the tool to send pre-notification e-mails and that the sample is ready. The first of these reminders (Attachment B.12 – *Institutional Contact 12*) will be an e-mail follow-up that includes a reminder of their agreement to send the pre-notification e-mails. Also included in the e-mail is a description of an alternate option in which pre-notification e-mails come from NSF with the disclaimer that it is preferable that they send them. This language is included because in the methodological pilot we learned that while some HAs agree to send pre-notification e-mails when the time comes to send them HAs schedules, availability, or general willingness to send the e-mails can change.

About five days after the reminder e-mail, a phone reminder is made to HAs who have not sent pre-notification e-mails (Attachment B.13 – *Institutional Contact 13*). The purpose of this phone call is to provide a gentle reminder to HAs, determine if there are any questions about the tool used to load pre-notification e-mails, and determine if HAs still plan to send the e-mails. The call also provides another opportunity to determine if the HA needs to make alternative arrangements (i.e., change to NSF group) to the pre-notification process.

As can be seen by comparing Figures 1 and 2, following the receipt and review of ECD data, the flow of contacts differs for the NSF and HA groups. After step 7, institutions included in the NSF Group have completed all necessary steps following the receipt and review of ECD contact and demographic data. However, HAs from institutions in the HA Group will be sent a *request to send pre-notification e-mail (*Attachment B.11 – *Institutional Contact 11)*. Instructions on how to use the web-based e-mail assistance tool are included in this communication.

III. Protocols for Contacting ECDs

In the Total Design Method (TDM), Dillman (2007) suggests a multi-contact strategy in which an initial pre-notification is sent, followed by a request to complete the questionnaire and multiple reminders for which there is a heightened sense of urgency with each new request. Building awareness and anticipation of the survey to come is the main purpose of the pre-notification letter. Reminder mailings may jog a sample member's memory about a prior request, but they may also do more than that. It is possible initial requests were not received due to incorrect contact information and a subsequent reminder, if the mode of contact is changed, gives us another opportunity to contact the sample member. But perhaps more importantly, it also gives us the opportunity to "invoke new and more persuasive appeals" (Dillman, 2007: 178). Below we provide a description of the second stage of data collection—web survey administration—that is grounded in the TDM methodology. A stepwise description of each contact is provided and differences across the groups are highlighted.

Pre-notification letters will be sent via USPS mail for the NSF group. For the HA group, *pre-notification e-mails will be sent by a high ranking person within the ECD's institution.* As with institutional contact materials, ECD contact materials are available for review in Attachment C after the contact for which the materials are designed. For example, *pre-notification letters* can be found in Attachment C.1 – *ECD Contact 1*.

Enclosed with the NSF letters will be two documents: the *letter of support* from the institutional HAs and the *ECD brochure*. The pre-notification letters briefly describe the survey and what is being asked of the ECD. Brochures are included to complement the letter by providing more detail on the survey and answering frequently asked questions. Support letters from HAs are included in this contact to enhance the legitimacy of the survey and increase the likelihood that the ECD will deem this worth his or her time and consideration. The ECD brochure will also be available electronically on the main webpage for the survey.

One to two days after the pre-notifications are received by the ECD, RTI will send *login credential e-mails* (Attachment C.2 – *ECD Contact 2*) to each ECD. For the NSF group, this will be 5 business days after mailing the letter. This will ensure adequate time elapses for ECDs in the NSF condition to receive letters in the mail. For the HA group, the login credentials will be automatically generated through an overnight batch process the day after the HA has sent the pre-notification e-mail. For the HA Opt-in group, login credentials will be automatically generated through the same process and sent on a rolling basis as RTI receives notification that the ECD has opted-in to the survey. The same automatic process will generate the login credentials for the Opt-out group. The e-mail will be sent to those ECDs who did not opt-out within one day of receiving a list of ECDs from the HA. Login credential e-mails will include a hyperlink that contains a unique username and password that upon being clicked will open the user's web browser and log them into the secure (i.e., https) survey website.

Whether an ECD receives subsequent communications regarding survey participation is contingent upon their response. That is, only ECDs who do not respond to the initial login credential e-mail will receive follow-up communications. Figure 3 depicts the flow of initial and follow-up communications.
A reminder e-mail #1 (Attachment C.3 – *ECD Contact 3*) will be sent to all ECDs who have not completed the questionnaire within three business days of receiving their login credentials (henceforth all days referred to are business days). The HA and NSF groups will receive e-mails with wording differing based on who sent an initial contact to the ECD. The remainder of the content is the same across the two e-mails. The purpose of this e-mail is to jog the memory of nonrespondents who may have forgotten the initial request. The e-mail includes login credentials for those who may have already deleted the initial credentials e-mail.

R*eminder e-mail #2* (Attachment C.4 – *ECD Contact 4*) will be sent approximately 5 days after the first reminder e-mail. Rationale for a second e-mail is twofold. Following the TDM approach, the language used exhibits a strong form of personalization and the importance of their participation. Attention to individual nonrespondents is exhibited by noting that our records indicate that they have not completed the questionnaire. Attention to the individual indicates to the prospective respondent how important they are to the success of the survey. With only minimal effort the recipient can gain access to the questionnaire. Note: this contact does not vary by group.

A reminder phone call is the fifth contact in our protocol (script is in Attachment C.5 – *ECD Contact 5*). Following the TDM, this contact invokes special procedures. Invoking the special procedure allows us to further intensify our follow-up while at the same time decreasing the intensity of language used. By using a new mode of contact we demonstrate to the prospective respondent that their participation is so critical to our survey that we are attempting to reach them in a new way. A second purpose of the call is to determine if those individuals who broke off after beginning experienced any problems that need to be addressed in order for them to complete the survey. A final purpose of the call is to provide an alternative mode to complete the survey. This option will be offered to potential respondents who would rather complete the survey at that time.

Approximately 10 days after the reminder phone call, a *reminder e-mail #3* (Attachment C.6 – *ECD Contact 6*) will be sent. Similar to the previous reminders, the verbiage used in this contact personalizes the contact and stresses the importance of the ECDs participation. Again, we note that our records indicate that they have not completed the questionnaire. Following the TDM approach, we include themes in this contact not used in previous reminder e-mails. The purpose of this contact is to attempt to assuage concerns and offer new and increasingly compelling reasons why the participation of each ECD is critical to the success of the survey. An automatic login hyperlink is again provided so the ECD may easily access the survey. Note: again this is the same for all ECDs.

An experiment will be included in the set of e-mail reminders. There is limited empirical evidence that the subject line of e-mails can impact response rates (see Couper, 2008 for a summary). That evidence suggests that the survey sponsor can play an important role. Combining this with the evidence for TDM, we experimentally test the sponsor vs. survey and increasing sense of urgency in the subject line.

Table 2. E-mail Subject Line Experimental and Control Conditions

	Control	Experimental Group #1	Experimental Group #2
Login credentials E-mail	NSF Early Career Doctorates Survey	NSF Early Career Doctorates Survey – Your Login Credentials	National Science Foundation ECD Survey – Your Login Credentials
Reminder E-mail #1	NSF Early Career Doctorates Survey	NSF Early Career Doctorates Survey – Reminder	National Science Foundation ECD Survey – Reminder
Reminder E-mail #2	NSF Early Career Doctorates Survey	NSF Early Career Doctorates Survey – Your Help Needed	National Science Foundation ECD Survey – Your Help Needed
Reminder E-mail #3	NSF Early Career Doctorates Survey	NSF Early Career Doctorates Survey – Please Respond	National Science Foundation ECD Survey – Please Respond

A *mail reminder* (Attachment C.7 – *ECD Contact 7*) is made to all nonrespondents about two weeks after the third e-mail reminder. Two versions of the letter are needed based on the need to refer to who notified the potential respondent of the survey (i.e., whether or not we want to refer to an HA). Accompanying the HA letter is *a second letter of support* (also in Attachment C.7 – *ECD Contact 7)*. Again we change the mode of contact and use language that notifies the potential respondent that they are one of only a few nonrespondents, their voice needs to be heard in order for the survey to be valid, and new language is used to describe the kind of data being gathered. As an experiment we will test this special procedure using two different forms of delivery. Cases will be randomly assigned to one of two groups. Letters will be sent via special, high priority mail (FedEx or U.S. Priority Mail) to one group of nonresponding ECDs.

The other group will receive letters via regular, first-class U.S. postal delivery. As Dillman (2007) points out, letters sent via high priority mail differ in the packaging, mode of delivery, and speed with which they are delivered. This makes the letter more noticeable to the recipient before they open the package and is expected to have the effect of lending greater importance and legitimacy of the survey request. However, we theorize that under our contact strategy the change in mode of delivery may be sufficient to garner attention whereas the change to special delivery in TDM is often because previous delivery was by regular U.S. mail. If our theory is correct and regular mail can be used to deliver our special procedure letter with comparable response rates to the special delivery method, substantial savings could be gained in future waves of the survey.

Approximately one week after the mail reminder, telephone interviewers will begin calling nonrespondents to conduct computer-assisted telephone interviews (CATI) (script is in Attachment C.8 – *ECD Contact 8)*. This is the third special procedure contact. It is similar to the previous telephone reminder. Again with this call the intensity is increased, but unlike the reminder call the CATI call does so both through a mode change and through the attempt to persuade the potential respondent to complete at the time of the call. The purpose of the call is therefore contingent upon a) the circumstances of the call; and b) how far from the end of data collection the case is. While interviewers will attempt to persuade potential participants to complete the interview over the phone at the time of the call, initial attempts will serve as reminder calls for cases where individuals volunteer that they will complete the web soon. Those individuals who indicate they will complete the web survey, but do not do so within one week will receive follow-up calls to continue to persuade them to complete the survey.

After approximately one month of CATI calls, a final e-mail reminder (Attachment C.9 – *ECD Contact 9)* will be sent. This final reminder switches back to the electronic format for two reasons. One reason for the switch is to return to the mode of contact that allows the simplest method of logging into the survey. The three previous contacts were in modes that for these nonrespondents essentially served as reminders. While there were important reasons for using these alternate methods of contacting the potential respondent, not providing the simplest method of logging into the web survey is the one limitation to them. Moreover, this final appeal e-mail invokes a combination of messages, some of which have not been used in recent contacts, that we believe provides the most intense plea for participation to date. Again, potential respondents are reminded that the survey has a unique focus, that survey offers an indirect benefit to them by helping determine how best to support the research community, and that only a small number of people were selected for the survey and that their participation is critical to the validity of the survey.

Finally, a thank you e-mail (Attachment C.10 – *ECD Contact 10*) will be sent to each ECD who completed the survey. There are three reasons for this contact. The primary reason for the contact is to confirm that the ECD is done and recognize that the respondents' time is valuable and appreciated. There are also two secondary reasons for the e-mail. Sending the thank you e-mail builds rapport with respondents for future contacts. Should they be selected to participate in the full implementation we will need their participation again. Social exchange theory, on which TDM is based, suggests that showing appreciation for one's efforts is a valuable use of time and energy. Finally, the thank you e-mail can serve as a way to determine whether one has participated. In the methodological pilot, some participants contacted erroneously believed they had completed the survey. Being able to inquire as to whether a thank you e-mail was received will quickly help verify successful completion. If a potential respondent indicates they have completed the survey when we make reminder or CATI calls, we will be able to ask about receiving our thank you e-mail. Should they not recall the e-mail or not have received, it will be an indication to the interviewer that the survey was not completed. This information can then be used to persuade respondents with partially completed surveys to finish the survey.

IV. Conclusion

In this Contact Strategy Narrative Protocol, we have delineated the steps involved in both of the two data collection stages. A description of each step within the two stages has been provided, in addition to the purpose of the corresponding contact material. It has been noted that there are multiple versions of some materials based on the protocol stratum to which the institution is assigned. Highlights of these differences include:

- The content of the initial letters to institutional high authorities vary based on our ability to identify a good LC candidate;
- Requests of HAs differ based on their willingness to notify sample members of their selection for the study. HAs willing to e-mail the sample members in their organization (or designate an authority figure to send these e-mails) will receive up to five additional communications from RTI after the stage 2 sampling is complete. The first will ask the HA to send a pre-notification e-mail. Up to four reminder communications (e-mail and phone) will be made to HAs until they send pre-notification e-mails, they inform RTI they will not send the e-mails, or it is determined by RTI that subsequent requests for the pre-notification are not appropriate, at which time pre-notification is sent by RTI on behalf of NSF. HAs in the NSF treatment group will receive no further communication from RTI after they have provided the ECD contact information and letters of support.

- Delivery of pre-notification differs by treatment group. Most sample members will receive an e-mail from an institutional authority figure notifying them of a soon to be received survey request (HA treatment group). Sample members in the NSF treatment group will receive notification via first-class USPS mail. Sample members in the opt-out and opt-in treatment groups will receive an e-mail from an authority figure in their organization asking for explicit or implicit permission to share contact information with NSF and the study contractor.

To the extent possible we will follow the steps outlined in this document. With the numerous varying factors across institutions it is possible that an unexpected scenario may arise. In these situations we will develop contingency plans based on the unique circumstances of the institution. However, we believe the current contact strategy plan lays out appropriate steps for the vast majority of institutions and that any contingencies will require only minor modifications to the existing plan.

References

Couper, M.P. 2008. Designing Effective Web Surveys. New York: Cambridge University Press.

Dillman, D. 2007. *Mail and Internet surveys: The tailored design method* (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Table 3. List of Institutional Contacts with Contact Timing

Contact	Mode	Day							
		1	**5**	**15**	**19**	**29-**	**~60**	**65**	**70**
1. HA: FedEx package 2.1a Letter – LC Strategies ABCE 2.1b Letter – LC Strategy D 2.1c Letter – LC Strategy F 2.1d Letter – Prior ECD Study LC Survey participation form HA brochure	Mail	B.1							
2. HA: Follow-up call with outline script	Phone		B.2						
3. HA: Pre-notification e-mail and one letter of support template (HA group only)	E-mail		B.3						
3. HA: Two letter of support templates e-mail (NSF group only)	E-mail		B.3						
4. LC: Introductory call with outline script	Phone			B.4					
5. LC: Information packet mailing Cover letter LC brochure Description of data fields and specifications	Mail			B.5					
6. LC: Profiling call with outline script	Phone				B.6				
7. LC: Overview/"next steps" e-mail	E-mail				B.7				
8. LC: Certificate of appreciation packet Cover letter Certificate of appreciation	Mail				B.8				
9. LC: Reminder/help phone calls (every two weeks, as needed)	Phone					B.9			
10. HA: Phone check-ins (HA group only; once a month, as needed)	Phone					B.10			
11. HA: Request to send pre-notification e-mail (HA group only)	E-mail						B.11		
12. HA: Follow-up e-mail about pre-notification (HA group only; if not sent)	E-mail							B.12	
13. HA: Follow-up phone call about pre-notification (HA group only; if not sent)	Phone								B.13

Figure 1. Flow of contacts to Institutions – HA Group

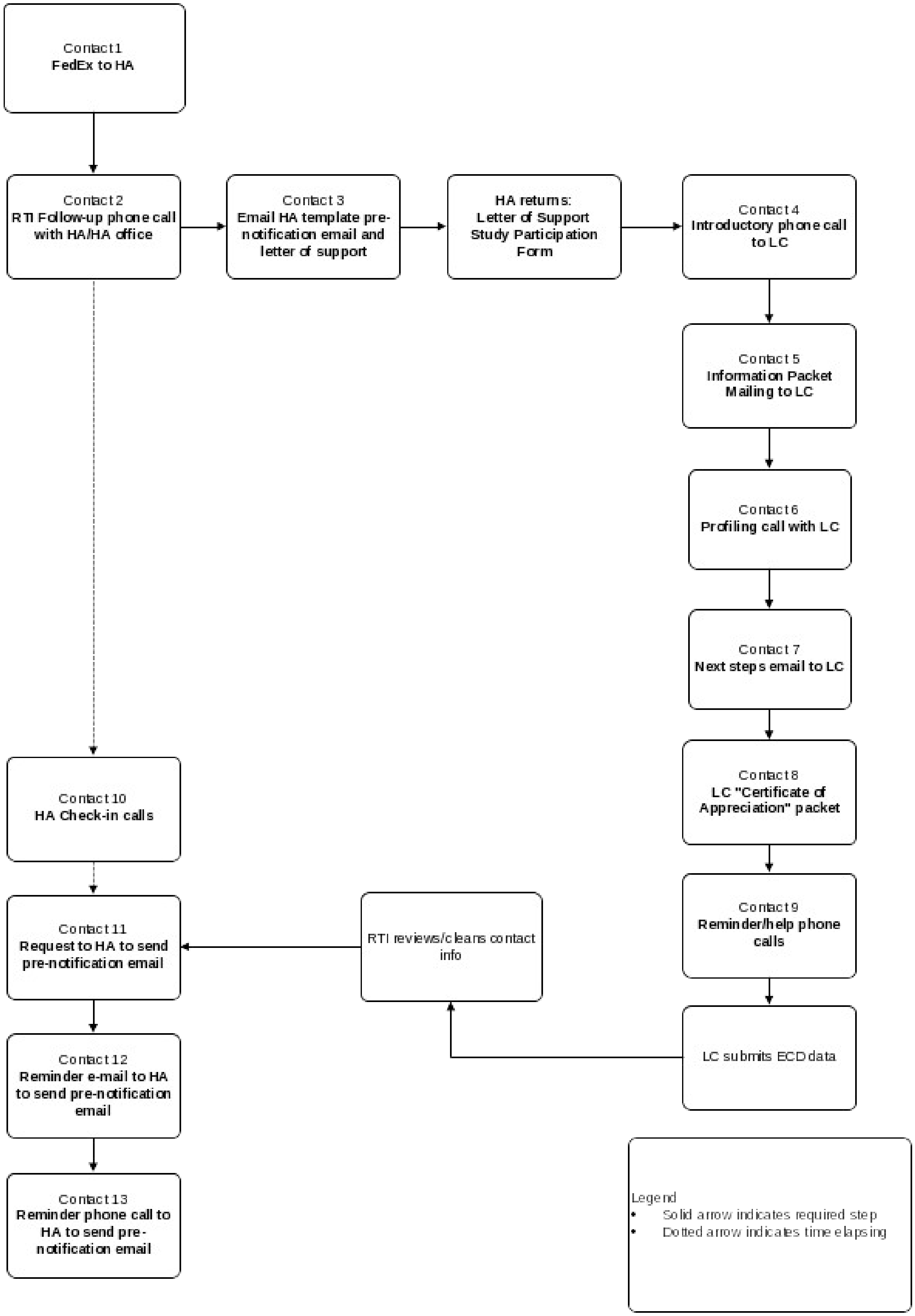

Figure 2. Flow of contacts to Institutions – HA Opt-out/Opt-in Group

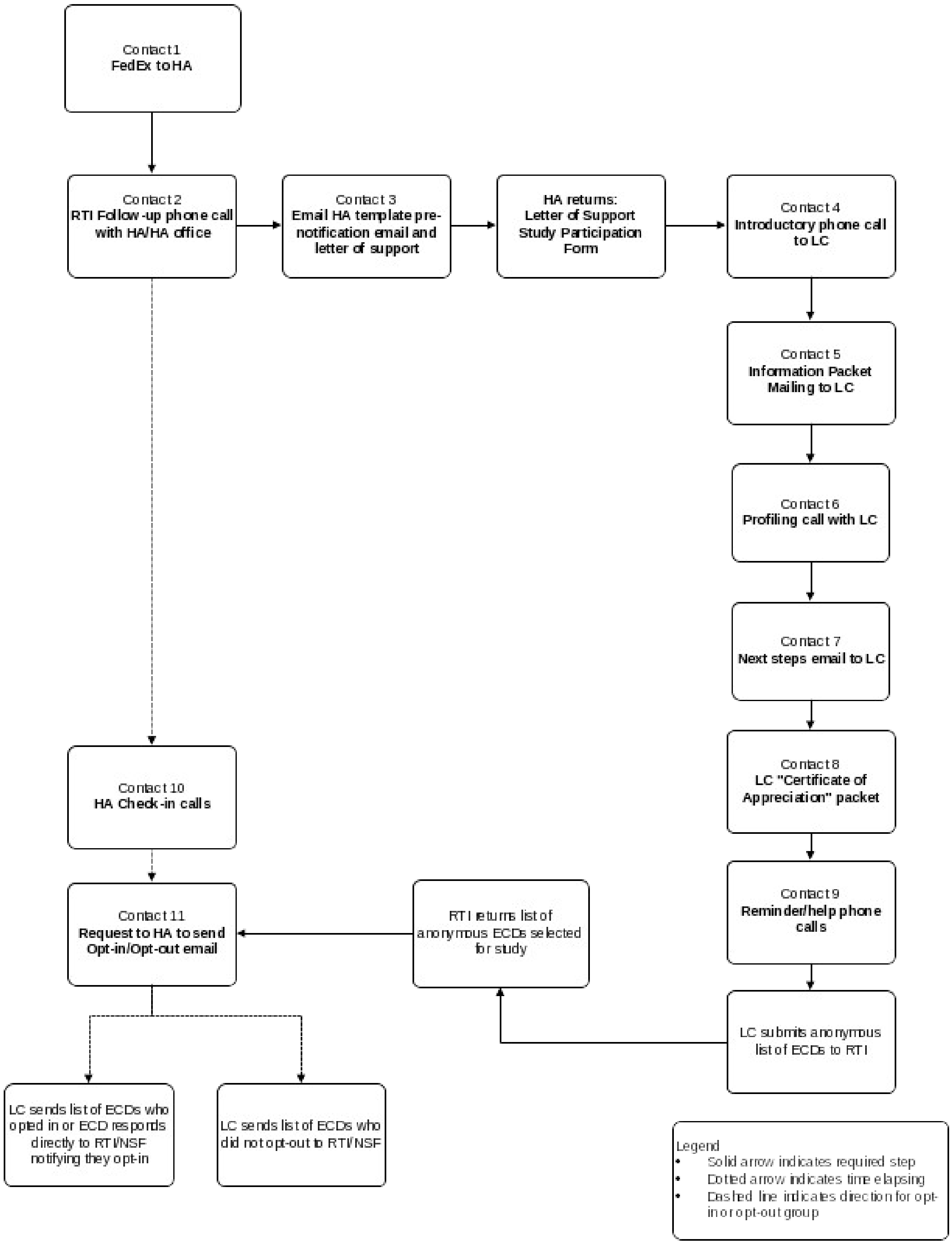

Figure 3. Flow of contacts to Institutions – NSF Group

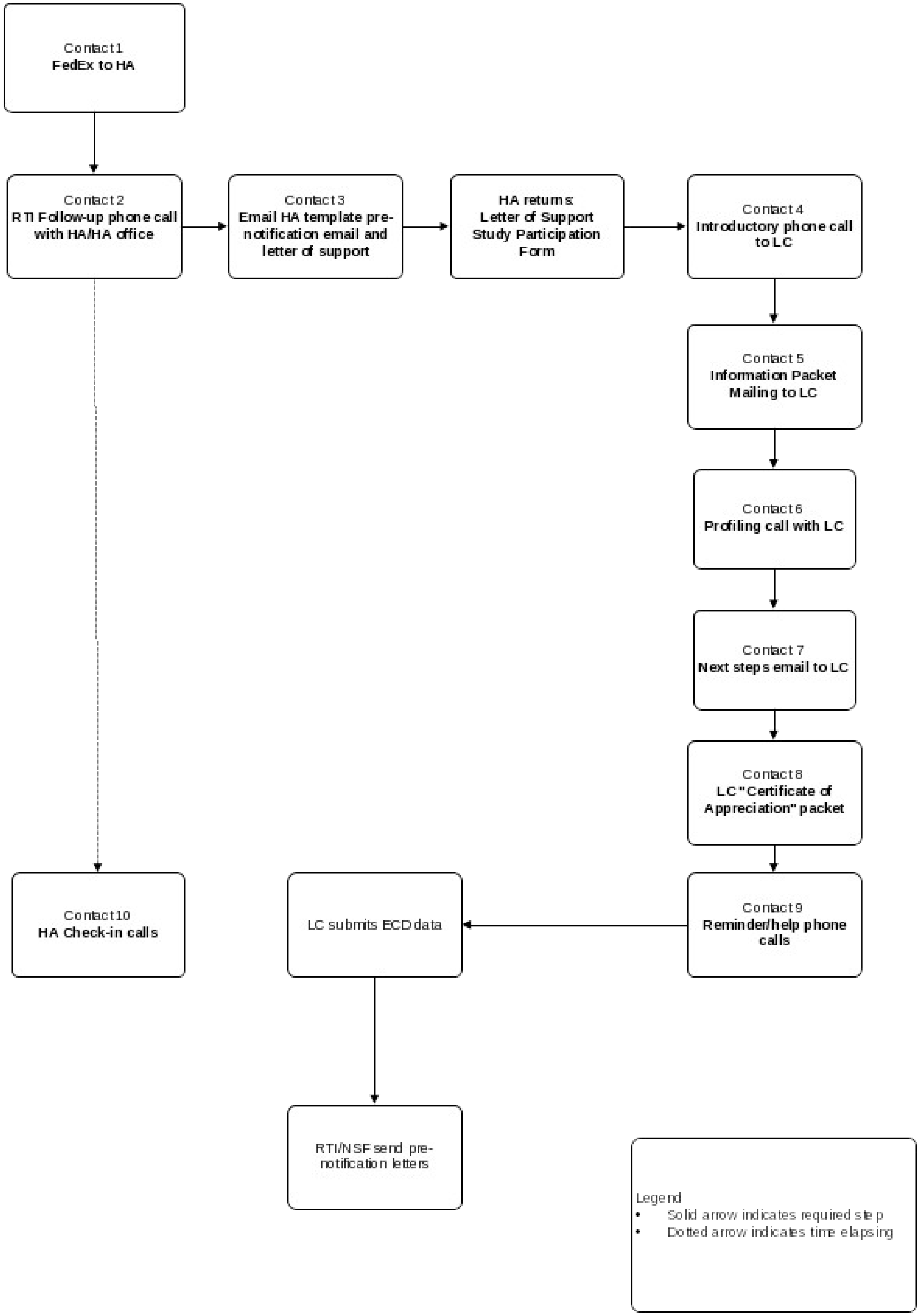

Table 4. List of Notifications to ECD

Protocol group and contact description	Contact number and timing of events[1]												
	1	**2a**	**2b**	**2c**	**2d**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Begin Date	*	+1	+3	+5	+3	+5	+5	+10	+10	+5	Post-CATI[2]	Post-complete
ECD - High Authority Group[3]													
Pre-notification e-mail from High Authority (includes link to survey website and brochure)	C.1												
Login credential e-mail				C.2									
ECD – High Authority Opt-out Group													
Opt-out e-mail from HA	C.1												
Login credential e-mail[4]			C.2										
ECD – High Authority Opt-in Group													
Opt-in e-mail from HA	C.1												
Login credential e-mail[5]		C.2											
ECD - NSF Group[6]													
Pre-notification letter from NSF, enclosing ECD brochure and letter of support from HA	C.1												
Login credential e-mail					C.2								
All Groups													
Reminder e-mail # 1						C.3							
Reminder e-mail # 2							C.4						
Reminder phone call								C.5					
Reminder e-mail # 3									C.6				
Mail reminder with ECD brochure and letter of support from HA										C.7			
CATI calls begin											C.8		
Final e-mail reminder												C.9	
Thank you e-mail													C.10

[1] The timing of each event is represented by a "plus number of business days" from the proceeding event.

[2] The duration of the CATI phase will vary for each case.

[3] HA group means the institutional high authority sends the first contact to the ECD and provides a letter of support for a mail reminder. All other contacts come from NSF.

[4] Login credential e-mails for the Opt-out Group will be sent within 1 day of receiving a list of ECDs who have not opted-out of the study.

[5] Login credential e-mails for the Opt-in Group will be sent when sample members notify the study team that they would like to participate. Login credential e-mails will be sent out as soon as possible, usually within a few minutes of receiving opt-in notification.

[6] NSF group means NSF sends all contacts to the ECD.

Figure 4. Flow of contacts to ECDs