

Supporting Statement B:

NATIONAL SURVEY OF FAMILY GROWTH

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Collection of Information Employing Statistical Methods

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- A. Authorizing Legislation for NCHS and NSFG**
- B. 60-Day Federal Register Notice and comments**
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 - D1. Advance household letters for phases 1/2 & 3, by mode
 - D2. Advance respondent letters for phases 1/2 & 3, by respondent type and mode
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- E. Household Screener Questionnaire for 2026+ (Year 5+) Data Collection**
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- G. Male Questionnaire for 2026+ (Year 5+) Data Collection**
- H. Verification Procedures and Questionnaires**
- I. IRB Approval Form for the NSFG 2022-2029 Protocol**

NOTE: The sample design to be used beginning in 2027 is a continuation of the multimode, multiphase design implemented since January 2022, and is based on the same principles as the sample design of the NSFG surveys conducted in 2006-2010 and 2011-2019. It is based on a responsive and adaptive survey design (Groves and

Heeringa, 2006; Schouten et al., 2017), to proactively monitor costs and response rates during data collection and to adjust as needed. A description of the sample design used for 2011-2019 that relied solely on a face-to-face mode (except for a portion administered by ACASI) can be found [here](#) for 2017-2019 NSFG. A similar document describing the multimode, multiphase design implemented for the 2022-2023 NSFG is provided at:

<https://www.cdc.gov/nchs/data/nsfg/NSFG-2022-2023-SampleDesignReport.pdf>. The same design with our approved \$60 incentive (instead of \$40) for Phases 1 and 2 of each data collection quarter has been implemented since January 2024.

Supporting Statement B focuses on the multimode, multiphase design to be implemented over the next 3 years of the NSFG, beginning in January 2027, and any changes from the design used since our last revision request (i.e., since January 2024) are highlighted.

Experiments during the earlier years of this data collection period 2022-2029 that informed the design and incentive changes implemented since January 2024 were described in our last revision approved in September 2023. In this Supporting Statement B, we review further experiments conducted during 2024-2025 data collection, describe their impact on the few small protocol changes in this revision request, and also summarize methodological experiments or studies being planned or considered for the next 3 years of the survey.

1. Respondent Universe and Sampling Methods

Summary

The National Survey of Family Growth (NSFG), for the 8-year data collection period of January 2022 through December 2029, is based on a national area multi-stage probability sample. The first stage involves the selection of Primary Sampling Units (PSUs). Across the 8 years of data collection planned (2022-2029), there are a total of 22 “self-representing” (SR), or “certainty” PSUs, defined as PSUs that are automatically included in the national probability samples due to their large population. There are an additional 200 non-self-representing (NSR), or “non-certainty” PSUs, defined as PSUs selected into the NSFG sample that represent other non-self-representing PSUs, for a total of 222 PSUs, including Alaska and Hawaii. A subset of these 222 PSUs was randomly allocated to each data collection year (40 allocated to each of years 1 through 4 and 41 allocated to each of years 5 through 8). This plan increases the number of PSUs and the year-to-year overlap of PSUs within the 2022-2029 data collection period compared to the 2011-2019 design. This should result in increased precision of point estimates and less interviewer turnover and training required.

Beginning in January 2026 and extending through December 2029, each year, about 50,000 households are sampled, and about 13,000 households are screened, with the multimode design, in order to yield approximately 5,000 completed main surveys annually. Each year of data is nationally representative, however, NSFG user guidance encourages the use of a minimum of two years of data, the timespan of all NSFG public-use file releases since 2011, to permit statistically reliable estimates to be made. Further, the desired sample size and precision for several key estimates and statistics for some domains of interest can only be attained with at least 4 years of data (for example, combining the 2022-2023 data with the 2024-2025 data).

Target Population

The target population for the NSFG throughout the 2022-2029 data collection period is the roughly 150 million men and women aged 15–49 at first survey contact whose primary residence is in one of the 50 United States or the District of Columbia. Men and women in the military but who live off-base are included, but individuals living in group quarters are excluded, with the exception of those living in college housing - dormitories or fraternity or sorority housing - who are eligible to be sampled via their parents' household.

Details of the NSFG Sample Selection

Further details can be found on the NSFG webpage for the [sample design](#) and [weighting methodology](#) for the 2022-2023 NSFG. The NSFG sample is selected in 5 stages summarized below:

- (1) The first stage involves selection of Primary Sampling Units (PSUs) (Metropolitan Statistical Areas (MSAs), counties, or groups of adjacent counties) from a sampling frame of 2,044 PSUs. The largest 22 Metropolitan Statistical Areas (MSAs), those estimated to contain one million or more occupied HUs based on the 2015-2019 American Community Survey (ACS), are treated as certainty selections, meaning they are guaranteed to be included in one or more years of the 8-year data collection period. The remaining set of PSUs is constructed from individual counties or groupings of sparsely populated contiguous counties using a customized algorithm to minimize the spatial size of the PSU while simultaneously maintaining minimum numbers of Secondary Sampling Units (SSUs) and Housing Units (HUs). A weighted measure of size (MOS) has been developed such that, all else equal, larger PSUs and PSUs with higher concentrations of Black individuals will be selected more frequently, at a rate of approximately 2.6 to 1.
- (2) The second stage involves selection of SSUs (or segments) within PSUs. These are defined as Census Block Groups (CBGs), which are aggregations of contiguous Census Blocks generally defined to have between 600 and 3,000 people and usually covering a contiguous area. Twelve SSUs are released from each PSU each year, with three SSUs held in reserve. Each SSU in the frame is required to contain at least 200 estimated occupied housing units (HUs). Each PSU is guaranteed to contain a minimum of 15 SSUs and a minimum of $200 \times 15 = 3,000$ estimated HUs. To achieve an oversample of Black individuals so they comprise 20% of completed interviews, the chance of selection of CBGs where ACS data indicate a high percentage of Black individuals in the target population ($\geq 10\%$) is increased relative to all other CBGs. Unlike prior NSFG designs prior to 2022, this design does not oversample Hispanic individuals, because the proportion of Hispanics in the target population has grown such that they will comprise 20% of completed surveys without oversampling.
- (3) Selection of households: For the third stage of selection, a frame of HUs is built within each sampled SSU, using the contractor's in-house enhanced address-based sampling (ABS) frame. The frame is based on the U.S. Postal Service (USPS) Computerized Delivery Sequence (CDS) File, updated monthly. For SSUs where the estimated ABS coverage rate

is below 85%, field enumeration (listing) is used.

For HU listings derived from the ABS frame, a model is used to predict the likelihood the given HU contains one or more age-eligible individuals. HUs are grouped into three density strata within the SSU – high, medium, and low – with differential sampling rates applied to increase the yield rate. The predictive power of this model becomes increasingly strong with the accumulation of empirical data. The step before the fourth step, “Selection of Individuals,” below, involves determining if any eligible individuals live in the selected HUs and proceeds as follows. Before Phase 1, an “advance household” lead letter (**Attachment D1**), NSFG Question-and-Answer (Q&A) brochure (**Attachment D4**), and \$2 prepaid incentive are mailed to sampled HUs. Sampled housing units receive in their lead letter instructions for online completion of a screener survey, containing a household roster, which determines if any household members are eligible (age 15-49 at the time of the screener). Beginning in Phase 2, HUs are followed up in person if they do not complete the roster by web. They will still have the option to complete the screener by web.

- (4) Selection of individuals: In households with eligible persons, a fourth stage of selection involves selecting one of the eligible persons. The within-household selection rates are set so that about 18.2% of all main surveys are with teens aged 15-19 and 55% of all main surveys are with females. These rates are programmed into an algorithm in the computerized screener instrument, which operates to select a respondent after all household members’ information has been collected. The screener process is then tailored to the identity of the selected respondent (screener respondent, other adult in the HU, or teen 15-17) and for FTF mode, the interviewer asks about his/her availability. In online mode, when a household member is chosen as the respondent, the survey website will allow the individual to immediately proceed with steps toward beginning the main survey (if the screener respondent is the chosen respondent) or send URL for the main survey within a day, if the chosen respondent is not the screener respondent. Respondents for the main NSFG survey are offered a \$60 incentive or “token of appreciation”: for FTF mode, this token is given in cash upon agreeing to participate in the survey, and for web mode, respondents can choose to receive either a check to be mailed or a digital gift card after they complete the survey (though it is also given for breakoffs who reach the final section of the main survey).
- (5) Selection of “nonrespondents” for a different protocol phase: As was done in the NSFG for 2006-2010, 2011-2019, and 2022-2025, NSFG will continue to conduct nonresponse follow-up (NRFU) in a less costly and more efficient manner than that used in earlier, periodically conducted NSFGs. As implemented in 2022-2025, NSFG data collection for the remainder of the 2022-2029 period will use a three-phase data collection design, and this third phase constitutes a fifth stage of selection. Data collection is divided into 16-week sample-release (partially overlapping) quarters each year. Each quarter, an approximately 40-50% subsample of active, nonresponding cases (among both households that have not completed a screener and individuals who have not completed a main interview) is selected for continued follow-up in person with more

directed effort and increased incentives. Data collection is discontinued for the nonresponding cases not selected into the subsample for Phase 3. In approximately weeks 13 through 16 of the quarter, this subsample of nonrespondents is offered higher incentives (\$5 rather than \$2 if they are a household screener nonrespondent and \$100 instead of \$60 if they are a main study nonrespondent) and the interviewers' efforts and all nonresponse follow-up mailings (**Attachment D10**) are focused on the fewer cases left in the subsample. Web survey completion remains an option throughout Phase 3. The additional \$5 screening incentive is mailed at the start of this phase in data collection to all nonresponding screener households selected for Phase 3. The additional \$40 main survey incentive in Phase 3 is offered to the respondent at the same time they would receive the original Phase 1/2 \$60 incentive for the main survey, for a total incentive of \$100 for the main survey in Phase 3.

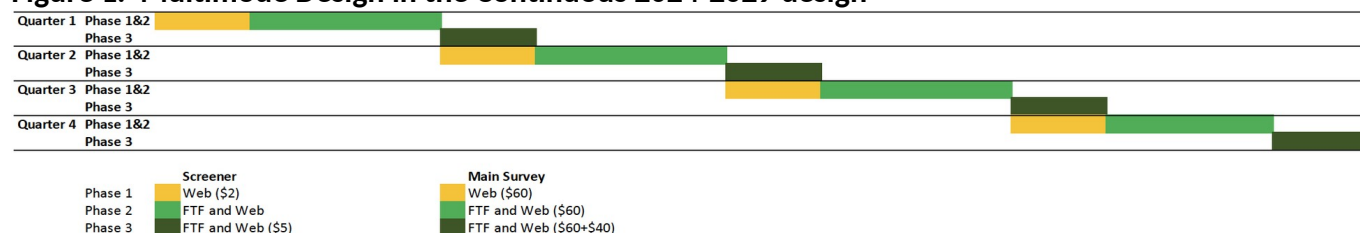
Group quarters with special living arrangements, such as dormitories, institutions, convents, or institutional group homes (for convicts, the frail elderly, or the developmentally disabled) are out of scope for NSFG data collection because they fall outside the household target population. Residents in college quarters (dormitories, fraternities, or sororities) who otherwise live with their parents are eligible to be sampled by way of rostering at their parents' homes. Members of the active-duty military who live in civilian housing (not on military bases) are eligible for the sample. Non-FTF contacts, including by telephone, e-mail or text, are permitted for prompting and reminders and to arrange appointments for FTF interviews after the household screener has been conducted, and telephone mode is permitted for verification interviews (**Attachment H**) to ensure that the household was screened and, if applicable, the selected household member completed an interview.

Study Design

The 2022-2029 study design consists of a multimode, multiphase data collection. The 2022-2029 design has three phases: web (Phase 1), followed by FTF and web (Phase 2), followed by FTF and web with additional tokens of appreciation for a subsample of nonrespondents (Phase 3).

To allow sufficient time to work the quarterly samples, and to provide continuous work to interviewers, the data collection for Phase 1 and Phase 3 is allowed to overlap between quarters, i.e., Phase 3 of Quarter 1 (FTF and web with increased tokens of appreciation) is conducted at the same time as Phase 1 of Quarter 2 (web only). These phases and their overlap are shown in Figure 1. Note that the \$60 incentive offered in Phases 1 and 2 has been implemented since January 2024, but the quarterly design shown in Figure 1 has been followed since January 2022.

Figure 1. Multimode Design in the Continuous 2024-2029 design



2. Procedures for the Collection of Information

As was included in the prior revision request approved in September 2023, the table below shows the sample size targets for the first 4 years of NSFG data collection for 2022-2029, along with sample sizes from the 2015-2019 fieldwork periods:

Sample Size Targets for Second 4 years of NSFG 2022-2029 (2026-2029), with 2015-2019 and 2022-2025 sample sizes shown for comparison

	2015-2019	2022-2025*	Target sample for 2026-2029**
TOTAL	21,441	20,363	20,000
15-19	3,812	3,101	3,640
20-49***	17,629	17,262	16,360
Male	9,746	8,995	9,000
Female	11,695	11,368	11,000
Hispanic***	5,281	4,131	4,000
Black	4,206	3,211	4,000
White & other	11,952	13,021	12,000

*Public-use data files for 2024-2025 have not yet been released so these numbers may change.

**Subject to change based on available funding and field conditions.

*** Starting in 2022, NSFG no longer oversampled Hispanic individuals.

The current contractor for the NSFG is RTI International (Andy Peytchev, Principal Investigator for RTI; Rebecca Granger, Project Director). Under NCHS oversight and monitoring, RTI recruits and trains the interviewers for the NSFG's FTF mode, programs the survey instruments for web and FTF, and carries out the data collection and preliminary file production. Further details on study design and data collection for the 2022-2023 NSFG are found [here](#); the main steps in data collection are described below.

Main steps in NSFG data collection

All advance letters, informed consent/assent forms, informational materials and token of appreciation selection form used with NSFG households and respondents are shown in **Attachments D1-D10**. A few changes to these materials proposed for implementation starting in January 2027 (Year 6 data collection) are shown in yellow highlighting or red font. These changes are intended to align references to the survey helpdesk or otherwise facilitate survey participation. The Household Screener questionnaire (CAPI-lite) corresponding to some of these steps is in **Attachment E**.

1. An “Advance Household” lead letter (**Attachment D1**) with a \$2 prepaid incentive and a Question-and-Answer (Q&A) brochure (**Attachment D4**) is mailed to sampled housing units. This lead letter contains instructions for completing the household screening survey online, including how to log on to the website to complete the main survey, using a unique password. It also includes a QR code to facilitate completion of the household screening survey.
2. After the household lead letters are sent, a pressure-sealed reminder card for the household screener survey is sent to nonresponding households (**Attachment D10**). This is followed in succession as needed by a reminder letter sent, a reminder postcard, and another reminder letter, all shown in **Attachment D10**. Five weeks after sending the lead letter, nonresponding sample housing units are assigned for FTF contact. The online completion option remains open after FTF assignment.
3. Interviewers visit households at varying times of day and days of the week until an adult member of the household can be contacted. If no one is at home, the interviewer leaves a “Sorry I Missed You” card that gives a contact number for the interviewer. When an adult household member is contacted in person, the interviewer introduces herself and shows her NSFG identification badge and letter of authorization if needed (**Attachment D7**), helping establish legitimacy of her purpose in approaching the selected household or respondent. She references the lead letter, providing an additional copy, if necessary (**Attachment D1**), and answers any questions or concerns the household member has about the study. NCHS staff and NSFG-trained personnel at RTI are available by phone through 800 numbers to answer any questions householders who receive the advance materials may have. In addition to the respondent Q&A brochure, the interviewer has other materials to help explain the survey and gain cooperation:
 - NCHS Confidentiality Brochure (**Attachment D5**) to explain the laws and other procedures in place to protect confidentiality of all NSFG households and respondents
 - NSFG Family Fact Sheet (**Attachment D6**) to illustrate selected uses of the survey data and reiterate that data are in aggregate form for statistical purposes only.

4. The interviewer administers the FTF screener survey (**Attachment E**) on the tablet computer and determines if anyone in the household is eligible for the main NSFG survey. The selection algorithm selects one household member if more than one is eligible. If no one in the household is eligible (for example, no household member is within the ages of 15 and 49), the interviewer thanks the household member and leaves.

If it is a web case in which the household screener is completed online, any adult household member can log on to the survey website, using the login credentials in the lead letter, to complete the screener for their household. The screener respondent will be presented with a screen requiring them to attest to being a member of the household and to being 18 years of age or over, as 18 is the age of majority in almost all states. *(Note: If any of the 3 states where age of majority is older than 18 are in the NSFG sample, the higher age is used instead of 18.)* If they do not meet the requirements for completing the screener, they will be informed that only a household member 18 or older may complete the screening survey and asked to pass the letter and log-in information to such a person. Using the same selection algorithm as used for FTF screeners, the survey website will notify the screener respondent whether he/she or another member of the household was selected for the main NSFG survey.

5. If an adult is selected for the NSFG survey and it will be completed in FTF mode, the interviewer provides a copy of the respondent letter (**Attachment D2**), explains the NSFG survey to the eligible person, provides a copy of the informed consent form, and then attempts to gain the respondent's consent to participate in the survey. If the adult respondent agrees to participate, the interviewer offers the respondent a \$60 token of appreciation in advance of completing the interview and asks the respondent to electronically sign an acknowledgment that they have either received the token or declined it. If the sampled person is willing to participate but cannot do so immediately, the interviewer schedules a time to return to complete the interview. If the eligible person is not at home or unavailable for scheduling, the interviewer enters information about the best times and days to find the person at home.

If the household screener survey is completed online and the screener respondent is the chosen main survey respondent, the survey website allows him/her to immediately proceed to the steps to completing the main survey. If the screener respondent is not the chosen main survey respondent, but another adult in the household is chosen, the screener respondent is asked to provide the chosen adult respondent's email address and/or phone number for texting. The chosen adult respondent is then sent an email and/or text invitation with the main survey link and login credentials within one day. The Advance Respondent Letter is also sent, regardless of whether the email or phone number was obtained. The respondent letter contains instructions on how to log on to the survey website, using the login credentials.

Once the chosen main survey respondent has accessed the survey website, he/she is

presented with a screen requiring him/her to attest to being a member of the household and to being at least 18 years old. The main survey respondent then reviews the informed consent form for adults (**Attachment D3, page 1**). After acknowledging that they consent via clicking through the consent screen, which displays the adult informed consent form, the adult respondent is asked to create a four-digit PIN known only to them to re-enter the survey if they breakoff for any reason or if the web survey is inactive for at least 20 minutes. When the respondent re-enters the main survey, they will need to enter the passcode provided on the advance respondent letter and then their own respondent-created PIN. Adult respondents on the web will have the option of choosing to receive their \$60 token of appreciation via mailed check or digital gift card. The process for choosing the form of the token of appreciation and providing the mailing or email address for sending, is detailed in **Attachment D8**. The respondent is asked to confirm their first and last name and confirm either the mailing address to receive a check or provide the email address to which the instructions for redeeming the digital gift card should be emailed.

6. If a minor¹ is selected as the eligible main survey respondent and the main survey will be completed in FTF mode, the interviewer ask the minor's parent or legal guardian for signed parental permission (**Attachment D3, page 2**) prior to approaching the minor. The interviewer provides the parent or legal guardian with a copy of the parental permission form (**Attachment D3, page 2**). Once parental permission is obtained, the interviewer provides the selected minor with a copy of the respondent letter explaining their selection for the NSFG survey. The interviewer then provides the minor with a copy of the minor assent form (**Attachment D3, page 3**) and then ask the minor for their signed acknowledgement of assent. Minors who assent are offered a \$60 token of appreciation before completing the NSFG survey. The parent is asked to be present in the home for the duration of the NSFG survey (although not in the same room).

If a minor is selected as the main survey respondent upon completion of the online screener and if the screener respondent is identified as the parent of the minor, the survey website will present at the end of the screener the parental consent form and ask for signed parental permission via the parent keying in their name to acknowledge consent. If the screener respondent is not the minor's parent, the screener respondent will be asked for the identity of the parent, and the contact information for the parent if they live in the household. The parent is contacted and asked to access the screener. They are then presented with a screen to attest to being the parent of the selected minor, then presented with the parental permission form. Once parental permission has been obtained, the minor is asked before completing their NSFG survey for signed assent by keying their name. Just like adult online respondents, minor respondents have the option of choosing to receive their \$60 token of appreciation via mailed check or

¹ *Emancipated minors - 15-17-year-olds who are married, cohabiting, or living away from their parents for other reasons - are rare in a sample of this size. Emancipated minors have been excluded from the continuous NSFG because the number of emancipated minors selected for the NSFG is so small that excluding this group is unlikely to have any noticeable impact on estimates. Using current IRB rules, however, including them would require special procedures that are too complex and too costly for the NSFG.*

digital gift card and they are asked to confirm the address for the mailed check or email address for the digital gift card redemption instructions.

7. Once consent or parental permission and minor assent has been obtained for a FTF NSFG survey, the interviewer asks for a private location to conduct the interview. During the FTF NSFG survey (**Attachments F and G**), the interviewer uses a showcard booklet for all respondents, and, for female respondents, a paper life history calendar. The interviewer reads all applicable questions to the respondent as they appear onscreen and enters the responses into the tablet computer.

Prior to FTF respondents beginning the self-administered section, the final section of the NSFG survey known as computer-assisted self-interview (or CASI), the interviewer will lead the respondent through a brief computer tutorial to make sure that the respondent is comfortable using the tablet computer. The interviewer then moves away from the tablet to give the respondent privacy so he/she can complete the self-administered section of the questionnaire. At the end of the self-administered section, there is a password screen so that the questionnaire program will lock, preventing the interviewer from going back to the self-administered section to review answers.

In households in which the main survey respondent chooses to complete the NSFG main survey online, once consent or parental permission and minor assent have been obtained, the selected main survey respondent reads all the questions to themselves as they appear onscreen and enters responses into the online survey application following a brief tutorial that covers the buttons available on the screen (next, back, accessing help screens when available, skipping edit checks, and ability to switch between English and Spanish). For web respondents, there is no change in mode for CASI as the entire survey is self-administered.

8. When the interviewer returns home, she transmits her completed case(s) for the day (along with any record of actions) back to RTI.
9. As part of follow-up, households or selected main survey respondents who, before the screener or before the main survey, express a specific concern about participating in the study are mailed a letter that addresses their concern. An interviewer will re-visit the household after sufficient time has elapsed for the letter to arrive.

Selected main survey respondents who do not immediately complete their online NSFG main survey after completion of the brief online household screening survey and who have consented to receiving email and/or text communications (or for whom email and/or cell number has been provided by a screener respondent) are sent an electronic reminder via email and/or text depending on available information (**Attachment D9**). A mailed reminder letter is also sent to the selected main survey respondent within 5 business days. Nonresponding main survey respondents are sent a second electronic and mailed reminder, as necessary. Selected main survey respondents who do not

complete their online NSFG survey after the second reminder are sent a third and final electronic reminder. Two weeks after selection for the NSFG main survey, but not before week 5 of the quarter, selected main survey respondents who have not completed their online NSFG main survey are assigned to an interviewer for FTF contact following the above steps starting at Step 3. The online NSFG main survey completion option remains open for the respondent, even after assignment to an interviewer.

10. After the reminders and letters described above have been sent, if there has been no response to the screener or to the main survey by the end of Phase 2, a roughly 40-50% subsample of households and main survey respondents who do not respond to repeated contact attempts are offered a higher token of appreciation amount and receive targeted contact attempts. This “Phase 3” protocol was described earlier in “Details of NSFG Sample Selection,” stage 5. For households who have not responded to the screener, an additional “Phase 3” lead letter (**Attachment D1**) is sent, with an advance \$5 incentive. Letter and electronic reminders described for Phase 2 also continue during Phase 3. For sample persons who have been chosen for the main interview and not yet responded, an additional “Phase 3” lead letter (**Attachment D2**) is sent. Then, FTF contact attempts are made mirroring the above steps starting at Step 3, but with an increased incentive amount: those who are selected for the main survey are offered an additional \$40 at the same time (based on mode) as the standard \$60 they would be given for participating in the main survey.

Quality control

Quality control for NSFG data collection in 2022-2029 is achieved in several ways.

- (a) The use of computer-assisted survey administration (whether in person or online) improves data quality and consistency by ensuring correct routing through the instrument and allowing resolution of inconsistencies directly with the respondent.
- (b) For interviewer-administered interviews, the instrument permits the entry of interviewer comments that are routinely reviewed by survey staff to assess the need for any data edits or improvements to the survey instrument.
- (c) The contractor employs a “Workflow and Control System” which allows the monitoring of the flow of data from the start of data collection through the creation of data files for analysis and delivery. This allows tracking and managing events relating to advanced mailings, reminders, map generation, incentives, progress of interviews in the field, QA/QC outcomes, verification follow-up, and other information that will aid in smoothly controlling data collection operations. Organization of the many detailed and parallel processes is essential for quality control of operations and ultimately the data files.
- (d) The “Verification” interview (**Attachment H**) is employed as a quality control procedure for FTF interviews. The main purpose of verification interviews is to reduce the risk of—

and identify—interview falsification and, to a lesser extent, to ascertain if the interviewer inadvertently contacted the wrong HU. Both reasons are related to interviewer error, whether deliberate or accidental. Therefore, verification interviews as described below are conducted for FTF screeners and FTF main interviews, but not conducted for web screeners and web main surveys.

For FTF screeners and main surveys, verification procedures involve a random at least 10% sample of both screened households and main survey respondents to be contacted by telephone within a few weeks after the interview to verify that the interview was conducted. The first two completed main surveys for each field interviewer are also selected for phone verification. If no phone number was provided, additional verification methods include production, contact information reviews, screener and main survey data reviews, timing data reviews, and keystroke audits. Verification of households confirms eligibility status (no household members aged 15-49 years of age, if coded ineligible; someone in the household was 15-49 years of age if coded eligible). Verification of main survey respondents confirms that the correct (selected) household member was interviewed and all procedures were followed: signed a consent form, if applicable; token of appreciation received; entered responses him- or herself in CASI.

3. Methods to Maximize Response Rates and Deal with Nonresponse

In the most recent two years of NSFG fieldwork for which public-use data have been released (January 2022 through December 2023), 9,957 surveys were completed based on a national sample of individuals aged 15-49 – 4,371 males and 5,586 females. The weighted response rate for this two-year survey period was 26.8% overall, 49.4% for the screener and 54.3% for the main survey. Conditional on screener response, the weighted response rate for females was 54.7%, and 54.0% for males. This reflects a longer-term pattern of declining response rates, as also experienced by all household-based surveys conducted in the public and private sectors.

As discussed throughout these supporting statements, several strategies have been put in place for NSFG to maximize response rates and avert refusals. These strategies are consistent with those in place since the 2002 NSFG but modernized and also adapted for online interviews. These strategies include detailed advance letters and informational materials, a user-friendly NSFG webpage including information tailored to [survey participants](#), highly trained interviewers, toll-free numbers at both RTI and at NCHS, multi-phase, multimode data collection protocols, and continuous changes and experimentation to further improve the design. Responsive and Adaptive survey design (Schouten et al., 2017; Groves and Heeringa, 2006), as exemplified in the multiphase data collection design with subsampling of nonrespondents, further aids in increasing response rates and reducing the risk of nonresponse bias with controlled costs, continues to be a key part of the NSFG methodology. It adds the ability to increase response rates within budget constraints and the ability to respond to unanticipated factors [cite Study Design and Data Collection Procedures report].

Several measures will continue to be implemented toward contract objectives to maximize response rates and achieve stated sample size, while minimizing nonresponse bias and controlling costs :

- a) Towards the goal of increasing respondent engagement and facilitating the survey tasks, some survey materials were redesigned, while retaining the same information. In particular, the household and main survey respondent lead letters (**Attachments D1 and D2**) were graphically redesigned to leverage behavioral cues and restructure the information to help the respondents understand their task and next steps. With the same objective to facilitate and increase participation, QR codes were added to the household lead letters and reminder mailings. The graphical design did not increase participation and seemed to even decrease participation, contrary to expectation, but the inclusion of the QR code to access the survey increased participation. As a result, the household and respondent lead letters were reverted back to using the standard letter design. The QR codes were retained on the household leaders as they did facilitate screener completion.
- b) RTI actively monitors paradata such as record of calls to ensure that contact attempts have been made at various times of day and days of the week, to strategize further actions and to reallocate resources, if necessary, to target subgroups where response rates are insufficient.
- c) RTI has focused effort on male sample members, given that higher nonresponse rates among males is not unique to the NSFG and has been documented in other large national FTF surveys in the U.S. (Wright et al., 2005). We aim to increase response rates for males by actively managing their cases throughout data collection—monitoring rates on a daily basis, directing interviewing effort, and including design features that aim at increasing response rates, particularly for men.
- d) A portion of PSUs will have two FIs, making it feasible to reassign refusal cases for follow-up by an experienced interviewer. Another advantage of this staffing model is that each FI can increase her contact attempts during the most productive time periods (e.g., evenings and weekends), while reducing visits during unproductive times. Given some amount of turnover in FI staffing, a number of FIs are hired that can travel, when needed, to PSUs with no, or less than 2, FIs assigned.
- e) The construction and implementation of the phased design is key to achieving the desired response rate. For phase 3, nonrespondents are subsampled so that higher incentives and more focused effort on fewer sample cases can be implemented to achieve a substantial increase in weighted response rates.
- f) RTI uses customized procedures for dealing with controlled access areas in sample PSUs. Controlled access (such as apartment buildings or communities where the FI cannot readily access the doors of selected dwelling units) are becoming more common, as are doorbell cameras, which people can use to screen visitors without actually coming to the door. Protocols that have been successful on other similar surveys (such as the National Study of

Drug Use and Health) have been adapted to the NSFG, such as early identification (to maximize the amount of time for efforts to gain access and cooperation), and having FSs communicate directly with municipal areas, housing directors, HOAs, or landlords to arrange for access and providing them more detailed information about the study.

- g) Interviewers go through a rigorous training program that includes strategies for refusal aversion and addressing respondent concerns. In addition, follow-up letters are used that are tailored to the concern raised by reluctant household members, and interviewers also have copies of these letters for refusal aversion in real time.

Incentives

Over the past several decades, the challenges facing household-based surveys have only grown. Incentives have been approved for use with the NSFG since 1995, and the same incentive structure was used throughout NSFG's continuous fieldwork in 2006-2010, 2011-2019, and 2022-2023. It is well-documented that for long, sensitive, in-person surveys, incentives do help raise response rates and help to control fieldwork costs when standard good survey practice is not enough. The multiphase data collection and incentive structure used by NSFG in 2006-2010 through 2022-2023 has also proven to be generally cost-effective and efficient in helping to slow the pace of overall response rate declines over the past two decades. Based on results from an incentive experiment conducted in Quarters 3 and 4 of 2022 and throughout 2023, we were approved in our last revision request to increase the main survey incentive to be offered in Phases 1 and 2 of each quarter from \$40 to \$60. We propose no changes to this incentive structure in this revision package.

Nonresponse Bias Analysis

The overall strategy for evaluating nonresponse bias can be categorized into three types of analysis. The first is an examination of descriptive statistics of nonresponse rates, as a prerequisite for the potential for nonresponse bias. The second and third are investigations into *ignorable* and *nonignorable* nonresponse bias, respectively (Little and Rubin, 2019). The former is evidenced by observable differences in demographic characteristics and key survey outcomes that are corrected for in the NSFG estimates through weighting. Analysis of ignorable nonresponse bias also offers the opportunity to assess the overall efficacy of each phase of data collection, since meaningful mitigation of nonresponse bias can be gauged by whether or not the data collected in each phase results in *differences* in estimates on key survey outcomes, compared to a prior phase. In other words, when the protocol changes in the second phase and in the third phase results in gaining the cooperation of sample members who differ on key outcomes from those already interviewed, the design is performing as intended. Another valuable opportunity to estimate nonignorable nonresponse bias was presented by the incentive experiments conducted in 2022 and 2023. Analyses also used benchmark data from the 2022-2023 American Community Survey (ACS) to gauge the degree to which design and other features reduced any differences between the NSFG and the population as represented by the benchmark.

Attachment C includes the nonresponse bias analysis that was conducted for the 2022-2023 NSFG. The main survey response rate for those 15-19 years of age was eight percentage points lower than for those 20-49 years of age. Minors, who comprise the large part of this teen age group, need to provide assent to complete the survey, but only after permission is given by a parent or legal guardian. Subsequent phases of data collection help to reduce the difference in participation from Phase 1, reducing the initial difference in participation. Participation varied by Census region and similar findings for response rates by phase of data collection were found for the West region, but not for the Northeast region.

Looking at ignorable nonresponse bias, each successive phase of data collection tended to reduce any imbalances in the respondent socio-demographic characteristics when compared to ACS benchmark estimates. There was some variation across characteristics, but the largest differences were reduced in the later phases of data collection.

Nonignorable nonresponse bias was investigated through comparison of weighted estimates to other surveys and to vital statistics. Three of the six estimates compared to the 2022 and 2023 National Health Interview Survey yielded statistically significant differences. However, NSFG and NHIS have substantial differences in design, including different topics, questionnaires, and modes of data collection, that likely contribute to these differences and do not allow ascribing them to nonresponse alone.

Vital statistics provide national counts for the number of births, which are also collected in the NSFG. The number of births in 2017-2021 based on vital statistics fell within the 95% confidence intervals of NSFG estimates by age group for this same period. Further comparisons of NSFG birth estimates to vital statistics are available in survey documentation [here](#).

Finally, the impact of the increased Phase 1 and Phase 2 incentive amount was investigated. The higher incentive amount yielded higher main survey and overall response rates, and for three of the estimates with some of the largest bias among those investigated (having worked last week, region, and education), it helped to reduce the magnitude of the bias.

4. Tests of Procedures or Methods to be Undertaken

Electronic life history calendar (e-LHC) operational assessment

If assessing the calendar experience for web mode respondents reveals potential ways to enhance the e-LHC or reduce any difficulties, this could be explored and result in modifications to the e-LHC. Outcomes from the 2024-2025 data collection period show that 75.5% of surveys were completed by web mode, and of these, 64% were completed on a smartphone. The e-LHC was developed to be adaptable to the smaller screens of smartphones but is more difficult to view and use compared to larger screens. Although respondents can hide the calendar, which should reduce the likelihood of negative utility, there may still be ways

to evaluate the effect of the calendar on Rs experiences on the smart phone and make improvements.

Experiments with mailed materials: invitations to participate and reminder mailings

The goal of introductory and reminder materials is to facilitate efforts to gain cooperation, reduce FI contacting and travel costs, and enhance response rates. Toward this end, experiments will be considered to develop more targeted introductory materials, including those tailored for controlled access settings.

Experiments with timing and duration of phases

The timing and duration of phases is affected primarily by mailing needs (mailed invitations and reminder mailings for the screener and main survey) and the need to keep constant interviewer work without overlapping field data collection from two quarters. However, there is potential to further optimize the design by changing the onset of phases, if it is coordinated with changes to the onset and/or duration of other phases, within the four-quarter design. Extending all phases is also possible if the design is changed to include three rather than four sample releases in a calendar year. Such potential changes may be considered with the primary goal of increasing response rates.

Experiments with sampling for nonresponse between other phases

The current NSFG design includes subsampling of Phase 2 nonrespondents to be sent to Phase 3, when a higher incentive is offered for that subsample. Similarly, Phase 1 (web only data collection) nonrespondents can be subsampled for Phase 2 to be sent to field interviewers. With continuing challenges in interviewer recruitment and retention, such flexibility has the potential to increase response rates, among other benefits, by reducing the field interviewer case workload.

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

The NCHS statistical consultant on NSFG sample design, variance estimation, and statistical methods is **Hee-Choon Shin, Ph.D.**, a mathematical statistician in NCHS' Division of Research and Methodology (301-458-4307, wmi7@cdc.gov). The NCHS individual responsible for NSFG-RTI contract management including modifications, receipt/approval of contract deliverables, and all other contract actions is **Joyce C. Abma, Ph.D.**, NSFG's Contracting Officer's Representative and a senior social scientist in NCHS' Division of Health Interview Statistics (301-458-4058, jabma@cdc.gov). The NCHS individual responsible for obtaining all survey clearances and supervising the work of the NCHS/NSFG team, including dissemination and analysis of survey data, is **Anjani Chandra, Ph.D.**, Principal Investigator for NSFG at NCHS and a senior health scientist in NCHS' Division of Health Interview Statistics (301-458-4138, achandra@cdc.gov).

In addition to Drs. Chandra and Abma, the NSFG team at NCHS includes four other individuals who significantly contribute their social science and public health expertise to the management, conduct, and dissemination of the NSFG, including preparation of this OMB clearance package: **Gladys Martinez, Ph.D., Kimberly Daniels, Ph.D., Colleen Nugent, Ph.D., and Jennifer Sayers, M.S.** The NCHS security steward for the NSFG data systems is **Sonali Sinha, M.P.S.**, a computer scientist in NCHS' Division of Health Interview Statistics (301-458-4760, kfo1@cdc.gov).

The contractor staff supervising NSFG sample selection, data collection, and production of contract deliverables at RTI are shown below:

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