B. Collection of Information Employing Statistical Methods

1. Universe and Respondents Selection

1.1. State and Federal Prisons

The frame for sample selection is provided by the 2005 Census of State and Federal Correctional Facilities and updated for facility closures and population counts in federal facilities. The Census includes aggregate-level data on the number and characteristics of inmates housed, as well as data on the facility age and type (confinement or community-based), security level, court orders, facility programs and policies, health and safety conditions, confinement space, employment, and operating costs. The universe for the NIS will include all state and federal confinement facilities in the Census which includes 1,353 facilities and 1.4 million inmates.

There will be a two stage sample selection process that will allow for both national and facility level estimates. The first stage will select a nationally representative sample of 215 state and federal prison facilities. The first stage sample will be selected with probabilities proportionate size while ensuring that at least one facility is selected in each state. In general, the size measure used will be the inmate population recorded in the Census. However, the size measure will be adjusted if a facility was selected in the 2009 NIS in order to reduce its probability of selection and reduce the likelihood of incurring burden on that facility two survey years in a row. Furthermore, prisons housing only female inmates will be oversampled by a factor of 5 in order to allow for meaningful analysis by gender.

Prior to selection, facilities that house a large number of juveniles (25 or more) will be placed in their own stratum. The remaining facilities will be stratified by the gender housed and whether they offer mental health services to their inmate population. The sample will be allocated such that 20 facilities are selected from the juvenile stratum. The next 170 facilities will be allocated to the gender and mental health strata proportionately based on the total size measure in each stratum. The remaining 25 facilities will be allocated to the mental health strata to ensure that precise estimates from this population can be made.

Facility selection will be conducted using Chromy's Sequential PPS algorithm (Chromy, 1979) with the frame sorted by region, state, and gender of facility. This will ensure that, in expectation, the number of facilities selected in each region and state will be proportionate to their size measure. For purposes of sample selection, federal facilities will be treated like a state and grouped together regardless of their geographic location. This will ensure that at least one federal facility will be selected.

In the second stage a stratified simple random sample of inmates will be selected from a roster of inmates generated immediately prior to data collection. The inmate population will be stratified by whether the inmate is a 16 or 17 year old juvenile or an adult of 18 years old or older. The expected, average prevalence rate within state prisons is 4.0%.

Based on this expectation, the within facility sample size is designed to produce a standard error of 0.0175 in order to minimize the number of facilities whose confidence interval includes zero. Moreover, due to the varying sizes of state prisons, a finite population correction factor will be applied to the sample size to minimize burden on smaller facilities. Also, the facility-level sample design assumes a 70% response rate and sampled inmates will be randomized such that they have a 10% chance of not receiving the sexual assault questionnaire.

The inmate sample will be allocated such that facilities with 50 or fewer 16 and 17 year olds will have all 16 and 17 year olds selected. The remaining sample will be allocated to the 18 years old and above stratum. In facilities with more than 50 16 and 17 year olds a sample of 16 or 17 year olds containing at least 50 16 or 17 year olds will be taken. The specific allocation will be dependent on the total number of 16 and 17 year olds in the facility. Due to the disproportional allocation across strata and the expected weight adjustment due to nonresponse an additional factor of 1.85 will be used in the sample size calculation as the expected design effect due to unequal weights.

1.2 Jails

The frame for local jails will be based on the 2005 Census of Local Jail Inmates and updated using information from Year 1 and 2 of the NIS. The NIS will consist of both public and private local jails with more than 5 inmates housed on June 30, 2005 as identified on the 2005 Census. Thus, the frame for the jail sample contains 2,988 jails. There will be a two stage sampling process that will allow for nationally representative and facility level estimates. The first stage will select jail facilities with probability proportionate to the inmate population in the facility. Prior to selection facilities will be stratified by the number of juveniles housed in the facility according to the Census. Facilities with a high concentration of juveniles (50 or more) will be contained in one stratum and all other facilities will be in a second stratum. The first stage will be designed such that 334 jails are selected. This sample size includes 9 jails that were selected in the 2008 NIS, but did not participate. These jails will be selected with certainty. The remaining jail sample will be allocated such that 20 jails will be selected from the high concentration of juvenile's stratum and 305 jails will be selected from the low concentration of juvenile inmate's stratum.

In the second stage a stratified simple random sample of inmates will be selected from a roster of inmates generated immediately prior to data collection. Inmates will be stratified by age such that 16 and 17 year olds are in one stratum and inmates 18 years old or older are in a second stratum. The expected prevalence rate within a particular jail is 3.0%. Based on this expectation, the within facility sample size is designed to produce a standard error of 0.014 in order to minimize the number of facilities whose confidence interval includes zero. Moreover, due to the varying sizes of local jails, a finite population correction factor will be applied to the sample size to minimize burden on smaller facilities. Also, the facility-level sample design assumes a 65% response rate and sampled inmates will be randomized such that they have a 10% chance of not receiving the sexual assault questionnaire.

The inmate sample will be allocated such that facilities with 50 or fewer 16 and 17 year olds will have all 16 and 17 year olds selected. The remaining sample will be allocated to the 18 years old and above stratum. In facilities with more than 50 16 and 17 year olds a sample of 16 or 17 year olds containing at least 50 16 or 17 year olds will be taken. The specific allocation will be dependent on the total number of 16 and 17 year olds in the facility. Due to the disproportional allocation across strata and the expected weight adjustment due to nonresponse an additional factor of 1.85 will be used in the sample size calculation as the expected design effect due to unequal weights.

Furthermore, to account for the high turnover rate in jails and the anticipated loss of sample between when the initial sample is drawn and data collection begins, a supplemental sample of inmates will be drawn on the first day of data collection. Using a roster from the first day of data collection, new inmates will be identified and sampled at the same sampling rate used to draw the initial sample. Inmates who have left the facility prior to the start of data collection will be removed from the sample and frame lists and considered ineligible for the study. The supplemental sample process will yield a total sample size that is approximately the same as the initial sample since the number of new inmates in the facility will be very close to the number of inmates that have left.

The table below illustrates the size of the NIS universe by facility type.

<u>Facility type</u>	Number of facilities
Total	4,341
Prisons	
Public - Federal	191
Public and Private – State*	1,162
Local Jails	
Public and Private**	2,988

*This count includes confinement facilities only. **All jails with fewer than 5 inmates on an average day are excluded from the NIS sampling universe.

Note that independent samples for state prisons, federal prisons, and local jails will be drawn each year, as stated in the PREA.

2. <u>Procedures for Information Collection</u>

Data collection procedures include computerized interviewer-administered interviews, Audio Computer-Assisted Self-Interviews, and paper and pencil surveys.

The methods proposed for use in data collection are as follows:

a. <u>Facility Recruitment</u>

A sample of 558 jails and prisons will be selected from a frame of federal, state, and local correctional facilities. Each sampled facility will be contacted to solicit participation. A contact person will be designated at each facility.

b. <u>Sampling of Inmates</u>

Within one week prior to data collection at a facility, the facility will provide a roster of all inmates ages 18 and older (ages 16 older if parental consent is not required by the facility) who are currently incarcerated there. A random sample of inmates will be drawn from the roster.

c. Data Collection

A team of interviewers will visit the facility. They will ask correctional officers to bring each sampled inmate to a private interviewing area. The interviewer will read a consent form to the sampled inmate and ask a series of follow-up questions to ensure comprehension. If the inmate consents, the interviewer will begin administering a brief set of demographic questions that includes age, date of admission, and housing type. The interviewer will then give the inmate a brief tutorial on answering questions on the touch screen computer and allow the inmate to answer the more sensitive questions in complete privacy. In order to allow inmates with reading difficulties to participate, the inmate will wear a set of headphones and hear the questions being read as they appear on the screen. The inmate will enter his response by touching a button on the screen – no computer expertise is required. The computer program will randomly pick a series of questions to administer. Most inmates will get the series of questions about sexual assault and mental health/disability screeners. However, a portion of inmates will get a series of questions about mental health, medical, and disability screeners, followed by questions on drug and alcohol use as time permits. No one but the inmate will know which series of questions he was asked. At the end of the inmate section of the guestionnaire, the inmate will turn the computer back to the interviewer and return to his housing unit. The interviewer will then finish the process by answering a set of debriefing questions about the interview.

In order to determine if there is any bias introduced from non-respondents, administrative record data will be collected for all sampled inmates. This will allow researchers to compare demographic characteristics of responding inmates with those who did not participate.

3. <u>Methods to Maximize Response</u>

Response rate is of great importance for the NIS, particularly due to the requirement to rank facilities by prevalence of sexual victimization. The response rate in the 2007 NIS collection was 72% in prisons and 67% in jails. BJS received approval from OMB to offer incentives (cookies) for inmate participation in permitting jurisdictions prior to implementation of the second data collection. Response rates were significantly higher in facilities allowing the use of incentives (see table in Part A, Section 9).

Every effort is being made to make the survey materials clear and simple to use. The confidential nature of the data collected is clearly explained in the consent process and followed by several questions to verify respondent comprehension.

The NIS questionnaire has been designed to maximize respondent comprehension and participation and minimize burden. Some examples include an easy to use touch-screen interface with the questions simultaneously delivered via headphones. A Spanish version of the questionnaire will be available for non-English, Spanish speaking respondents. Field staff will be available to answer any questions that respondents may have, including bilingual staff who can answer questions in Spanish. Arrangements with mental health staff at each facility, or if needed, an on-call or some other arrangement, will be made for delivery of counseling services for respondents interested in obtaining counseling services or assistance following the survey.

4. <u>Test of Procedures or Methods</u>

The interview and data collection procedures were tested in a pilot study conducted January 2010 among three correctional facilities (two prisons and one jail) with 377 inmates. Juveniles were sampled in the jail so that procedures for interviewing juveniles could be tested.

Timing data was obtained for both series of questions. Based on the test is finding we have increased the burden estimate for the year 3 survey to 35 minutes.

The field staff participated in a telephone debriefing after data collection and reported that the pilot went well and that the inmates liked the fact that questions about facility climate have been added. Data collection with juveniles is reported to have gone smoothly. The additional informed consent document used with juveniles to reiterate important components of the informed consent was viewed favorably by the interviewers. At their recommendation we have decided to include this additional procedure with all inmates during year 3.

5. <u>Consultation Information</u>

The Corrections Statistics Unit at BJS takes responsibility for the overall design and management of the activities described in this submission, including sampling procedures, development of the questionnaires, and the analysis of the data. BJS contacts include:

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