

SUPPORTING JUSTIFICATION - PART B
CAUSAL ANALYSIS AND CONTERMEASURES TO RAIL-RELATED SUICIDES
Form Numbers FRA F 6180.125A; FRA F 6180.125B
OMB No. 2130-0572

1. DESCRIBE (INCLUDING A NUMERICAL ESTIMATE) THE POTENTIAL RESPONDENT UNIVERSE AND ANY SAMPLING OR OTHER RESPONDENT SELECTION METHOD TO BE USED. DATA ON THE NUMBER OF ENTITIES (E.G., ESTABLISHMENTS, STATE AND LOCAL GOVERNMENT UNITS, HOUSEHOLDS, OR PERSONS) IN THE UNIVERSE COVERED BY THE COLLECTION AND CORRESPONDING SAMPLE ARE TO BE PROVIDED IN TABULAR FORM FOR THE UNIVERSE AS A WHOLE AND FOR EACH OF THE STRATA IN THE PROPOSED SAMPLE. INDICATE EXPECTED RESPONSE RATES FOR THE COLLECTION AS A WHOLE. IF THE COLLECTION HAD BEEN CONDUCTED PREVIOUSLY, INCLUDE THE ACTUAL RESPONSE RATE ACHIEVED DURING THE LAST COLLECTION.

By fall of 2010, AAS has collected over 500 cases of incidents from railroad companies and state agencies. Some of these cases turn out to be accidents or manner of death undetermined. The unit of analysis of the study is a “case,” that is, one individual who died with blunt force impact or other cause of death on rail property. Each of the cases that is determined to be a suicide by rail strike is considered to be in the universe.

Therefore, the potential respondent universe for the psychological autopsy component consists of friends and family members of the deceased individual, the appropriate Coroner or Medical Examiner, and railroad personnel who were involved or witnessed the suicide. Of this potential universe, eight (8) individuals will be selected to answer the questionnaires. These eight (8) individuals will be selected based on their knowledge of the deceased individual and knowledge of the events leading up to his/her death. FRA/AAS expects a response rate of over 90% because the mode of data collection is by face-to-face interviews by trained staff who will reach out to the interviewees prior to the interview. The high response rate is reflective of experience where psychological autopsies have been conducted following sensitive outreach by research staff.

2. DESCRIBE THE PROCEDURES FOR THE COLLECTION OF INFORMATION INCLUDING:

• STATISTICAL METHODOLOGY FOR STRATIFICATION AND SAMPLE SELECTION

Over a two-year period, a psychological autopsy is being conducted on a systematic sample of 80 railroad suicides. A nationally representative sample is being obtained. The geographic location of these suicides is random. All individuals with relevant information about the deceased individual are approached to be interviewed. Originally, a systematic sampling plan was planned for. A list of rail suicides was developed and select every third incident was selected to be included in the study. However, this sampling plan was abandoned when early efforts revealed that recruitment would be more time-consuming than originally thought, and that families would

often be reluctant to participate. In order to assure that the sample size of 11 transit and 60 rail cases could be recruited, family and friends of all cases were contacted for possible inclusion in the study. Hence, the resulting sample is a convenience sample of railroad suicides where we could obtain consent from family and friends to conduct psychological autopsies.

- **ESTIMATION PROCEDURE**

As the objective is to describe the characteristics associated with a definite number of railroad suicides, no estimates are made.

- **DEGREE OF ACCURACY NEEDED FOR THE PURPOSE DESCRIBED IN THE JUSTIFICATION**

For the study to be useful, AAS staff were trained on interviewing techniques and appropriate recording of the data on the questionnaire. In order to accomplish this, AAS staff were given in depth training prior to the start of data collection.

- **UNUSUAL PROBLEMS REQUIRING SPECIALIZED SAMPLING PROCEDURES, AND**

Due to the random nature of the geographic location of railroad suicides, AAS will need to ensure that the sample obtained is nationally representative of where rail suicides occur. However, AAS has little power over which families agree to participate and which decline, thus there may be unavoidable bias in the sample.

- **ANY USE OF PERIODIC (LESS FREQUENT THAN ANNUAL) DATA COLLECTION CYCLES TO REDUCE BURDEN**

No, there will be no use of periodic data collection for this study. This is the first time such data is being collected.

It should be noted once again that the total estimated burden for this study is very minimal.

3. DESCRIBE METHODS TO MAXIMIZE RESPONSE RATES AND TO DEAL WITH ISSUES OF NON-RESPONSE. THE ACCURACY AND RELIABILITY OF INFORMATION COLLECTED MUST BE SHOWN TO BE ADEQUATE FOR INTENDED USES. FOR COLLECTIONS BASES ON SAMPLING, A SPECIAL JUSTIFICATION MUST BE PROVIDED FOR ANY COLLECTION THAT WILL NOT YIELD “RELIABLE” DATA THAT CAN BE GENERALIZED TO THE UNIVERSE STUDIED.

In addition to the cover letter that was sent out to survivors by the FRA (and FTA) in which the Administrators explained the rationale for the proposed study, its importance for public safety on and around railroad property, the potential for preventing railroad suicides and encouraging respondents to participate, a second letter accompanied that, from AAS to respondents. This letter assured them that – after gathering and processing the data – AAS will release to FRA and

FTA only generalized, statistical, summary reports and that AAS will not release any of the raw data provided to FRA. Seven days to two weeks after the letter was sent out (but not within two weeks prior or after the decedent's birthdate or three weeks prior or after the death date), an AAS researcher called the addressee to determine his or her level of interest in participating in the study and to answer questions. The caller explained the importance of this study to potential interviewees and asked for their consent to meet with them to collect the data. When some individuals were unwilling to participate in the study, outreach was made to other individuals who may be able to provide the required information on the same case until all contacts were exhausted. Family and friends were called from 3 to 5 times before being dropped. When a telephone number was wrong or a letter returned, research staff at AAS searched the web and telephone directory assistance to locate new numbers and new individuals for each case. If new addresses were found for those who had already been sent a letter, a new letter was sent to the more recent address. If one family member in a household declined, she or he was asked if there was anyone else in the household who might be willing to participate.

4. DESCRIBE ANY TESTS FOR PROCEDURES OR METHODS TO BE UNDERTAKEN. TESTING IS ENCOURAGED AS AN EFFECTIVE MEANS OF REFINING COLLECTIONS OF INFORMATION TO MINIMIZE BURDEN AND IMPROVE UTILITY. TESTS MUST BE APPROVED IF THEY CALL FOR ANSWERS TO IDENTICAL QUESTIONS FROM 10 OR MORE RESPONDENTS. A PROPOSED TEST OR SET OF TESTS MAY BE SUBMITTED FOR APPROVAL SEPARATELY OR IN COMBINATION WITH THE MAIN COLLECTION OF INFORMATION.

The questionnaires were pilot tested by AAS staff and field researchers after they were trained to use the instruments. Issues that arose during the pilot test were addressed prior to the start of actual data collection. Some of the wording was changed to clarify certain items, but the intent of each item remained the same. Field researchers were asked to summarize the findings in prose form at the end of the protocol, but this addition did not change the questions asked to the friends and families of the decedent. In other words, the protocol has changed very little since the original approval, and those changes were minor changes in wording rather than intent. Use of a standardized questionnaire has been necessary to ensure that the data we obtain from the survey can be compared and analyzed with validity. It has also enabled us to maintain human subjects clearance for this project.

5. PROVIDE THE NAME AND TELEPHONE NUMBER OF INDIVIDUALS CONSULTED ON STATISTICAL ASPECTS OF THE DESIGN AND THE NAME OF THE AGENCY UNIT, CONTRACTOR(S), GRANTEE(S), OR OTHER PERSONS(S) WHO WILL ACTUALLY COLLECT AND/OR ANALYZE THE INFORMATION FOR THE AGENCY.

FRA and RRF have engaged the services of the American Association of Suicidology (AAS), 5221 Wisconsin Ave., N.W., Washington, D.C. 20015, for the conduct of this study. AAS will be responsible for data collection, tabulation, and analysis.

The AAS primary point of contact for this work is:

Andrea Price
Project Manager
Tel.: (202) 237-2280
Fax: (202) 237-2282
aprice@suicidology.org

The FRA primary point of contact for the contracted study is:

Michael Coplen
Railroad Development (RDV) Human Factors Program Manager
Tel.: (202) 493-6346
Fax: (202) 493-6333
michael.coplen@dot.gov