Attachment 3: Comments from External Reviewers

Standard Electronic External Review Form for Division of Safety Research Intramural Projects

A. IDENTIFICATION

Name of Project Officer: Hope Tiesman, PhD and Rebecca Heick, PhD

Title of Proposed Project: Cops & Cars: Reducing LEO Deaths in Motor Vehicle Crashes

Name of Reviewer: Betsy Brantner Smith **Telephone Number of Reviewer:** 630-399-1645

Fax Number of Reviewer: N/A

E-mail address of Reviewer: betsybrantner@aol.com

B. CRITIQUE

1. Significance:

Does this study address an important problem in occupational safety? If the aims of the project are achieved, how will scientific knowledge be advanced? What will be the effect or impact of this study on the DSR mission to reduce worker injuries?

This study addresses not only an important problem in peace officer safety, but one that is in desperate need of additional study. This study will have national implications. The focus on police officer safety tends to be on firearms, tactics and subject control and yet law enforcement personnel spend a great deal of their time either driving a vehicle or getting in and out of a patrol car in hazardous areas, poor changing weather conditions, and in situations where their focus is elsewhere. Training in this area tends to be sporadic and inadequate. This study should assist police agencies in developing realistic training and risk management programs for their personnel who spend a significant part of their work day behind the wheel, thus reducing worker injury.

2. Approach:

Are the scientific framework, design (including the composition of the study population), methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project? Does the project officer acknowledge potential problem areas including feasibility, and consider alternative tactics?

The scientific framework of this study speaks to the project officers' knowledge of their topic and their targeted survey respondents. Law enforcement personnel are notoriously suspicious of such surveys and are not always accurate in their response (as highlighted in the reference to the Von Kuenssberg 2005 and the Cowen 2006 studies cited). The project officers have developed a mechanism for officers in the field to respond anonymously, which should increase not only the number of respondents but the accuracy of their answers. The response method (paper and pencil) also allows for officers to respond privately and without the need for confusing or time consuming technology.

By involving individual department leadership combined with organizations such as Iowa POST (through Iowa DPS), the Iowa State Police Association, and the Fraternal Order of Police, the project officers have thoroughly blanketed the state to engage a significant number of Iowa police personnel in this study. Simply put, they have not put all of their research eggs into one police basket.

3. Innovation:

Where needed, does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies? Cops are notoriously secretive and frankly, a bit paranoid. By making this study anonymous and non-Internet based, the project officers have increased their chances of a true and accurate response from survey participants. This study accurately challenges the myth that police officers die or are injured primarily in gun fights. Driving is a hazardous, high risk activity for law enforcement, and the project officers also correctly acknowledge that (a) police personnel are also at risk standing next to their own vehicles or other, and (b) police officers likely have some culpability in their own lack of motor vehicle safety. Mostly importantly, this study will challenge the existing believe that wearing seat belts is "not tactical" and therefore "not safe" for police personnel.

4. Project Officer (Investigator):

Is the project officer appropriately trained and well suited to carry out this work? Is the work proposed appropriate to the experience level of the project officer and other researchers (if any)? Please do not include descriptive biographical information unless important to the evaluation of merit. For new or less experienced NIOSH staff, note if the level of supervision appears adequate.

The primary project officer as well as the additional staff clearly possess the education, background and skills needed to complete this important study. By working with other staff members who have ties to the law enforcement community, this will add credibility to the work and allow for easier "buy in" from law enforcement personnel.

5. Environment:

Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take advantage of unique features of the scientific environment or employ useful collaborative arrangements? Please do not include a description of available facilities or equipment unless important to the evaluation of merit.

The coordinated effort to reach out to law enforcement managers, line personnel and various training and fraternal organizations will greatly contribute to the potential success of the study.

6. Overall Evaluation:

In **one paragraph**, briefly summarize the most important points of the Critique, addressing the strengths and weaknesses of the application in terms of the five review criteria. Recommend a score reflecting the overall impact of the project on the field of occupational safety and health, weighting the review criteria as you feel appropriate for each application. An application does not need to be strong in all categories to be judged likely to have a major impact and, thus, deserve a high merit rating. For example, an investigator may propose to carry out important work that by its nature is not innovative, but is essential to move a field forward.

The significance of this project is extraordinary and so timely in a year that has seen peace officer deaths increase by 43% year-to-date. The strength of this project lies in the collaboration of those involved, the simplicity and anonymity of the response process and the realistic goal of disseminating the data collected to help individuals, agencies, and training organization deal more effectively with the high rate of police officer death and injury due to traffic related incidents. The project team is well-qualified and highly motivated to gather data that can be realistically utilized to reduce peace officer injury and death in the state of Iowa. This project will provide ongoing opportunities for additional research in the area of police officers, risk, and the use of information and training to challenge the status quo.

C. OTHER CONSIDERATIONS

- 7. Gender, Minority, and Children Inclusion (As Relevant) Because of the well-documented differences between the male and female reaction and response to risk, I would suggest that gender be included in the survey. I would also suggest that age, years of police experience and current assignment be included.
- 8. **Human Subjects Note** that NIOSH projects involving human subjects must obtain review and approval from the NIOSH Human Subjects Review Board.
- 9. Researcher Hazards none

10. **Other**

(Please type any other comments here)

Standard Electronic External Review Form for Division of Safety Research Intramural Projects

A. IDENTIFICATION

Name of Project Officer: Hope Tiesman, PhD and Rebecca Heick, PhD

Title of Proposed Project: Cops & Cars: Reducing LEO Deaths in Motor Vehicle Crashes

Name of Reviewer: Tom Nolan

Telephone Number of Reviewer: 610-205-8549 Cell: 484-366-2819

Fax Number of Reviewer:

E-mail address of Reviewer: tnolan@umtownship.org

B. CRITIQUE

1. Significance:

Does this study address an important problem in occupational safety? If the aims of the project are achieved, how will scientific knowledge be advanced? What will be the effect or impact of this study on the DSR mission to reduce worker injuries?

A. This study does address an extremely important problem in occupational safety in the law enforcement profession. I believe that if the aims of the project are achieved it will provide sufficient data to be used in a marketing campaign to get more law enforcement officers to use seat belts and to reduce officer deaths. Law enforcement officers are certainly a "show me the facts" community and the facts will be blatantly obvious at the end of the study.

2. Approach:

Are the scientific framework, design (including the composition of the study population), methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project? Does the project officer acknowledge potential problem areas including feasibility, and consider alternative tactics?

A. For the most part I do believe the composition of the study population are appropriate to the aims of the project, but I do have concerns that it may be studying a majority of rural departments with lower call volumes. Inner city urban police officers are handling a higher volume of calls that require them to be in and out of the car more frequently. They are probably more apt to go without a seatbelt for a 2 minute ride to their next call as opposed to the rural officer who may be driving 20 minutes to his next call or 3 hours until they actually get a call.

3. Innovation:

Where needed, does the project employ novel concepts, approaches or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?

A. I was concerned about the use of a paper survey form at first, but based on the explanation provided I now agree with this method.

4. Project Officer (Investigator):

Is the project officer appropriately trained and well suited to carry out this work? Is the work proposed appropriate to the experience level of the project officer and other researchers (if any)? Please do not include descriptive biographical information unless important to the evaluation of merit. For new or less experienced NIOSH staff, note if the level of supervision appears adequate.

A. I have a minor concern that the project officer does not have enough of a working knowledge of the law enforcement profession. Issues that may be presented by respondent may not be fully understood by the project officer. Also, some excuses, such as the "entanglement of the seatbelt and the holster" may go unchallenged when they are really just an old worn out excuse. Most modern security holsters sit higher on the belt and are built in a manner that does not cause then to become entangled with the seat belt.

5. Environment:

Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take advantage of unique features of the scientific environment or employ useful collaborative arrangements? Please do not include a description of available facilities or equipment unless important to the evaluation of merit.

A. It appears that the surveys will be completed by the officers in the field, in their patrol car in most cases so I think it is a good scientific environment.

6. Overall Evaluation:

In **one paragraph**, briefly summarize the most important points of the Critique, addressing the strengths and weaknesses of the application in terms of the five review criteria. Recommend a score reflecting the overall impact of the project on the field of occupational safety and health, weighting the review criteria as you feel appropriate for each application. An application does not need to be strong in all categories to be judged likely to have a major impact and, thus, deserve a high merit rating. For example, an investigator may propose to carry out important work that by its nature is not innovative, but is essential to move a field forward.

A. This project is addressing a serious issue at the very source of the problem. The project is taking the appropriate steps to make sure that they get honest and adequate end user input to develop a strategy to get more officers to wear their seatbelts all the time while in the police car. The only area of concern that I am not sure that the project officer is going to address is the importance of using the seatbelt when the police car is not in motion. Officers are severely injured and killed each year when their police car is struck when they are parked on the highway blocking traffic, writing an accident report or issuing a citation, etc. Police cars carry a multitude of equipment in the passenger compartment (unlike passenger cars) that can be dangerous if the officer is thrown into them while struck while stationary. Overall I rate the project at 90 %.

C. OTHER CONSIDERATIONS

7. Gender, Minority, and Children Inclusion (As Relevant)

8. **Human Subjects** Note that NIOSH projects involving human subjects must obtain review and approval from the NIOSH Human Subjects Review Board.

9. Researcher Hazards

10. **Other**

A. You mention that you have the support of the FOP. You should also contact and seek the support of the National Sheriffs Association (NSA) which is the voice and advocate of the many Sheriffs Departments across the nation.

(Please type any other comments here)