

CIREN Wake Forest Suggestions for CISS Expansion

Outside Agency Assistance

- The proposed new crash types add unique challenges which are not present with current CISS crash types involving only passenger motor vehicles. Pedestrian, pedalcyclist, scooter, heavy truck, and on-scene crashes will involve many non-towed vehicles, which are historically difficult to track down and gain permission for inspection. The following suggestions could improve this situation:
 - Issue grants to law enforcement agencies to participate in CISS research. The owners/drivers of the vehicles involved in these new crash types are frequently going to be unavailable and/or not give permission for vehicle inspection. On-scene data from these new crash types will also be more important than in MVC crashes to understand the crash circumstances and collect relevant data. Law enforcement can greatly improve the acquisition and quality of data on these points. The CISS teams could then conduct follow-on data collection, expanding on the on-scene data collected by law enforcement.
 - Create a NHTSA initiative to expand insurance company cooperation. The insurance company is usually responsible for deciding who can and cannot inspect total loss vehicles. Their adjusters could also provide assistance with non-total loss vehicles. There is currently some cooperation arranged by NHTSA that is greatly appreciated, but data collection teams still regularly lose vehicles due to not having cooperation.

Internal Agency Assistance

- Increase the budget paid to the IT contractor (AQA), so as to be able to hire more staff to handle CISSWeb change requests promptly. Currently some requests take up to a year or more.
- Add limited CISSWeb access for non-PIV cardholders to perform data entry. With a small number of PIV agent offices nationwide and the numerous steps for obtaining a PIV card, the PIV card process costs a large amount of time & money and may prevent some teams from adding additional research staff that could increase output. Much of the data in CISSWeb is deidentified and could be handled by non-PIV employees.

Field Data Collection

- Consider greatly reducing the use of Total Stations for scene reconstructions. A highly accurate scene diagram can easily be drawn using the satellite imagery option already installed in FARO Zone 2D. For scenes without evidence, the Total Station could be excluded entirely, reducing the time to perform a complete scene survey to only the time necessary for taking pictures.
 - If Total Stations were eliminated from scene protocol entirely, documentation of evidence could come from the scene images and a large cost savings could be realized by not equipping new teams with the Total Stations (~\$10k per Total Station). In the opinion of the comment submitter, this would result in a minimal decrease in data quality.
- Consider eliminating the use of Total Stations for vehicle crush measurement. Use LIDAR scanning iPads or other less-expensive/faster/more thorough scanning device to measure crush on vehicles.
- Invest in a more expansive supply and loaner program of EDR download tools. The EDR data is some of the most valuable data in any given case.

- Consider discontinuing measurement of airbag dimensions. They are non-uniform, three-dimensional objects and different investigators usually arrive at different measurements of the same airbags (see public database of airbag measurements for similar vehicles).

New data elements

- Addition of mental health comorbidities when applicable and helpful to the study data

CISSWeb Enhancements

- Additional dedicated tab for the upload of referring hospital records (currently these go under Other Documents)
- A way to upload the EMS Report in the EMS Tab (currently this goes under Other Documents)

Engineering Enhancements

- Automation of virtual reconstructions
- Development of AACN algorithms and systems