

Illinois Traffic Records Coordinating Committee  
Data Quality Subcommittee Meeting  
February 26, 2014  
10:05 a.m. – 11:50 a.m.

## MINUTES

**Attendees:** **DTS:** Ken Martin, Mark Blankenship, Anne Hillen, Suzie Hulett, Darrell Clark, Mehdi Nassirpour, Rick Ingold, Michelle Fowler; **FHWA:** Greg Piland; **Loyola:** Dan Leonard; **ISP:** Phil Pullman; **BIP:** Brad Long,

**Teleconference:** **City of Chicago:** David Pulsipher, David Zattero; **Loyola:** Ruth Kafensztok

1. Ken Martin kicked-off the meeting at 10:05 a.m. by asking the attendees and those on the teleconference to introduce themselves.
2. Ken Martin then gave an overview of the history leading up to some of the items being considered by the Data Quality Subcommittee, including:

*The NHTSA Traffic Records Assessment performed in April 2011 had a number of recommendations that focused on data quality and improvement opportunities. While developing a “Complete Traffic Records System” is the focus of the full Illinois Traffic Records Coordinating Committee (ITRCC), several recommendations gave direction to this subcommittee, including:*

- *The ITRCC must “Oversee Quality Improvement”*
  - *The strategic plan for the ITRCC should include the “creation of data quality improvement projects”*
  - *The ITRCC must “promote data usage and continual improvement efforts”*
  - *Finally, the ITRCC strategic plan must “Formalize Quality Control Programs”*
    - *Data quality metrics*
    - *Feedback to data generators and stakeholders (e.g., timeliness, accuracy, completeness, uniformity, accessibility)*
    - *Tracking the crash reports corrected or returned for correction*
    - *Data audits*
3. Ken Martin reviewed the highlights of the minutes from the October 11, 2012 meeting of the Data Quality Subcommittee and made a motion to approve the minutes. Motion seconded by Rick Ingold. Motion carried.

4. Ken Martin then reviewed the status of recommendations from the ITRCC Strategic Plan that impact data quality, including:
  - a. **Formalize a plan to have data entry staff perform an expanded data quality improvement role:**
    - i. Review and correct location information and codes. Is this item still on-hold?
      - 1) **DISCUSSION:** This item is not on-hold. DTS now has conversion capability for the location tool that has improved on this issue. Further, with the increase in electronic crash reporting, the use of longitude and latitude will further reduce concerns for this issue.
      - 2) **RECOMMENDATION:** This issue is being addressed appropriately. Close.
    - ii. Feedback to law enforcement regarding errors on crash reports. Does waiting for an increase in electronic crash reporting still resolve this issue?
      - 1) **DISCUSSION:** While electronic crash reporting will definitely reduce the number of errors we receive because we require law enforcement (LE) agencies to go through data validation checks before they are allowed to submit a crash report, we do still receive some 60% of our reports in paper/ hard copy form. Therefore, this area does continue to be a concern that must be monitored. The new Safety Portal being developed for DTS by the Bureau of Information Processing (BIP) will have a **Common Errors in Filling-out SR1050 Forms** feature that will allow DTS to report back to LE agencies thus helping to address this concern area.
      - 2) **RECOMMENDATION:** Continue to monitor this issue as the Safety Portal is developed to ensure we address this item and encourage more agencies to move to electronic crash reporting.
    - iii. Compile “error” lists to use in training law enforcement agencies. Does waiting for an increase in electronic crash reporting still resolve this issue?
      - 1) **DISCUSSION:** Electronic crash reporting will definitely reduce the number of errors we receive because we require law enforcement (LE) agencies to go through data validation checks before they are allowed to submit a crash report. As noted earlier though, some 60% of the reports we receive are paper/hard copy forms.

We need to monitor the typical errors so we can inform LE agencies. The new Safety Portal we are developing will have a **Common Errors in Filling-out SR1050 Forms** feature that will allow DTS to report back to LE agencies.

- 2) **RECOMMENDATION:** Continue to monitor this issue as the Safety Portal is developed to ensure we address this item, including on-site training or on-line training when needed.
- iv. Target crash reports for further review based on specific factors (e.g., poor narrative). Does waiting for an increase in electronic crash reporting still resolve this issue?
- 1) **DISCUSSION:** While electronic crash reporting will reduce data entry errors, it will not address issues such as weak narratives.
  - 2) **RECOMMENDATION:** Review crash narratives, when feasible, to determine if additional training is necessary. Inform LE agencies of the critical importance of a good narrative description of the crash.
- v. Conduct audits on crash reports. Does waiting for an increase in electronic crash reporting still resolve this issue?
- 1) **DISCUSSION:** While electronic crash reporting will reduce data entry errors, it will not address the intent of this Item. This issue focuses on taking crash reports as submitted, making any corrections to data that may be required, and then comparing the two (i.e., initial submission compared to the corrected version) to determine the most common errors on crash reports. The results of such an audit would allow DTS to report back to LE agencies about commonly made errors in crash reporting. Further, it would allow DTS to identify the source LE agencies having the most problems and address their errors with them directly.
  - 2) **RECOMMENDATION:** Keep this item on the plan for consideration. While such as audit has yet to be completed, resources may be identified in the future to complete a sample audit and provide the subsequent follow-up training with LE agencies.

5. Ken Martin reviewed the Data Quality Subcommittee Action Items from the last Subcommittee meeting. The Subcommittee agreed:
  - a. **New Item #1, Old Item #6 – Provide training to law enforcement agencies on the use of SR 1050, as well as on XML electronic reporting systems:**
    - i. **Follow-on Action/Result #1 (Old Item #1) – Decrease the number of blank fields, “unknown” entries, and erroneous data crash reports.**
    - ii. **Follow-on Action/Result #2 (Old Item #4) – Provide feedback to law enforcement agencies on crash report data quality and routine errors.**
      - 1) **DISCUSSION:** The Subcommittee approved the recommendation that the new Item #1 for the Subcommittee will be a combination of original Items #1, #4, and #6, with #6 being the parent Item.
      - 2) The new Safety Portal being developed by BIP for DTS will allow us to have on-line training available for law enforcement agencies and other Safety Portal users. Greg Piland mentioned that we should review the on-line training course developed for the Chicago Police Department as a sample.
      - 3) However, we have found recently that numerous LE agencies have difficulty completing the crash reports correctly and City/County/State Engineers have indicated they have trouble understanding the information on the reports.
      - 4) Feature 12 of the new Safety Portal will allow us to provide feedback regarding common errors committed when completing crash reports.
      - 5) **RECOMMENDATION:** We need to consider the option of doing training classes, or Train-the-Trainer classes for LE agencies and City/County/State engineers. Currently, DTS is not doing “on-site” training and should consider developing such a program when resources are available.
  - b. **Old Item #2, New Item #2 – Conduct a survey to provide us with a GAP Analysis that would result in a diagram of TRCC data; identify who owns the data; and what systems or processes are used by various agencies to collect/submit data:**
    - i. **Follow-on Action/Result #1 (Old Item #5) – Compile data dictionaries for all traffic records systems.**
    - ii. **Follow-on Action/Result #2 (Old Item #8) – Study all traffic records systems to identify their strengths and weaknesses (this may require hiring a consultant).**

- 1) **DISCUSSION:** The Subcommittee approved creating New Item #2 by combining original Items #2, #5, and #8, with #2 being the parent Item. The Subcommittee discussed the draft survey we developed and decided that we actually already have much of the information we are requesting on the survey in our Traffic Records Improvement Program Reporting System (TRIPRS) with NHTSA.
  - 2) **RECOMMENDATION:** Ken Martin will coordinate with Darrell Clark and Mehdi Nassirpour to refocus the survey by entering the information we already have such as the agency, agency contact, the type of data they collect, etc. and drill down into questions such as:
    - a. How do they collect their data?
    - b. Do they collect their data electronically?
    - c. If yes, what electronic systems do they use?
    - d. How do they handle the data on the back end (e.g., review for errors, corrections, enhancements, analyses)?
    - e. Is their data easily accessible?
    - f. Do they have relational databases?
    - g. Can we establish an Interagency Agreement to access their data?
    - h. What metrics do they use for data quality?
  - 3) We will then target the 6-7 agencies that collect the core traffic records system data elements such as:
    - a. Crash
    - b. Driver
    - c. Vehicle
    - d. Roadway
    - e. Citation/Adjudication
    - f. Injury/Surveillance
  - 4) Once the survey data is collected, DTS will then have to decide if we have the resources in-house to complete the study of the records systems to identify strengths or weaknesses, or if that would have to be outsourced.
- c. **Old Item #3, New Item #3 – Make sure edits and data validation procedures are adequate and in place for XML reported data:**
- 1) **DISCUSSION:** The Subcommittee discussed the current procedures DTS has in place for approval of third-party XML vendors (i.e., test scenarios) as well as our ability to edit the data after submission and feels that at this time we are accomplishing this Item.

- 2) **RECOMMENDATION:** Continue to monitor this Item as additional XML vendors are reviewed and approved to ensure the test scenarios, as well as our ability to edit and validate the data is satisfying our requirements.
- d. **Old Item # 4 (combined with New Item #1) – Provide feedback to law enforcement agencies on crash report data quality and routine errors:**
  - 1) **DISCUSSION:** The Subcommittee approved combining the original Item #4 with the new Item #1.
- e. **Old Item #5, New Item #4 – Compile data dictionaries for all traffic records systems:**
  - 1) **DISCUSSION:** Members of the Subcommittee believe we may already have the data dictionaries for each of the agencies that we are aware of that currently collect traffic records data.
  - 2) **RECOMMENDATION:** If not, we will include a request on the survey from Item #2 for said data dictionaries.
- f. **Old Item #6 (parent Item for New Item #1) – Provide training to law enforcement agencies on the use of SR 1050, as well as on XML electronic reporting systems:**
  - 1) **DISCUSSION:** The Subcommittee approved making the original Item #6 into the new Item #1 and combining it with original Items #1 and #4.
- g. **Old Item #7, New Item #5 – Develop legislation that would facilitate changes to traffic records systems.**
  - 1) **DISCUSSION:** Currently, legislative efforts to allow DTS to sell crash reports (as previously discussed by this Subcommittee) are on-hold. Greg Piland indicated that FHWA will be making recommendations regarding a legislative review panel and potential legislative proposals in their upcoming (i.e., April 1, 2014) briefing with DTS on the recent *Availability and Use of Crash Data* process review they completed.
  - 2) **RECOMMENDATION:** Review the upcoming *Availability and Use of Crash Data* process review report from FHWA and consider their recommendations for a legislative review panel to determine if legislative proposals are appropriate at that time.
- h. **Old Item #8 (combined with New Item #2) – Study all traffic records systems to identify their strengths and weaknesses (this item may require hiring a consultant):**

- 1) **DISCUSSION:** The Subcommittee approved keeping the original Item #2 as New Item #2, and combining it with original Items #5 and #8.
  - i. **Old Item #9, New Item #6 – Develop a methodology for improving intersection coding (this is critical for the Safety Analyst application):**
    - 1) **DISCUSSION:** The Subcommittee determined that at this time this Item cannot be completed unless we decide to collect a significant number of new data elements on our SR 1050 crash reports.
    - 2) **RECOMMENDATION:** Put this Item on-hold.
  - j. **Old Item #10, New Item #7 – Simplify our Illinois Traffic Crash Report (SR 1050):**
    - 1) **DISCUSSION:** The Subcommittee determined that based on the new SR 1050 developed in CY2013; there is no need for action on this Item, at this time.
    - 2) **RECOMMENDATION:** Put this item on-hold for now. Review this item annually and ensure that any changes DTS makes to comply with the Model Minimum Uniform Crash Criteria (MMUCC) manual are reflected on our SR 1050. The next MMUCC update is scheduled for approximately CY2017.
  - k. **Old Item #11, New Item #8 – Review of changes made to the SR 1050 in the CY2014 print run, including work zone information:**
    - 1) **DISCUSSION:** The Subcommittee determined the recent changes made to the SR 1050 were appropriate and provided valuable information for crash analyses. The one item not included for work zones was the total number of workers present on the scene at the time a crash occurs. While there has been some interest in this statistic by our end-users, it was determined by the Subcommittee that this would be a very difficult data element to complete with any accuracy. Therefore, as of now there is no recommendation to add the data element in future revisions of the SR 1050.
    - 2) **RECOMMENDATION:** Continue to monitor the data elements on the SR 1050 and propose revisions as appropriate.
6. Other Discussion Items:
- a. Mehdi Nassirpour indicated it would be useful to collect data on the number of motorcyclists who are involved in a crash who had previously completed a motorcycle training course. This data would be useful to determine the impact of training on crash involvement.

- 1) **DISCUSSION:** The Subcommittee determined this would be difficult information to obtain at the crash scene by the investigating law enforcement agency. Further, before adding such a data element to the SR 1050, the Subcommittee would like to know that they are not simply creating a data element that will be consistently left blank, due to uncertainty by the investigating LE agency.
  - 2) **RECOMMENDATION:** The Subcommittee determined that if this type of data were to be collected, it would be better to pilot test the collection of the data through a sample of medical services records for motorcyclists injured in crashes to determine if they had received previous training, rather than asking the LE agency to make this determination or asking the LE agency to go back to the SR 1050 at a later date and fill-in the data as a corrected crash report. Ken Martin will discuss this suggestion further with Mehdi Nassirpour.
7. Ken Martin asked how frequently the Subcommittee should meet and the initial consensus was every six (6) months. However, due to reporting requirements for Darrell Clark as the ITRCC coordinator, the Subcommittee will try to meet quarterly.
  8. Ken Martin adjourned the meeting at 11:50 a.m.