



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**



DOT HS 813 056

June 2022

Tribal Crash Reporting Toolkit: Toolkit Manual

DISCLAIMER

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Suggested APA Format Citation:

Scopatz, R., Chesnik, K., Cross, A., Gross, A., Haney, K., Stevens, G., Brown, R., & Chestnutt, C. (2022, June). *Tribal crash reporting toolkit: Toolkit manual* (Report No. DOT HS 813 056). National Highway Traffic Safety Administration.

Technical Report Documentation Page

1. Report No. DOT HS 813 056	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Tribal Crash Reporting Toolkit: Toolkit Manual		5. Report Date June 2022	
		6. Performing Organization Code	
7. Authors Scopatz, R., Chesnik, K., Cross, A., Gross, A., Haney, K., Stevens, G., Brown, R., and Chestnutt, C.		8. Performing Organization Report No.	
9. Performing Organization Name and Address VHB Venture I 940 Main Campus Drive, Suite 500 Raleigh, NC 27606 Address City, State, ZIP Code		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. Contract DTNH22-14-D-00342L Task Order 693JJ919F000087	
12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration 1200 New Jersey Avenue SE Washington, DC 20590		13. Type of Report and Period Covered Final Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract This toolkit manual describes all other pieces of the Tribal Crash Reporting Toolkit. These tools are designed to help Tribal governments collect, manage, and analyze crash data in their jurisdictions. The Officer's Instruction Tool serves as a guide for law enforcement officers completing motor vehicle crash reports. The guide is broken into sections that correspond to the sections of the crash report. A motor vehicle crash report describes characteristics of the crash, the vehicles, and people (drivers, occupants, and nonmotorists) involved. Quality data are necessary for developing countermeasures to decrease motor vehicle injuries and fatalities. Decision-makers use the data to perform problem identification, establish goals and performance measures, allocate resources, and support the development and evaluation of highway and traffic safety countermeasures.			
17. Key Words toolkit, officer's instruction tool, manual		18. Distribution Statement Document is available to the public from the DOT, BTS, National Transportation Library, Repository & Open Science Access Portal, rosap.ntl.bts.gov .	
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 14	22. Price

Table of Contents

Introduction.....	1
Crash Reporting Facts and Fictions Tool.....	2
Data Analysis Tool.....	4
Crash Reporting Tool.....	5
Officer’s Instruction Tool.....	6
Quality Control Tool.....	7
Database Tool.....	8
Tribal Self-Assessment Tool.....	9

Introduction

This toolkit manual describes all other pieces of the Tribal Crash Reporting Toolkit. These tools are designed to help Tribal governments collect, manage, and analyze crash data in their jurisdictions. The tools are:

- Crash Facts and Fictions Tool;
- Data Analysis Tool;
- Crash Reporting Tool;
- Officer's Instruction Tool;
- Quality Control Tool;
- Database Tool; and
- Tribal Self-Assessment Tool.

This manual describes the final versions of each of the tools. Each tool was pilot-tested with Tribal governments and, where applicable, their supporting agencies. The final versions reflect the feedback provided by the participating pilot agencies.



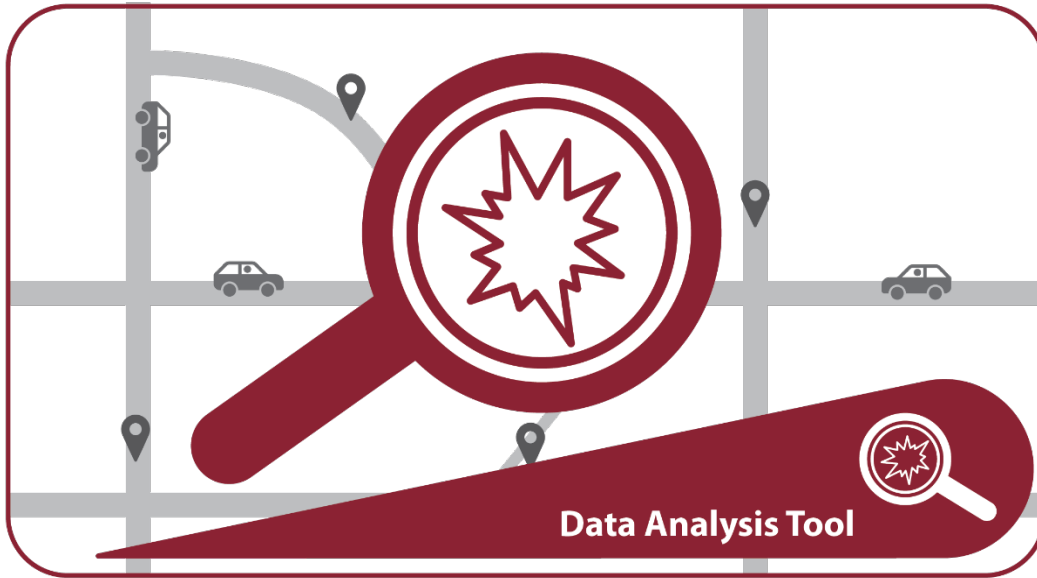
Crash Reporting Facts and Fictions Tool

This tool is designed to help Tribal governments and their law enforcement agency partners (whether part of the Tribal government or not) address some of the most common misconceptions about law enforcement crash reporting. This list is intended to address concerns that Tribal agencies may have regarding incomplete, inaccurate, or inconsistent data. The treatments of topics in this tool are organized around various “fictions” about crash reporting. For each fiction, we present the facts of the situation—how the data are collected or used—and the tool includes suggestions on how a Tribe might counter that particular fiction through training, marketing, communications, outreach, and promotions.

The fictions and corresponding facts are presented as follows:

- Fiction: Crash reports are useless.
Fact: Crash reports are used as the core of many safety improvement efforts.
- Fiction: Tribal members’ identities or sacred sites can’t be protected.
Fact: Tribal governments control sensitive data elements through data sharing agreements.
- Fiction: No injury, no crash report.
Fact: We know from decades of research that crash severity is like a pyramid with the wide base (largest number of crashes) made up of the lowest severity (property damage only—PDO).
- Fiction: We don’t need details about every person.
Fact: We use information on everyone in crashes to understand risk and outcomes.
- Fiction: If vehicles are moved or people are gone, I can’t fill out the crash report.
Fact: An officer’s opinion is better than leaving the crash report blank.
- Fiction: Nobody looks at the crash narrative and diagram.
Fact: Narratives and diagrams are important parts of the crash record.

- Fiction: I can't submit the report until every data element is completed.
Fact: Officers can submit a crash report and amend it later.
- Fiction: I only need the name and number from the commercial truck's door.
Fact: The owner of the power unit may not be the party responsible for the trip.
- Fiction: Local names or landmarks are the best way to locate a crash.
Fact: There are several problems with local unique names as crash locators.
- Fiction: I can't judge injury severity or damage.
Fact: Officers are the only source for some of this information in many crashes.
- Fiction: Only State and Federal agencies benefit when Tribes share data.
Fact: Everyone benefits from data sharing.



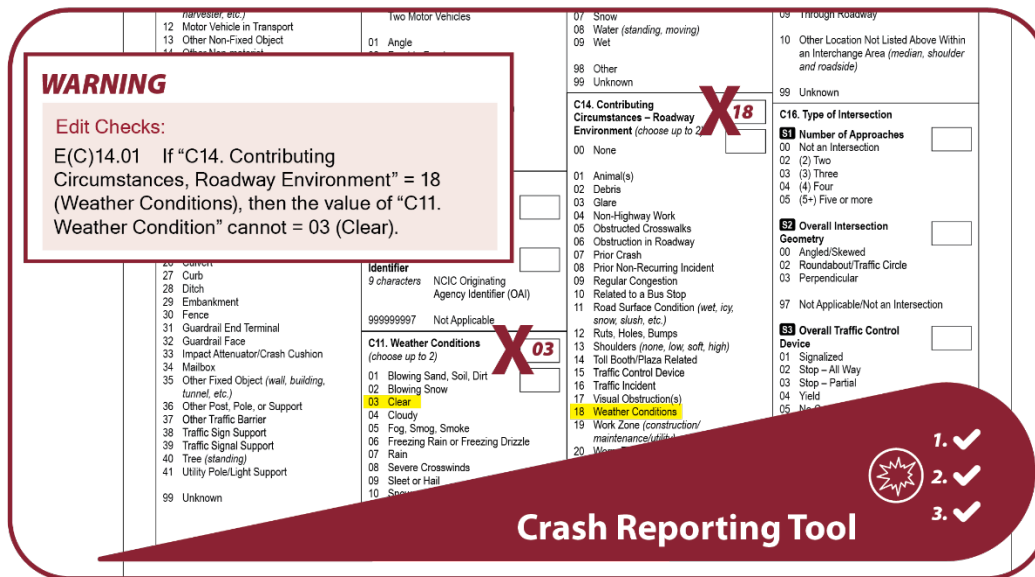
Data Analysis Tool

This tool is designed to help Tribal governments analyze crashes in their jurisdictions. This tool is not intended to be exhaustive, but it is intended to give Tribal governments a good understanding of the kinds of safety analyses they can perform and how the results can help define a safety program and its components. The topics in this tool are organized around common types of analyses:

- Exploratory analyses that can help a Tribe identify important focus areas for safety improvement;
- Location-based and systemic roadway analyses; and
- Behavior-focused analyses organized around common program areas.

The tool aligns with the same processes Tribes use to develop their Transportation Safety Plans. It goes beyond those strategic planning efforts by presenting the methods and uses of advanced roadway and behavioral safety analysis.

The tool ends with a section on how Tribes can use the results of data analyses to plan safety efforts and support funding requests—including grant funding justifications.

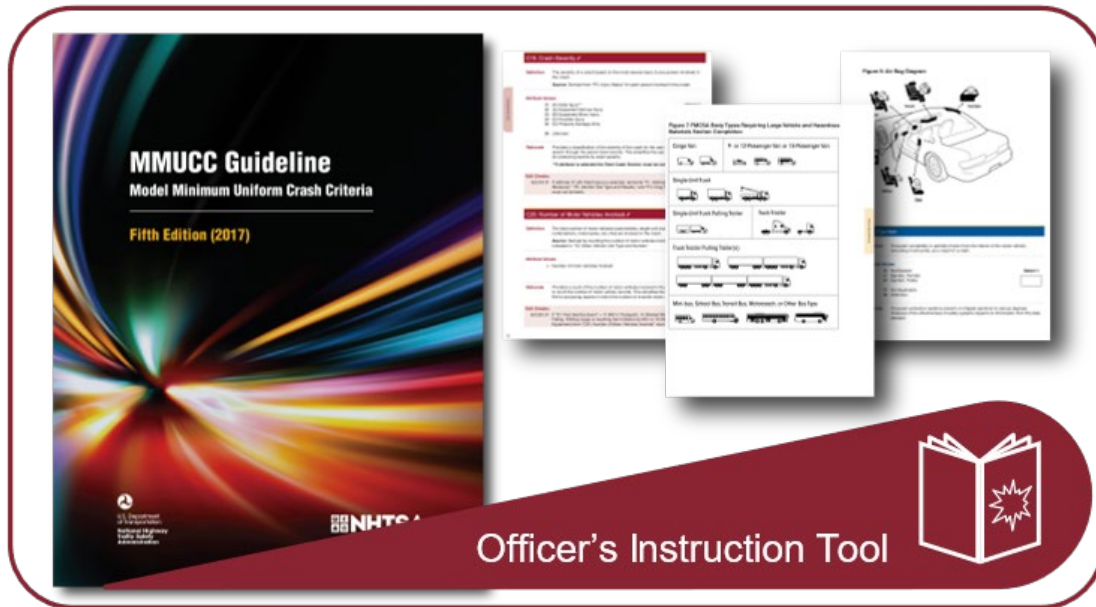


Crash Reporting Tool

The Crash Reporting Tool is based on a subset of the Model Minimum Uniform Crash Criteria (MMUCC) 5th Edition¹ data element definitions. It is designed as a fillable PDF designed for law enforcement officers to use in collecting selected, important data about a crash. The list of data elements is based on discussions with Tribal governments on the information they need for safety decision making. The MMUCC data elements that meet those information needs are included in the Crash Reporting Tool. The tool itself has *active* content so that officers can click on the data elements, select the relevant attributes from a list, and type in text as required. The tool also includes a way for officers to draw a crash scene diagram.

The Crash Reporting Tool is complemented by the Officer’s Instruction Tool, the Quality Control Tool, and the Database Tool. These are described in later sections of this document. The Crash Reporting Tool is designed to store data for an individual crash report. That data can be shared with the Database Tool or sent to any desired database such as a law enforcement agency’s records management system. The Officer’s Instruction Tool is also based on the MMUCC 5th Edition, and provides information for officers on how to complete each data element on the crash report. The Quality Control Tool includes the detailed validation rules as defined in the MMUCC 5th Edition—these are implemented in the Crash Reporting Tool as well.

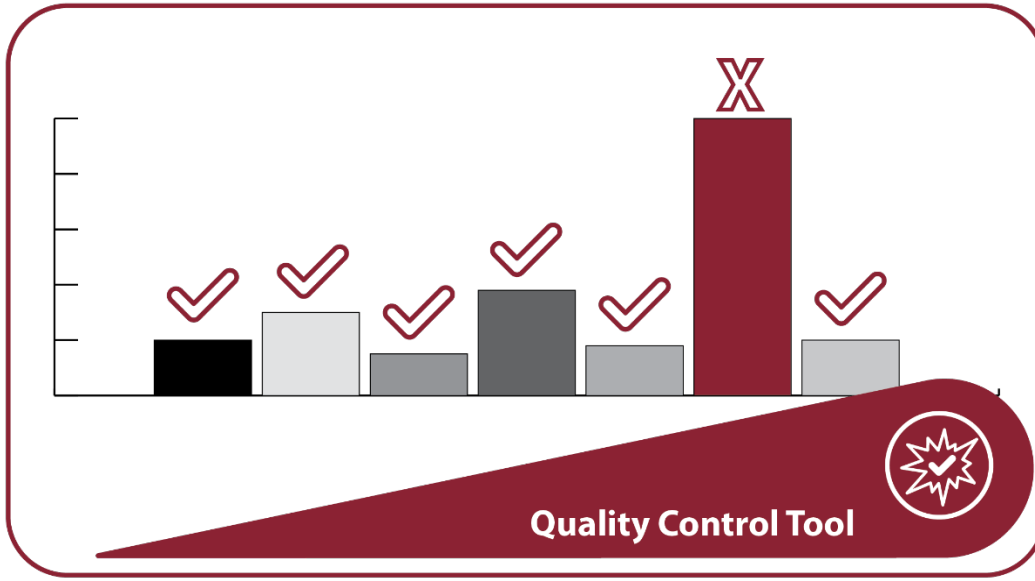
¹ National Highway Traffic Safety Administration. (2017, July). *MMUCC guideline: Model minimum uniform crash criteria, fifth edition*, 2017 (Report No. DOT HS 812 433). <https://crashstats.nhtsa.dot.gov/Api/Public/Publication/812433>



Officer's Instruction Tool

The Officer's Instruction Tool is based on MMUCC 5th Edition. It presents the data element definitions and validation rules for each of the data elements included in the fillable PDF—the Crash Reporting Tool. This tool serves two purposes. The primary purpose is to serve as an instruction manual for law enforcement officers filling out a crash report. To support that use, the instruction tool will include the same content as the MMUCC 5th Edition for each of the data elements as well as any relevant material from the MMUCC manual such as descriptions, diagrams, and use cases. The secondary purpose of the tool is to serve as a resource for data users. To support users, the Officer's Instruction Tool will also include the coded values for each attribute of each data element as provided in the MMUCC 5th Edition.

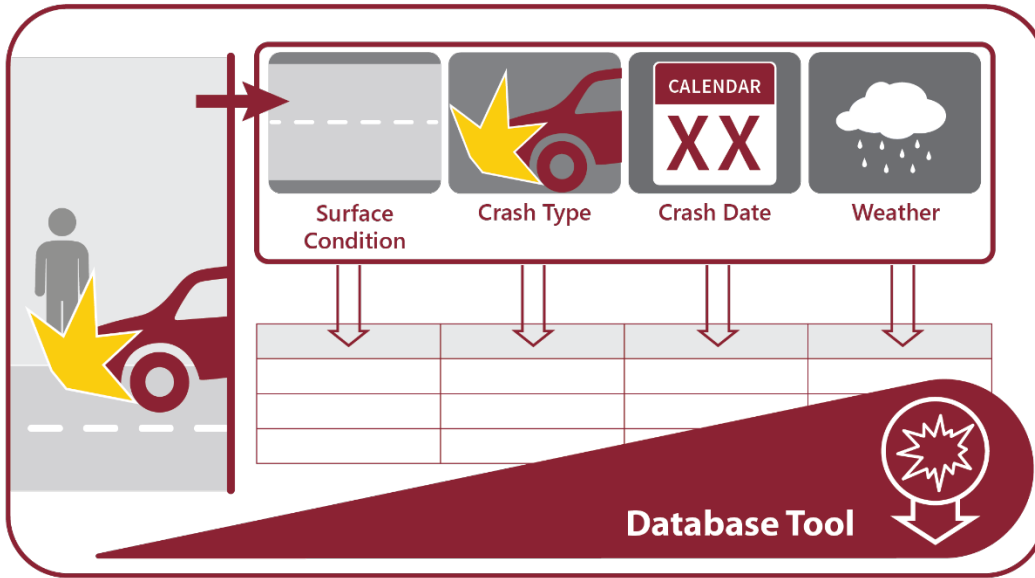
The Officer's Instruction Tool is complemented by the Crash Reporting Tool, the Quality Control Tool, and the Database tool. The Officer's Instruction Tool and the Crash Reporting Tool have the same data elements as drawn from the MMUCC 5th Edition. The Database Tool implements the data element definitions in database fields and values. The Database Tool and Crash Reporting Tool also implement the data validation rules described in MMUCC and the instruction manual.



Quality Control Tool

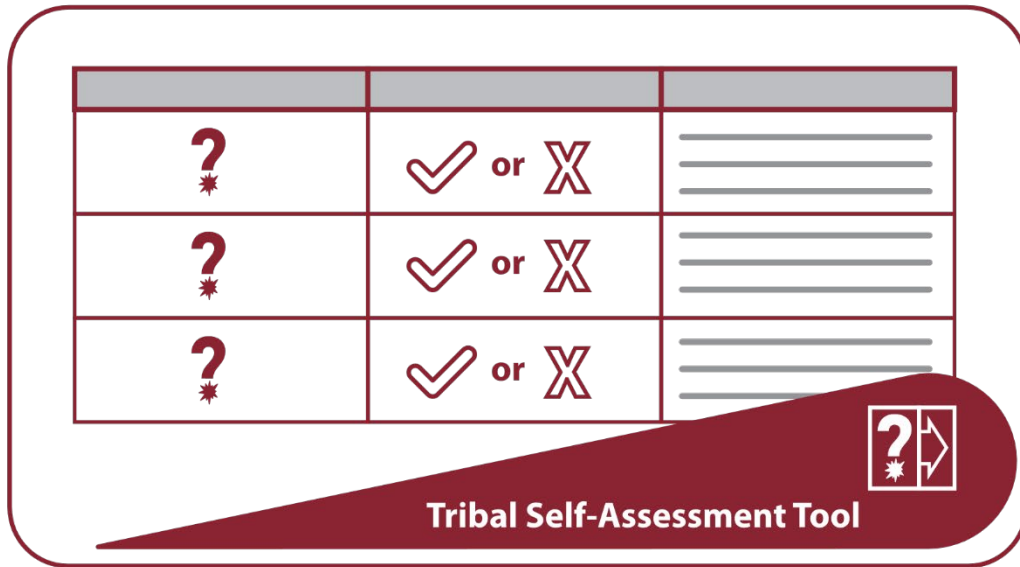
The Quality Control Tool has two parts. The first part is the validation rules drawn from the MMUCC 5th Edition. These rules define how the crash data can be checked for completeness, accuracy, and logical agreement. The second part of the Quality Control Tool describes how a Tribal government can assess data quality using a series of analyses. These analyses test for consistency across years and test the data for reasonableness.

The Quality Control Tool is complemented by the Crash Reporting Tool, the Officer's Instruction Tool, and the Database Tool. Each of these other tools use the same validation rules drawn from the MMUCC 5th Edition.



Database Tool

The Database Tool is designed to store and manage crash data. It can accept data from the Crash Reporting Tool and other law enforcement sources (e.g., a records management system). It is designed to implement the MMUCC 5th Edition data element subset included in the Crash Reporting Tool. It also incorporates the data validation rules implemented in the Crash Reporting Tool and the Quality Control Tool, and as documented in the Officer's Instruction Tool.



Tribal Self-Assessment Tool

Intended to help Tribal governments identify opportunities to improve crash data collection, sharing, and use, the Tribal Self-Assessment Tool includes 21 questions and a selection of responses that describe how the Tribe’s crash system operates. Each question in the Tribal Self-Assessment Tool provides recommended actions depending on the Tribe’s selected responses. Tribes can use the outputs of the tool to develop a crash data improvement action plan.

This tool is based on the National Cooperative Highway Research Program Report 788, *Guide for Effective Tribal Crash Reporting*,² which can be found at www.nap.edu/login.php?action=guest&record_id=22267.

² Noyce, D. A., Li, Z., Chesnik, K., Macy, A., & Qin, X. (2013, December). *Guide for effective tribal crash reporting* (NCHRP Report 788). Transportation Research Board. www.nap.edu/login.php?action=guest&record_id=22267
See also the PowerPoint presentation at <http://onlinepubs.trb.org/onlinepubs/webinars/160826.pdf>

DOT HS 813 056
June 2022



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

