

Crash Records from NC Division of Motor Vehicles

Overview: General description of data source

Crash reports investigated by all of North Carolina's law enforcement agencies are maintained by the North Carolina Division of Motor Vehicles, located within the North Carolina Department of Transportation.

Data owner

NC Department of Transportation; Division of Motor Vehicles

Data description and collection criteria

A motor vehicle crash involves a motor vehicle in transport resulting in an un-stabilized situation, which includes at least one harmful event. An un-stabilized situation is a set of events not under human control, which originates when control is lost and terminates when control is regained or when all persons and property are at rest. The terms collision, accident, and crash are synonymous when describing a motor vehicle crash.

North Carolina crash records must meet at least one of the following criteria:

- The crash resulted in a fatality, or
- The crash resulted in a non-fatal personal injury, or
- The crash resulted in total property damage amounting to \$1,000.00 or more, or
- The crash resulted in property damage of any amount to a vehicle seized, or
- The vehicle has been seized and is subject to forfeiture under G. S. 20-28.3.

In addition, a reportable motor vehicle traffic crash must occur on a trafficway (any land way open to the public as a matter of right or custom for moving persons or property from one place to another) or occur after the motor vehicle runs off the roadway but before events are stabilized.

Type of data: source or compiled/abstracted

Source data

Are the data available to outside parties for analytical purposes?

Yes

Process to obtain the data for research

There are three ways to obtain crash data for research:

1. Submit a request for data to the Traffic Records Section at the Department of Transportation Division of Motor Vehicles using form DMV APP-ONLINE-DATA Request for Access to Multiple Records Containing Personal Information. The form should be submitted to:
North Carolina Department of Transportation
Division of Motor Vehicles Traffic Records Section
3105 Mail Service Center
Raleigh, NC 27699-3105

Data extracts are typically only available to state agencies, insurance companies or for a substantial fee. Extracts do not contain identifying variables.

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2. Use the HSRC Crash Data website tool (no longer supported) to obtain limited data from 2001–2017. Results are in Excel. <http://nccrashdata.hsrc.unc.edu/>
3. Contact the HSRC for assistance obtaining data.

Website

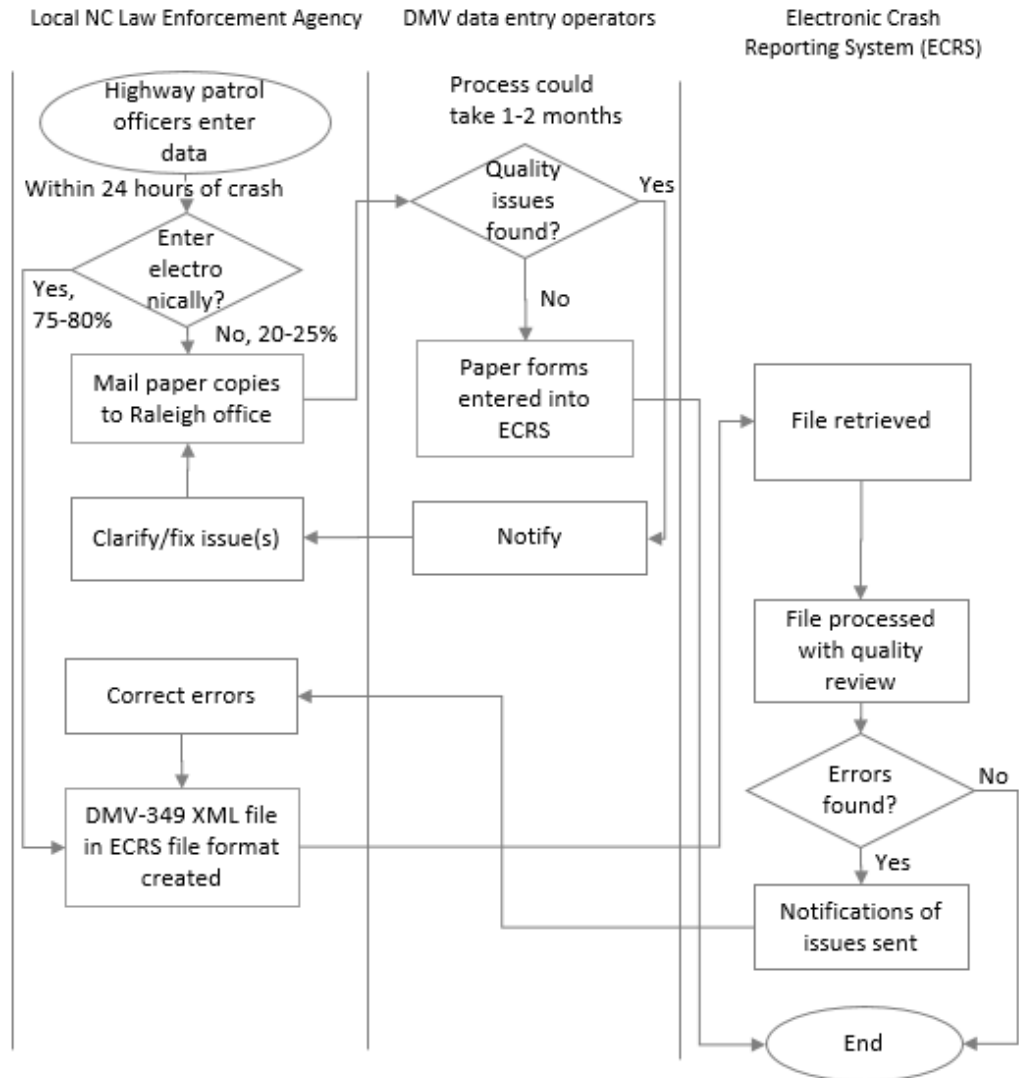
<https://www.ncdot.gov/dmv/records/>

Contact(s)

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Data Flowchart



Who enters the original data (Highway patrol officers, Healthcare providers, etc.)?

NC highway patrol officers within 24 hours of event; approximately 75% submit PDF forms, 25% submit paper forms that are then data-entered by state office staff.

Injury classification: Injury classification method (ICD-10-CM, etc.)

KABCO:

- K Killed: Deaths, which occur within 12 months after the crash.
- A injury type (disabling): Injury obviously serious enough to prevent the person injured from performing his normal activities for at least one day beyond the day of the collision.
- B injury type (evident): Obvious injury, other than killed or disabling, which is evident at the scene. Class B injury would not necessarily prevent the person from carrying on his normal activities.
- C injury type (possible): No visible injury, but person complains of pain, or has been momentarily unconscious.

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- No injury

Collection timeframe: when the data were entered after original event

After the investigation of a crash is completed, North Carolina General Statute 20-166.1 requires that the investigating officer make a written report of the crash within 24 hours. The law enforcement agency must submit the report to the Division of Motor Vehicles (DMV) within 10 days after receiving it. If the officer writing the report is a member of the State Highway Patrol, the officer must forward the report to the Division of Motor Vehicle (DMV).

Years available: Description of timespan for which data are available

January 1, 1990 to the present, with 1-2 month delay for current records

Data History: Key changes in the data that would affect research use

KABCO definitions revised in 2012

Is a data dictionary available?

Yes

Dictionary

CR_Dictionary.pdf from 2015, Excel version 2018

Field Mapping from Source Documentation

Source documentation field map

Two documents were made available to create the data documentation: an Excel file which documented the DMV crash database and a PDF called the 2015 DMV 349 Data Dictionary. There were no exact fields in common between the two documents and they appeared to serve different purposes, the former as a comprehensive database documentation and the latter as a guide for researchers. We created two field dictionaries based on the two documents and included our attempt to cross match the data elements. Researchers requesting data elements should not rely on the cross match, but should work with the data owners to ensure the data requested is correct.

Report labels	Source labels (where available) Excel Database Documentation	Source labels (where available) DMV 349 Data Dictionary
Table or category	Table Name	Number and heading
Field		Element
Field-Literal	Field Name	
Description	Field Description	Definition
Source comments	Comments + Date	Source + Attributes (if needed) + Rationale
Format	Type	
Length	Length	
Required (Y/N)	'Null?' (NOT NULL = Y)	
Sensitive (Y/N)		
Unique key (Y/N)		
Retired Field (Y/N)		
Retired Date		

Additional fields available in source documentation

- Table description (Excel file)

Quality and Performance Measures

Known data quality issues

- Injury classification (KABCO) not always an accurate measure of level of injury
- Does not include accidents on private or federal land, which excludes most ATV accidents