

# North Carolina Crash Report Form DMV-349

**A reportable motor vehicle crash must meet at least one of the following criteria:**

- results in a fatality, or
- a non-fatal personal injury, or
- property damage of \$1,000 or greater, or
- property damage of any amount to a vehicle seized

**In addition, a reportable motor vehicle 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.**

The terms collision, accident, and crash are synonymous when describing a motor vehicle crash.

**(FILLING OUT THE DMV-349)**

**(\*) EXPLAIN IN CRASH NARRATIVE  
(-) IF QUESTION DOES NOT APPLY, USE A DASH  
(If a section does not apply, draw diagonal line through section)**

**ONLY USE "CHECK BLOCKS" IF THEY APPLY**

The Division of Motor Vehicles (DMV) requests that:

1. The DMV-349 should be typewritten or if handwritten the officer should use black ink,
2. The report should be legible. This is of the utmost importance for clarity, when reports are microfilmed or imaged for later storage, and
3. The original should be submitted to the DMV Traffic Records Section.

**(20) Commercial Motor Vehicle (CMV)**

A commercial motor vehicle (CMV) is defined as a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle:

- a. Has a gross combination weight rating of **10,001 or more pounds** inclusive of a towed unit, or
- b. Is designed to transport **16 or more passengers**, including the driver, or
- c. Is of any size and is used in the **transportation of materials found to be hazardous** for the purposes of the Hazardous Materials Transportation Act **and which require the motor vehicle to be placarded** under the Hazardous Materials Regulations (49 CFR Part 172, Subpart F).

**✓ If the vehicle is a CMV, check box 20 on the DMV-349**

**(8-9) Contributing Circumstances, Non-Motorist (Maximum - two per person)**

- 0 None
- 1 Coming from behind parked veh.
- 2 Darting
- 3 Lying and/or illegally in roadway
- 4 Failure to yield right of way
- 5 Not visible (dark clothing, etc.)
- 6 Inattentive (talking, eating, etc.)
- 7 Failure to obey traffic signs, Signals
- 8 Wrong side of road
- 9 Other\*
- 10 Unknown

**(12-13) Contributing Circumstances, Roadway (Maximum - two per crash)**

- 0 None (no unusual conditions)
- 1 Road Surface Condition
- 2 Debris
- 3 Rut, holes, bumps
- 4 Work zone (construction, maintenance, utility)
- 5 Worn travel-polished surface
- 6 Obstruction in roadway
- 7 Traffic control device inoperative, not visible or missing
- 8 Shoulders low, soft or high
- 9 No shoulders
- 10 Non-highway work
- 11 Other\*
- 12 Unknown

**(10-11) CRASH LEVEL First Harmful Event & Most Harmful Event**

- 0 Unknown  
**Non-Collision**
- 1 Ran off road - right
  - 2 Ran off road - left
  - 3 Ran off road - straight
  - 4 Jackknife
  - 5 Overturn/rollover
  - 13 Other non-collision\*

- Collision of Motor Vehicle With**
- 14 Pedestrian
  - 15 Pedalcyclist
  - 16 RR train, engine
  - 17 Animal
  - 18 Movable object\*
  - 19 Fixed object\*

**Collision of Two or More Motor Vehicles**

- 20 Parked motor vehicle
- 21 Rear end, slow or stop
- 22 Rear end, turn
- 23 Left turn, same roadway
- 24 Left turn, different roadways
- 25 Right turn, same roadway
- 26 Right turn, different roadways
- 27 Head on
- 28 Sideswipe, same direction
- 29 Sideswipe, opposite direction
- 30 Angle
- 31 Backing up
- 32 Other collision with vehicle\*

**(14-19) Contributing Circumstances, Driver (Maximum - three per driver)**

- 0 No contributing circumstances indicated
- 1 Disregarded yield sign
- 2 Disregarded stop sign
- 3 Disregarded other traffic signs
- 4 Disregarded traffic signals
- 5 Disregarded road markings
- 6 Exceeded authorized speed limit
- 7 Exceeded safe speed for conditions
- 8 Failure to reduce speed
- 9 Improper turn
- 10 Right turn on red
- 11 Crossed centerline/going wrong way
- 12 Improper lane change
- 13 Use of improper lane
- 14 Overcorrected/oversteered
- 15 Passed stopped school bus
- 16 Passed on hill
- 17 Passed on curve
- 18 Other improper passing
- 19 Failed to yield right of way
- 20 Inattention
- 21 Improper backing
- 22 Improper parking
- 23 Driver distracted
- 24 Improper or no signal
- 25 Followed too closely
- 26 Operated vehicle in erratic, reckless, careless, negligent or aggressive manner
- 27 Swerved or avoided due to wind, slippery surface, vehicle, object, non-motorist
- 28 Visibility obstructed
- 29 Operated defective equipment
- 30 Alcohol use
- 31 Drug use
- 32 Other\*
- 33 Unable to determine
- 34 Unknown

Contributing Circumstances Non-Motorist 8 - 9

First Harmful Event at Crash Level 10

Most Harmful Event at Crash Level 11

Contributing Circumstances 12 - 13 Roadway

Driver 1 Contributing Circumstances 14 - 16

Driver 2 Contributing Circumstances 17 - 19

**(1) Locality**

- 1 Rural (<30% developed)
- 2 Mixed (30% to 70% developed)
- 3 Urban (>70% developed)

**(2) Predominant Development Type**

- 1 Farms, woods, pastures
- 2 Residential
- 3 Commercial
- 4 Institutional
- 5 Industrial

**(3) Road Surface Condition**

- 1 Dry
- 2 Wet
- 3 Water (standing, moving)
- 4 Ice
- 5 Snow
- 6 Slush
- 7 Sand, Mud, Dirt, Gravel
- 8 Fuel, Oil
- 9 Other\*
- 10 Unknown

**(4-5) Weather Condition (Maximum - two per crash)**

- 1 Clear
- 2 Cloudy
- 3 Rain
- 4 Snow
- 5 Fog, smog, smoke
- 6 Sleet, hail, freezing rain/drizzle
- 7 Severe crosswinds
- 8 Blowing sand, dirt, snow
- 9 Other\*

**(6) Weather Contributed To the Crash**

- 1 Yes 2 No 3 Unknown

**(7) Ambient Light**

- 1 Daylight
- 2 Dusk
- 3 Dawn
- 4 Dark - lighted roadway
- 5 Dark - roadway not lighted
- 6 Dark - unknown lighting
- 7 Other\*
- 8 Unknown

**(21) Vehicle Number 1, 2, 3, etc.**

**(22) Person Type**

- 1 Driver
  - 2 Passenger
- Non-Motorist (including)**
- 3 Pedestrian
  - 4 Pedalcyclist
  - 5 Roller skater, roller blader, etc.
  - 6 Other\*
  - 7 Unknown

**(23) Seating Position**

- 1 Front - left (Driver, motorcycle driver)
- 2 Front - middle
- 3 Front - right
- 4 Second seat - left (motorcycle passenger)
- 5 Second seat - middle
- 6 Second seat - right
- 7 Third row - left (motorcycle passenger)
- 8 Third row - middle
- 9 Third row - right
- 10 Sleeper section of cab (truck)
- 11 Passenger in other enclosed area (refer to multi-occupant form)
- 12 Passenger in unenclosed area (pickup)
- 13 Trailing unit
- 14 Riding on vehicle exterior
- 15 Unknown

**(24) DOB mm/dd/ccyy (If unavailable approx. Age)**

**(25) Ethnicity**

- W White  
B Black  
N Native American  
H Hispanic  
A Asian  
O Other\*  
U Unknown

**(26) Gender**

- M Male  
F Female  
U Unknown

**(28) Air Bag Deployed**

- 0 No Air Bag(s)
- 1 Not deployed
- 2 Deployed front
- 3 Deployed side
- 4 Deployed both front and side
- 5 Unknown

**(27) Occupant/Non-Motorist Protection**

- 0 None used
  - 1 Lap belt only
  - 2 Shoulder and lap belt
  - 3 Shoulder belt only
  - 4 Child restraint
  - 5 Helmet (motorcyclist or Non-Motorist)
- Codes 6-8 Non-Motorist**
- 6 Protective pads
  - 7 Reflective clothing
  - 8 Lighting
  - 9 Other\*
  - 10 Unable to determine

**(29) Air Bag Switch Status**

- 0 No ON-OFF switch
- 1 Switch in ON position
- 2 Switch in OFF position
- 3 Unknown if Switch present
- 4 Unknown pos. in vehicle

**(30) Trapped**

- 1 Yes
- 2 No
- 3 Unknown

**(31) Ejection**

- 1 Not ejected
- 2 Totally ejected
- 3 Partially ejected
- 4 Unknown

**(32) Injury Status**

- 1 Killed
- 2 A type injury (disabling)
- 3 B type injury (evident)
- 4 C type injury (possible)
- 5 No injury
- 6 Unknown

**Names and Addresses**

Names and addresses are necessary for all persons involved in the crash, including non-motorists, as well as motor vehicle occupants.

This will help later investigations, including identifying persons previously involved in a crash, as well as persons whose injury status is later updated following a crash.

**Vehicle Towing**

Towed To/By:

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**(33) Relation to Roadway Surface**

The location of the first harmful event (at the crash level) as it relates to its position within or outside the trafficway

- 1 On Roadway (Surface)
- Off Roadway**
- 2 Shoulder
- 3 Median
- 4 Roadside
- 5 Outside Trafficway

**(34) Vision Obstruction**

- 0 None
- 1 Vehicle window(s) obscured
- 2 Trees, crops, brush, etc.
- 3 Building(s)
- 4 Embankment
- 5 Sign(s)
- 6 Hillcrest
- 7 Parked vehicle(s)
- 8 Vehicle(s) in traffic/moving
- 9 Blinded, headlights
- 10 Blinded, sunlight
- 11 Blinded, other lights
- 12 Other\*
- 13 Unknown

**(35) Physical Condition**

- 1 Apparently normal
- 2 Illness
- 3 Fatigue
- 4 Fell asleep, fainted, loss of consciousness
- 5 Impairment due to medications, drugs, alcohol
- 6 Medical condition
- 7 Other physical impairment
- 8 Restriction not complied with
- 9 Other\*
- 10 Unknown

**(36) Driver License Restrictions**

Restrictions assigned to an individual's driver license by the license examiner.

Indicate restrictions shown on the Driver's License. For out-of-state drivers, write out the restriction.

**(37) Alcohol/Drugs Suspected**

- 0 No
- 1 Yes – alcohol, impairment suspected
- 2 Yes – alcohol, no impairment detected
- 3 Yes – other drugs, impairment suspected
- 4 Yes – other drugs, no impairment detected
- 5 Yes – alcohol and other drugs, impairment suspected
- 6 Yes – alcohol and other drugs, no impairment detected
- 7 Unknown

**(38) Alcohol/Drugs Test Status**

- 0 No test
- 1 Alcohol test
- 2 Test for other drugs
- 3 Alcohol & other drugs test
- 4 Test refused
- 5 Unknown

**(39) Alcohol/Drugs Test Results**

- 0 No test
- 1 No alcohol or other drugs
- 2 Alcohol (percent BAC)
- 3 Other drugs reported
- 4 Contaminated sample/unusable
- 5 Pending
- 6 Unknown

**(40) Vehicle Seizure (DWI)**

Check this box if the crash involves alcohol or other drugs in sufficient amount to constitute a DWI, and the vehicle is "seized."

**(41) Vehicle Style (Type)**

- 1 Passenger car
- 2 Pickup
- 3 Light truck (mini-van, panel)
- 4 Sport utility
- 5 Van
- 6 Commercial bus
- 7 School bus
- 8 Activity bus
- 9 Other bus
- 10 Single unit truck (2-axle, 6-tire)
- 11 Single unit truck (3 or more axles)
- 12 Truck/trailer
- 13 Truck/tractor (i.e., bobtail)
- 14 Tractor/semi-trailer
- 15 Tractor/doubles
- 16 Unknown heavy truck
- 17 Taxicab
- 18 Farm equipment
- 19 Farm tractor
- 20 Motorcycle
- 21 Moped
- 22 Motor scooter or motor bike
- 23 Pedalcycle
- 24 Pedestrian
- 25 Motor home/recreational vehicle
- 26 Other\*
- 27 All terrain vehicle (ATV)
- 28 Firetruck
- 29 EMS Vehicle, Ambulance, Rescue Squad
- 30 Military
- 31 Police
- 32 Unknown

**(42) Vehicle Drivable**

Vehicle is disabled by damage severe enough to prevent driving it. For comparison purposes, this data element could be used as a minimum reporting threshold for "property damage only" crashes.

**(43) TAD**

**Damaged Areas**

- FC Front concentrated
- FD Front distributed
- FL Front left corner
- FR Front right corner
- BC Rear concentrated
- BD Rear distributed
- BL Rear left corner
- BR Rear right corner
- LP Left side (door)
- RP Right side (door)
- LFQ Left side front quarter
- RFQ Right side front quarter
- LBQ Left side rear quarter
- RBQ Right side rear quarter
- LD Left side distributed
- RD Right side distributed
- L&T Left side & top (rollover)
- R&T Right side & top (rollover)
- TOP Top
- UND Undemeath

**Extent of Deformity**

The Severity of Damage is based on a scale of "0" being no damage and "7" being the most severe damage

**(44) Estimated Damage**

Dollar estimate of the cost to restore the vehicle to its condition just prior to the crash, or the estimated value of the vehicle before the crash, whichever is less. For a "totaled" vehicle, enter a dollar estimate of the retail value of the vehicle prior to the crash. Do not enter the word "totaled".

A vehicle being towed by another is part of the towing vehicle and its damage should be included in the "Parts Damaged" and "Amount of Damage" categories.

**(45) Cargo Body Type**

- 1 Bus (seats for 16 or more, including driver)
- 2 Bus (seats for less than 16, including driver)
- 3 Van/enclosed box
- 4 Grain/chips/gravel truck
- 5 Pole truck
- 6 Cargo tank
- 7 Flatbed
- 8 Dump
- 9 Concrete mixer
- 10 Auto transporter
- 11 Garbage/refuse
- 12 Log truck
- 13 Other\*

**(46) Name of EMS**

Record the name of the EMS (or EMS unit number if available) that responded to the crash. A letter designation, unique to each injured person is provided in the first column of the Occupant and Non-Motorist Section. This unique identifier must precede the name of the EMS for each injured person being transported.

Example: A - Cumberland County Ambulance

**(47) Injured Taken by EMS to**

Record the destination of the injured person preceded by the unique letter designation (from the first column) for the person involved, if they were taken to a hospital, clinic, doctor's office, or other place of emergency medical aid. Include both name of treatment facility and city or town.

Example: A - N.C. Memorial, Chapel Hill; B - Duke Hospital, Durham, etc.

**KEY DEFINITIONS**

**CRASH/MOTOR VEHICLE/UNIT**

A motor vehicle crash is any event that results in death, injury or property damage attributable directly to a motor vehicle or its load in transport, but not involving aircraft or watercraft. It must occur on a trafficway or after the motor vehicle runs off the roadway but before events are stabilized.

A motor vehicle is any mechanically or electrically powered device, not operated on rails, upon which any person or property may be transported or drawn upon a highway.

A unit is any motor vehicle, pedestrian, pedalcyclist, moped or other road vehicle, excluding railway vehicles, which can be shown on the report as "other" RR train.

**DRIVERLESS MOTOR VEHICLE**

A driverless motor vehicle, though previously parked, or a motor vehicle out of control while being towed or pushed, is considered to be a motor vehicle in transport. Also, an abandoned motor vehicle, upon a roadway, is considered to be a motor vehicle in transport. This principle does not apply to such devices as farm or industrial machinery, highway graders, construction machinery, or similar devices which are not in use at the time of the crash for transport.

**HIT & RUN**

A hit & run vehicle is one which was involved in the crash as the "striking vehicle" or as the "vehicle struck" but which left the scene. The appropriate box must be checked, e.g., vehicle 1, vehicle 2, etc. and any information that is known, included in the Driver and/or Vehicle areas.

**NON-CONTACT VEHICLE OR NON-MOTORIST**

Non-contact phantom motor vehicles or non-motorists are units that caused the crash but left the scene. They should not be counted in the number of units, but should be referred to in the narrative.

Non-contact motor vehicles or non-motorists are units that caused the crash and remained at the scene. They should be counted as units with identifying information, and referred to in the narrative. A school bus could be an example of a non-contact vehicle that is related to a crash (refer to data element # 68).

**SCHOOL BUS**

A motor vehicle used for the transportation of any school pupil at or below the 12<sup>th</sup>-grade level to or from a public or private school or school-related activity.

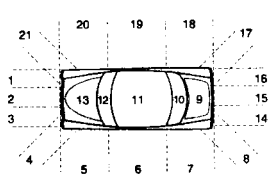
A school bus must be externally identifiable by the color yellow, the words "school bus", flashing red lights located on the front and rear, and identifying lettering on both sides indicating the school or school district served, or the company operating the bus.

**MOTOR VEHICLE STATUS**

The use of the device at the time of the crash is the primary criterion for establishing motor vehicle status. For example:

1. A registered motor vehicle is being drawn by a team of horses on a city street; it is considered other road vehicle.
2. A registered motor vehicle is being used to draw a plow engaged in breaking ground on a farm; it is considered farm machinery while engaged in plowing.
3. A registered truck is engaged in spreading concrete at a road construction site; it is construction machinery.
4. A motorized highway grader, under its own power, is moving from one work place to another on a public way; it is considered a motor vehicle in transport.
5. A registered truck, with a blade attached, is engaged in plowing snow from a trafficway; it is considered road maintenance machinery.
6. A riding, motorized lawn mower, under its own power, is being driven from one home to another on a city street; it is considered a motor vehicle in transport.
7. A military tank is being moved, under its own power, from the firing range to the motor pool, on a land way of a military post; it is considered a motor vehicle in transport.

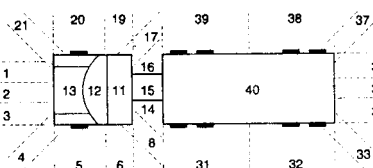
**48 Points of Initial Contact**



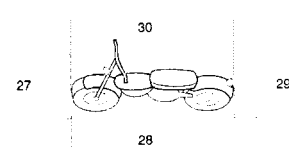
**Passenger Cars/Small Trucks**

**0 Pedestrian & Non-Contact Vehicle**

**UNDERNEATH: 22 Front, 23 Center, 24 Rear, 25 Rollover, 26 Unknown**



**Tractor-Trailers**



**Motorcycle, Bicycle, Moped or ATV**

**(49) Vehicle Maneuver/Action**

- 1 Stopped in travel lane
- 2 Parked out of travel lanes
- 3 Parked in travel lanes
- 4 Going straight ahead
- 5 Changing lanes or merging
- 6 Passing
- 7 Making right turn
- 8 Making left turn
- 9 Making U turn
- 10 Backing
- 11 Slowing or stopping
- 12 Starting in roadway
- 13 Parking
- 14 Leaving parked position
- 15 Avoiding object in road
- 16 Other\*

**(50) Non-motorist Action**

- 1 Entering or crossing specified location
- 2 Walking, riding, running/jogging with traffic
- 3 Walking, riding, running/jogging against traffic
- 4 Working
- 5 Pushing vehicle
- 6 Approaching or leaving vehicle
- 7 Playing
- 8 Standing
- 9 Other\*

**(51) Non-motorist Location Prior to Crash**

- 1 Marked crosswalk at intersection
- 2 At intersection but no crosswalk
- 3 Non-intersection crosswalk
- 4 Driveway access crosswalk
- 5 In roadway
- 6 Not in roadway
- 7 Median (but not on shoulder)
- 8 Island
- 9 Shoulder
- 10 Sidewalk
- 11 Within 10 feet of roadway (not on shoulder, median, sidewalk, island)
- 12 Beyond 10 feet of roadway (within trafficway)
- 13 Outside trafficway
- 14 Shared-use path or trails

**(52-56) VEHICLE LEVEL**

**Crash Sequence of Harmful Events (First, Second, Third, Fourth), fields 52-55, and Most Harmful Event, field 56 for each Unit (Vehicle)**

If a vehicle has only one event, then only one code is required. Vehicles can have up to 4 harmful events. The Most Harmful Event may or may not be one of the 4 events.

**0 Unknown**

**Non-Collision**

- 1 Ran off road right
- 2 Ran off road left
- 3 Ran off road straight ahead
- 4 Jackknife
- 5 Overturn/rollover
- 6 Crossed centerline/median
- 7 Downhill runaway
- 8 Cargo/equipment loss or shift
- 9 Fire/explosion
- 10 Immersion
- 11 Equipment failure (tires, brakes, etc.)
- 12 Separation of units
- 13 Other non collision\*

**Collision of Motor Vehicle With**

- 14 Pedestrian
- 15 Pedalcyclist
- 16 RR train, engine
- 17 Animal
- 18 Movable object\*

**Collision of Two or More Motor Vehicles**

- 20 Parked motor vehicle
- 21 Rear end, slow or stop
- 22 Rear end, turn
- 23 Left turn, same roadway
- 24 Left turn, different roadways
- 25 Right turn, same roadway
- 26 Right turn, different roadways
- 27 Head on
- 28 Sideswipe, same direction
- 29 Sideswipe, opposite direction
- 30 Angle
- 31 Backing up
- 32 Other collision with vehicle\*

**(57) Distance & Direction from Road to Object Struck**

- 0 None
- 1 In road
- 2 Right of road, 0-10 ft.
- 3 Right of road, 11-30 ft.
- 4 Right of road, over 30 ft.
- 5 Left of road, 0-10 ft.
- 6 Left of road, 11-30 ft.
- 7 Left of road, over 30 ft.
- 8 Straight ahead, 0-10 ft.
- 9 Straight ahead, 11-30 ft.
- 10 Straight ahead, over 30 ft.

**(58) Vehicle Underride/Override**

An underride refers to a vehicle sliding under another vehicle during a crash. An override refers to a vehicle riding up over another vehicle. Both can occur with a parked vehicle.

- 1 Underride
- 2 Override
- 3 Neither Underride or Override
- 4 Unknown

**(59) Vehicle Defects Maximum of two per Vehicle**

- 0 None detected
- 1 Brakes
- 2 Headlights
- 3 Rear lights
- 4 Steering
- 5 Tires
- 6 Other defects\*
- 7 Unknown

**(60) Authorized Speed Limit**

Authorized speed limit for the vehicle at the time of the crash. The authorization may be indicated by the posted speed limit, blinking sign at construction zones, restricted speed for permitted vehicles

**(61) Estimate of Original Speed**

Estimated speed in miles per hour for each vehicle involved in the collision. Estimates reflect the speed of each vehicle at the moment the driver initially perceived an existing hazard.

**Collision with Fixed Object**

- 33 Tree
- 34 Utility pole (with or without light)
- 35 Luminaire pole (non-breakaway)
- 36 Luminaire pole (breakaway)
- 37 Official highway sign (non-breakaway)
- 38 Official highway sign (breakaway)
- 39 Overhead sign support
- 40 Commercial sign
- 41 Guardrail end on shoulder
- 42 Guardrail face on shoulder
- 43 Guardrail end in median
- 44 Guardrail face in median
- 45 Shoulder barrier end (non-guardrail)
- 46 Shoulder barrier face (non-guardrail)
- 47 Median barrier end (non-guardrail)
- 48 Median barrier face (non-guardrail)
- 49 Bridge rail end
- 50 Bridge rail face
- 51 Overhead part of underpass
- 52 Pier on shoulder of underpass
- 53 Pier in median of underpass
- 54 Abutment (supporting wall) of underpass
- 55 Traffic island curb or median
- 56 Catch basin or culvert on shoulder
- 57 Catch basin or culvert in median
- 58 Ditch
- 59 Embankment
- 60 Mailbox
- 61 Fence or fence post
- 62 Construction barrier
- 63 Crash cushion
- 64 Other fixed object\*

**(62) Estimate of Speed at Impact**

Estimated speed in miles per hour for each vehicle involved in the collision. Estimates reflect the speed of each vehicle at the moment of impact.

**(63) Tire Impressions Before Impact**

Length (in feet) of the tire impressions (skid marks, tire print yaw) for each vehicle involved in the collision, prior to impact.

**(64) Distance Traveled After Impact**

Distance (in feet) each vehicle or pedestrian traveled after impact as a result of the force of the collision.

**(65) Emergency Vehicle Use**

Indicates vehicles which are on an emergency response, i.e., traveling with physical emergency signals in use; lights, siren sounding, etc.

- 1 Firetruck
- 2 EMS Vehicle, Ambulance, Rescue Squad, etc.
- 3 Military
- 4 Police
- 5 Other

**(66) Post Crash Fire**

If "Yes" check block

**(67) School Bus - Contact Vehicle**

If "Yes" check block. This data element is used to determine "school bus related." The school bus, with or without a pupil on board, is directly involved as a contact vehicle.

**(68) School Bus - Noncontact Vehicle**

If "Yes" check block. This data element is used to determine "school bus related." The school bus, with or without a pupil on board, is indirectly involved as a noncontact vehicle.

**(69) Road Feature**

- 0 No special feature
- 1 Bridge
- 2 Bridge approach
- 3 Underpass
- 4 Driveway, public
- 5 Driveway, private
- 6 Alley intersection
- 7 Four-way intersection
- 8 T-intersection
- 9 Y-intersection
- 10 Traffic circle/roundabout
- 11 Five-point, or more
- 12 Related to intersection
- 13 Non-intersection median crossing
- 14 End or beginning-divided highway

**Interchange (15-21)**

- 15 Off-ramp entry
- 16 Off-ramp proper
- 17 Off-ramp terminal on crossroad
- 18 Merge lane between on and off ramp
- 19 On-ramp entry
- 20 On-ramp proper
- 21 On-ramp terminal on crossroad
- 22 Railroad crossing
- 23 Tunnel
- 24 Shared-use paths or trails
- 25 Other\*

**(70) Road Character - Horizontal and Vertical Alignment**

- 1 Straight, level
- 2 Straight, hillcrest
- 3 Straight, grade
- 4 Straight, bottom (sag)
- 5 Curve, level
- 6 Curve, hillcrest
- 7 Curve, grade
- 8 Curve, bottom (sag)
- 9 Other\*

**(71) Road Classification**

- 1 Interstate
- 2 US Route
- 3 NC Route
- 4 State Secondary Route
- 5 Local Street
- 6 Public Vehicular Area
- 7 Private Road, Driveway
- 8 Other\*

**(72) Road Surface Type**

- 1 Concrete
- 2 Grooved concrete
- 3 Smooth asphalt
- 4 Coarse asphalt
- 5 Gravel
- 6 Sand
- 7 Soil
- 8 Other\*

**(73) Road Configuration (Trafficway Description)**

- 1 One-way, not divided
- 2 Two-way, not divided
- 3 Two-way, divided, unprotected median
- 4 Two-way, divided, positive median barrier
- 5 Unknown

**(74) Access Control**

- 1 No access control
- 2 Full access control
- 3 Partial access control

**(75) Number of Lanes**

Total number of lanes in both directions in the trafficway. If parking lot,

**(76) Traffic Control Device**

- 0 No control present
- 1 Stop sign
- 2 Yield sign
- 3 Stop and go signal
- 4 Flashing signal with stop sign
- 5 Flashing signal without stop sign
- 6 RR gate and flasher
- 7 RR flasher
- 8 RR crossbucks only
- 9 Human control
- 10 Warning sign
- 11 School zone signs
- 12 Flashing stop and go signal
- 13 Double yellow line, no passing zone
- 14 Other\*

**(77) Traffic Control Operating**

- 1 Yes
- 2 No
- 3 Unknown

**(78 - 81) Work Zone Related**

**(78) Did crash occur in or near**

- 1 Construction work area
- 2 Maintenance work area
- 3 Utility work area
- 4 Intermittent/moving work- e.g., patching pothole
- 5 No

**(79) Work activity at time of crash**

- 1 On going
- 2 No apparent activity

**(82) Trailer Type**

- 0 No trailer
- Non-semi trailers**
- 1 Boat
- 2 Camper
- 3 Utility
- 4 Horse
- 5 House trailer (mobile home)
- 6 Towed vehicle
- 7 Other non-semi
- Semi trailers**
- 8 Tanker
- 9 Enclosed van
- 10 Flatbed or platform
- 11 Other semi trailer
- 12 Double trailer

**(83) Overwidth Trailer/Mobile Home**

Enter the number of the vehicle pulling overwidth trailer, including overwidth mobile home, followed by the permit number.

**(84) Crash Diagram**

The diagram should include:

- 1 Roads and intersecting roads; if a vehicle is struck exiting a driveway, give the name of the business or resident
- 2 Direction of travel for each lane
- 3 All pertinent roadside features
- 4 Paths of travel for vehicles, pedestrians, bicyclists, etc.
- 5 Tire marks and debris
- 6 Measurements pertinent to the location of the point of impact. Use a tape for distances up to 500 feet. Use an odometer for greater distances

For crashes within an Interchange:

- 1 Add a small line sketch of the interchange and show an "x" where the crash occurred
- 2 Sketch should be less than 25% of the total diagram area, and
- 3 Conform to the north arrow
- 4 Identify number, name of the road(s), ramps, and service roads shown

**(85) Crash Narrative**

Provide a word description of events occurring prior to, during, and after the crash which are not elsewhere on the form. Note all pertinent and unusual aspects of the crash. Statements made in this narrative should be in the opinion of the investigating officer.

**(86) Additional Property Damage**

Enter any property other than motor vehicles that was damaged, identify the property and its owner and enter an estimate of the dollar damage. Damage to signs, buildings, mailboxes, fences, etc., should be entered here.

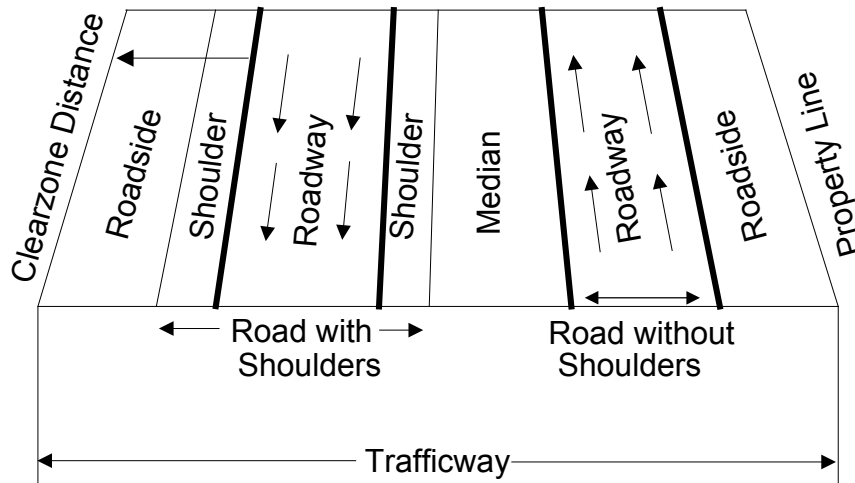
**(80) Work area marked with warning signs, cones**

- 1 Yes
- 2 No

**(81) Location of crash**

- 1 Before work area
- 2 In work area approach taper
- 3 Adjacent to actual work area

# Trafficway



## TRAFFICWAY DEFINITIONS

**Trafficway** - the entire width between property lines, or other boundary lines, of every way or place, of which any part is open to the public for purposes of vehicular travel as a matter of right or custom.

**Road** - that part of a trafficway which includes both the roadway and any shoulder alongside the roadway.

**Roadway** - that part of the trafficway designed, improved, and ordinarily used for vehicular travel. In the event the trafficway includes two or more separate roadways, the term "roadway" refers to any such roadway separately, but not to all such roadways collectively.

**Traffic Lane** - the specific part of the roadway that is used for vehicular travel.

**Auxiliary Lane** - the portion of the roadway adjoining the through traveled way for parking, speed change, turning, weaving, truck climbing, or for other purposes supplementary to through traffic movement.

**Shoulder** - that portion of the road contiguous with the roadway for accommodation of stopped vehicles, emergency use, and for lateral support of the roadway structure. The line between the roadway and the shoulder may be a painted edge line, a change in surface color or material, or a curb.

**Clearzone Distance** - the total roadside boarder area, starting at the edge of the traveled way, available for safe use by errant vehicles. This area may consist of a shoulder, a recoverable slope, a non-recoverable slope, and/or a clear run-out area. The desired width is dependent on the traffic volumes and speeds, and roadside geometry.

**Number of Lanes** - the total number of thru lanes of the "road on" at the point of the collision (if two-way, total for both directions). Do not count turning lanes unless they are continuous between intersections. Enter "0" for parking lots.

**Median** - the portion of a divided trafficway separating the traveled way for traffic in opposing directions.

**Crossover** - an area in the median of a divided roadway where vehicles are permitted to travel across the opposing lanes of traffic or do a U-turn.

**Driveway** - a roadway providing access to property adjacent to a trafficway.

**Intersection** - an area which (1) contains a crossing or connection of two or more roadways not classified as driveway access and (2) is embraced within the prolongation of the lateral curb lines or, if none, the lateral boundary lines of the roadways. Where the distance along a roadway between two areas meeting these criteria is less than 30 feet, the two areas and the roadway connecting them are considered to be parts of a single intersection.

**Intersection Related** - may refer to a crash that occurs within the influence area of the intersection and is caused by the operation of the intersection. The influence area is a variable distance that depends on the intersection design, traffic control and operating characteristics.

**Access Control** - the condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority.

**Full Access Control** - authority to control access is exercised to give preference to through traffic by providing access connections with selected public roads only, by prohibiting crossings at grade or direct private driveway connections.

**Railway Grade Crossing** - an intersection between a roadway and train tracks which cross each other at the same level (Grade).

**Highway, Street or Road** - a general term denoting a public way for purpose of vehicular travel, including the entire area within the right-of-way (recommended usage: in urban areas - highway or street, in rural areas - highway or road).

**Outside Trafficway** - not physically located on any land way open to the public as a matter of right or custom for moving persons or property from one place to another.

## LOCATIONS - SPECIAL INSTRUCTIONS

**Road On** - Enter the class and number of the "road on", such as U.S. 13. If this road is also referred to by street name, please list the street name in parenthesis, following the class of road and number. If a road has more than one classification or number, use the *highest class with the lowest number*. If the "road on" is a ramp or service road, also indicate "ramp" or "service road." The road reflected in "Road On" and Diagram must be the same.

Primary roads (I, US, NC) ending with an odd number, such as "1, 3, 5, 7" are North-South roads, whereas roads ending with an even number, such as "2, 4, 6" are East-West roads, with the exception of US 220 and US258, which are North-South roads.

**Interchange Ramp** - For "road on" enter the class and number of the road from which the ramp exits, followed by the word "ramp."

**Railroad Crossing** - Enter the number posted at the site. It is composed of six digits and a letter. It may be found strapped to a railroad signal post or part of the gate structure. If the number is not available, write in the name of the railroad company owning or operating the tracks and strike through the # on the form.

**PVA** - Public vehicular area is coded for any area generally open to and used by the public. Examples include:

- College campus (not state maintained road)
- Military reservation (not state maintained road)
- Driveway to or parking lot of school, church, hospital or other facilities; service station, office building, store or other business, etc.

In the space on the form for "road on" enter PVA and place in parenthesis a brief description of where the crash occurred, name of shopping center, business, etc.

**PP** - Private property is coded for any private areas or non-traffic areas. In the space on the form for "road on" enter PP and place in parenthesis a brief description or name of the private drive, or other private area.

## ABBREVIATIONS FOR STREET DESIGNATORS

Word	Abbreviation	Word	Abbreviation
Alley	AL	Lane	LN
Avenue	AVE	Parkway	PKWY
Boulevard	BLVD	Place	PL
Court	CT	Road	RD
Circle	CIR	Street	ST
Drive	DR	Terrace	TER
Highway	HWY	Trail	TR

Names which should not be abbreviated include: Acres, Heights, Hills, Loop, Park, Plaza, Row, Saint, Square, Village, Way

## GEOGRAPHIC LOCATIONS

**Global Positioning System (GPS)** - exact geographic location indicated in terms of latitude and longitude.

**Geographic Information System (GIS)** - system which associates information with specific geographic locations, for example roadway characteristics by latitude/longitude.

**Latitude/Longitude on the DMV-349** - for those agencies/municipalities which are able to record the latitude, longitude, and altitude (elevation) for specific crash locations, space has been provided on the form for capturing this information.

## CRASH SEQUENCE OF EVENTS, FIRST EVENT AND MOST HARMFUL EVENT

The crash sequence of events is a list of things that occurred to the vehicle in question that was relevant to the crash. The first harmful event is the injury or damage producing event which characterizes the crash type. The most harmful event is the event which caused the most severe injury or greatest amount of property damage.

For crash sequence of events, up to four (4) harmful events may be recorded for each vehicle involved in the crash. If only one event occurred in the crash, events 2-4 would be marked with a dash (-), not applicable.

Data elements 10-11 refer to the first harmful and most harmful events at the crash level, while data elements 52-56 refer to the first four harmful events (52-55) and the most harmful event (56) at the vehicle level.

It is important that these separate data elements are captured at both the vehicle and crash levels and that a determination is made in a multi-vehicle crash, which harmful event was "first" in the crash and which was the "most harmful event". These distinctions are important in classifying and comparing different types of crashes.

Data element values at the vehicle level have been expanded for "non-collision" and "fixed object" crash types, to present a greater number of categories for describing crash sequence of events.

## COLLISION WITH FIXED OBJECT

The following fixed object descriptions are provided as a reference to the fixed object types listed under the data elements "Sequence of Events" (#52-55) and "Most Harmful Event" (#56) for each vehicle.

**Utility Pole** - a pole or post constructed for the primary function of supporting an electric line, telephone line or other electrical-electronic transmission line or cable.

**Luminaire Pole** - a pole or post constructed to support a luminaire for lighting a roadway.

**Official Highway Sign** - a pole, post or structure constructed to support a highway sign intended to guide, regulate or inform highway users.

**Overhead Sign Support** - a pole, post, or structure constructed to support a sign which is over a roadway (usually installed on or relocated to nearby overpasses or other structures).

**Commercial Sign** - a sign placed by an area business as a means of advertising. Logo signs (advertising upcoming businesses along the roadway) placed by the State DOT are not commercial signs.

**Guardrail** - a longitudinal barrier consisting of posts and rails or cables, whose primary functions are to prevent penetration and to safely redirect an errant vehicle away from a roadside or median hazard.

**Shoulder Barrier** - concrete barrier or something other than a guardrail placed on the shoulder.

**Median Barrier (non-guardrail)** - a longitudinal barrier (such as concrete) used to prevent an errant vehicle from crossing the portion of a divided highway separating the traveled ways for traffic in opposite directions.

**Bridge rail** - a barrier attached to a bridge deck or a bridge parapet (a low wall built along the edge of a bridge deck) to restrain vehicles, pedestrians or other users.

**Overhead Part of Underpass** - any part of an underpass that is over the reference or subject roadway. For a bridge, this typically refers to the beams or other structural elements supporting the bridge deck.

**Bridge Pier** - a support for a bridge structure other than at the ends.

**Abutment (supporting wall) of underpass** - a structure that supports the end of a bridge.

**Traffic Island** - the cement or grassy area in the middle of a trafficway.

**Curb** - a raised edge (typically less than 9 inches) or border to a roadway.

**Culvert** - an enclosed structure providing free passage of water under a roadway.

**Ditch** - an open channel dug into the ground, usually paralleling the highway embankment and within the limits of the highway right-of-way.

**Embankment** - a mound of earth or stone above the original ground, built to hold back water or to support a roadway.

**Construction Barrier** - a traffic barrier designed to protect traffic from entering work areas, provide protection for workers, separate two-way traffic, protect construction, and separate pedestrian and vehicular traffic.

**Crash Cushion** - a barrier at a spot location designed to prevent an errant vehicle from impacting a fixed object hazard by gradually decelerating the vehicle to a safe stop or by redirecting the vehicle away from the hazard.

## CHARACTERISTICS OF MOTOR VEHICLE TRAFFIC CRASHES

(According to the ANSI D16.1 Classification Manual)

Motor vehicle traffic crashes have a number of characteristics which are used to distinguish between motor vehicle traffic crashes and other events such as non-crashes, aircraft or railway crashes and other motor vehicles, cataclysms and nontraffic crashes. The questions below address all of the distinguishing characteristics of motor vehicle traffic crashes. If the answer to each of the questions below is "yes", the incident is a motor vehicle crash.

1. Did the incident include one or more occurrences of injury or damage?
2. Was there at least one occurrence of injury or damage which was not a direct result of a cataclysm?
3. Did the incident involve one or more motor vehicles?
4. Of the motor vehicles involved, was at least one in transport?
5. Was the incident an unstabilized situation?
6. Did the unstabilized situation originate on a trafficway or did injury or damage occur on a trafficway?
7. If the incident involved a railway train in transport, did a motor vehicle in transport become involved prior to any injury or damage involving the train?
8. Is it true that neither an aircraft in transport nor a watercraft in transport was involved in the incident?

## DEFINITIONS APPLYING TO MOTOR VEHICLE TRAFFIC CRASH CHARACTERISTICS

**In Transport** - is the state or condition of a vehicle when it is in use primarily for moving persons or property (including the vehicle itself) from one place to another, and is:

- In motion, in readiness for motion, or on a roadway, but not parked in a designated parking area.

**Harmful Event** - is an occurrence of injury or damage.

**Cataclysm** - is a cloudburst, cyclone, earthquake, flood, tornado, or volcanic eruption.

**Unstabilized Situation** - is a set of events not under human control. It originates when control is lost and terminates when control is regained or, in the absence of persons who are able to regain control, when all persons and property are at rest. Exclusions are:

- Deliberate Intent - suicide, homicide and other harmful events under human control do not imply the existence of an unstabilized situation. A set of unintended consequences of such acts might be an unstabilized situation.

**Stabilized Situation** - is the condition prevailing after motion and other action constituting the events of a crash have ceased and no further harm will ensue unless a new series of events is initiated by some means.

## EXCLUSIONS FROM MOTOR VEHICLE TRAFFIC CRASHES

Some injury or damage producing events involving motor vehicles in transport are motor vehicle crashes by definition, but they are not classified as motor vehicle crashes, because transport is not deemed to be the primary contributing factor to the injury or damage producing event excluded, while other parts are included in a motor vehicle crash classification. The following examples are illustrative of the application of the exclusion principle:

- A motor vehicle in transport was washed away with a trafficway bridge during a hurricane. This crash was due to a cataclysm rather than the action of a motor vehicle in transport. However, this exclusion would not apply if the motor vehicle were driven into the water after the bridge had washed away because transport would be the primary contributing factor.

- A motor vehicle in transport was overwhelmed by a landslide or an avalanche which was a direct result of a cataclysm such as an earthquake, torrential rain, etc. However, this exclusion would not apply if a cataclysm were not in existence at the time of the event; nor would this exclusion apply if the motor vehicle were driven against any fallen materials covering a trafficway as a result of any landslide or avalanche.

- A loaded firearm was being carried in a motor vehicle in transport and it accidentally fired causing injury or damage. In such an event, transport is not considered to be the primary contributing factor; therefore, the event is not a motor vehicle crash.

- The driver of a motor vehicle in transport dies from a disease condition such as cerebral hemorrhage, heart attack or diabetic coma, prior to involvement of the motor vehicle in a motor vehicle crash. The death is due to the disease condition if it can be clearly established and not due to transport. However, to other persons, vehicles, or other property, this event, if it involved more than the death of the driver, would be a crash, and would be classified as a motor vehicle crash.

- The driver of a motor vehicle in transport suffers an epileptic seizure and the motor vehicle is involved in a motor vehicle crash. The injury or death to the driver is due to epilepsy. However, other injury or damage in the event would be classified as a motor vehicle crash.

- A pregnant woman, occupying a motor vehicle in transport, gives birth to a stillborn fetus following the involvement of the motor vehicle in a motor vehicle crash. The death of the fetus is not classified as a fatal injury resulting from a motor vehicle crash.

## NORTH CAROLINA GENERAL STATUTE 20-166.1

After the investigation of a traffic crash is completed, North Carolina Statute 20-166.1 requires that the investigating agency submit the crash report (DMV-349) to the Division of Motor Vehicles within 10 days. According to the statute, the crash report form must include the following information about a reportable crash:

1. The cause of the crash
2. The conditions existing at the time of the crash
3. The persons and vehicles involved

### The address of the Traffic Records Section is:

Traffic Records Section  
North Carolina Division of Motor Vehicles  
1100 New Bern Avenue  
Raleigh, NC 27697-0001

### In the event that the officer should have specific questions about coding the report, he or she should contact:

Supervisor  
Crash Reports Unit  
(919) 733-7250

## CRASHES INVOLVING COMMERCIAL MOTOR VEHICLES (CMV)

The reporting of motor vehicle crashes involving CMV's has been incorporated into the DMV-349. All of the data requirements to meet the Office of Motor Carrier, Federal Highway Administration requirements for SAFETYNET, and the seven motor carrier specific data elements recommended by the National Governor's Association have been addressed.

The DMV-349 is designed to record information for a single CMV involved in a crash. Questions concerning hazardous materials involvement may be found on the reverse side of the DMV-349. In rare instances where two or more CMV's are involved in the same crash, a second DMV-349 must be submitted with the appropriate information for subsequent CMV's.

## COMMERCIAL MOTOR VEHICLES CARRIER IDENTIFICATION NAME, NUMBERS, AND ADDRESS

This information is provided as a quick reference to aid law enforcement in correctly identifying the carrier identification numbers for purposes of reporting crashes or inspections. When a commercial motor vehicle crash report and/or inspection report is filled out, the correct motor carrier will receive credit (good and bad) for the crash and/or inspection.

The Federal Highway Administration and States use the crash and/or inspection reports in determining safety fitness ratings of motor carriers and targeting unsafe motor carriers for in-depth investigations. To avoid improperly identifying the name and address of a motor carrier, the officer should rely on more than a single document or item when identifying the motor carrier. The officer should review as many of the following items as possible to determine the name and address of the motor carrier.

**Side of the Vehicle** – The correct name, address and US DOT#/ICC# of the motor carrier may or may not be marked on the side of the vehicle. If the marking on the side of the vehicle matches the name on the other items, the correct motor carrier is probably identified. The US DOT# is required if the vehicle is an interstate private carrier. The ICC MC# is required if the vehicle is an interstate for hire carrier. The State Exemption Numbers, also contained on the side of the vehicle, are required for intrastate passenger carriers and/or carriers of household goods.

**Driver Interview** – The officer should ask questions, such as

1. Is the vehicle leased or rented?
2. Who is the motor carrier that is responsible for this load?
3. Who is directing and controlling the movement of this vehicle?
4. Where is the motor carrier's principal place of business?

**Lease Agreement** – This document is excellent for identifying the name of the lessee.

**Driver's Log** – When logs are required, they will contain the name of the motor carrier and the city and state where the motor carrier's principal place of business is located.

**Shipping Papers (Bill of Lading)** – Generally this document will provide the officer with the name of the motor carrier who is responsible for the load. The shipping papers are the written transportation contract between the shipper and the carrier. They identify the freight, who is to receive it, and the place of delivery and give the terms of the agreement.

**Vehicle Registration** – These documents are good for identifying the owner and/or registrant who may or may not be the responsible motor carrier. Even when the registration identifies the responsible motor carrier, it may or may not show the address of the motor carrier's principal place of business because carriers with terminals in multiple states generally register their vehicles in the state of domicile. Therefore, the address may be a terminal address.

The vehicle registration or "Cab Card" also contains the IFTA# (International Fuel Tax Agreement Number) and the Fuel Tax Account #, which is comprised of the State, FEI# (Federal Employee Identification Number) and Fleet Number.

## WHY AN OFFICER SUBMITS CRASH REPORTS

When an officer submits a North Carolina Crash Report Form DMV-349 to the DMV, he or she provides valuable data to many different groups of people working to make North Carolina streets and highways safer. Some of these people the officer will know first-hand: the county engineer planning to resurface a road, the city consultant developing safe school routes, the high school driver education teacher planning a curriculum, or the public works director applying for a state grant for reconstructing a hazardous intersection. It is important that officers are also aware of some of the state level uses of this data, such as enforcement of North Carolina's financial responsibility law by the DMV.

Other users of crash data are a bit more removed, such as the university researcher studying the problems of older drivers, the automobile manufacturer evaluating a design, or the people at all levels of the public and private sectors who support law enforcement's efforts to combat drunk driving. Their progress in highway traffic safety reaches into each officer's community.

Traffic crash reports are subject to be viewed by lawyers, judges, insurance companies and the general public. Crash prevention programs and successful prosecution in court are both dependent upon proper and complete crash investigation and report writing.

Subsequent levels of investigation will rely on the quality of the information contained on the DMV-349. The location of the crash, the road condition at the time of the crash, and the other evidence at the scene cannot be replaced or recreated, unless those things are documented by the officer during the initial investigation.

The National Highway Traffic Safety Administration (NHTSA) defines a motor vehicle traffic crash investigation as **The thorough examination of all elements contributing to the crash, resulting in a well-founded explanation of the series of events which occurred based upon the factual data.**

## COMPLETING SUPPLEMENTAL REPORTS

### When completing a supplemental report note that:

It is not necessary to rewrite most of the information as listed on the original DMV-349 (report).

Supplemental reports must be reported on a separate DMV-349 from the original report.

The location must be completed in addition to the date, and time of the crash.

List **only** the names of drivers (or owner, if no driver) as shown on the original report.

List the additional information or correction to be made.

If the original report included a hit and run driver and the driver has been apprehended the supplement must include all information for that respective driver and vehicle on the front and back of the report.

Supplemental traffic crash reports must be submitted **when**:

1. The original report was incomplete because of lack of information or an incomplete investigation.
2. A correction on the original report is necessary because of inaccurate information.
3. A person dies of injuries sustained in a traffic crash within one year of the crash.

## OTHER IMPORTANT DEFINITIONS IN CRASH REPORTING

**Fatal Injury** – Any injury that results in death within 12 months after the crash occurred.

**A Type Injury (disabling)** – An injury obviously serious enough to prevent the injured person from performing his or her normal activities for at least one day beyond the day of the crash. Massive loss of blood, broken bone, unconsciousness of more than momentary duration are examples.

**B Type Injury (evident)** – An obvious injury, other than a fatality or A Type injury, which is evident at the scene. Bruises, swelling, limping, soreness, are examples. This injury would not necessarily prevent the person from carrying on his or her normal activities.

**C Type Injury (possible)** – No visible injury, but person complains of pain, or has been momentarily unconscious.

**Derived Data Elements** – These are data elements which are not necessarily collected at the scene by the police. Instead, they can be obtained by counting or recoding information that has already been collected on the DMV-349. Examples include:

1. Day of week
2. Number of motorists
3. Number of non-motorist
4. Vehicle body type
5. Crash severity
6. Total persons injured
7. Total persons killed