

---

# STATE OF CONNECTICUT CRASH DATA GUIDELINES

XML Schema Element Definitions  
Acceptance Rules and Warning Rules  
Requirements For Electronic Submission of Crash Data

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
CONNECTICUT TRANSPORTATION SAFETY RESEARCH CENTER

MARCH 13, 2015

## Document History

**October 23, 2013**

Version 1.0

**January 15, 2014**

Version 1.1

- Update: General Comments
- Addition: Submitting Crash Reports Via PDF Files
- Update: Miscellaneous Comments
- Update: Requirements for Electronic Submission of Crash Data
- Update to XML Schema:
  - DOT1. TransmitterID
  - DOT2. TransmitterEmailAddress
  - C5. Crash City/Place
  - C6. Crash Location (Latitude, Longitude)
  - CountryName
  - DOT14. Approval Date
  - DOT16. CrashReportSubmissionDate
  - DOT7. Diagram
  - DOT9. Narrative
  - DOT14. Approval Date
  - DOT17. Report Revision Status
  - P7. Seating Position
  - V17. Traffic Control Device Type
  - V20. Sequence of Events
- Additions to XML Schema:
  - P2. Date of Birth (Age)
  - DOT56. NonBusSeatingPosition
  - DOT57. BusSeatingPosition
  - DOT59. Electronic Contact Information
  - DOT60. Electronic Contact Information of Owner
- Removal from XML Schema
  - DOT21. Electronic Contact Information (ContactType)
  - DOT22. Electronic Contact Information (ContactDetails)
  - ElectronicContactInfo (Is Primary Contact)
  - DOT41. Electronic Contact Information of Owner (ContactType)
  - DOT42. Electronic Contact Information of Owner (ContactDetails)
- Update: Warning Rules
- Update: Requirements for Electronic Submission of Crash Data
- Update: Contact Information

## February 20, 2014

Version 1.2 (February2014.01)

- Update: General Comments
- Update: Submitting Crash Reports Via PDF Files
- Added: Schema Versioning
- Update to XML Schema:
  - schema targetNamespace, xmlns, xmlns:dot
  - TrafficwayClassType
  - DOT9. Narrative
  - PersonType
  - UnitType
  - StateCode
  - ElectronicContactInforOfOwner
  - V10. Special Function of Vehicle
  - V20. Sequence of Events
  - V21. Most Harmful Event for this Motor Vehicle
  - V26. Motor Carrier Identification (USDOTNumber)
  - DOT24 Action Taken By Officer
  - P12. Driver License Number Class And Endorsements
- Additions to XML Schema:
  - DOT17. Report Revision Status
  - DOT61. VehicleOwnerInformationSameAsDriver
  - DOT62. ElectronicMailAddress
  - DOT63. Telephone
  - DOT64. Trailer License Plate Issuing State Code
  - DOT65. Count Of Motor Vehicles
  - DOT66. Count Of Nonmotorists
  - DOT67. Count Of Witnesses
- Removal from XML Schema:
  - DOT26. Passenger Number
  - DOT33. Witness Number
  - DOT59. Electronic Contact Information
  - DOT60. Electronic Contact Info of Owner
- Additions to Acceptance Rules:
  - 46. Drivers must be seated in the first row of the vehicle.

## March 21, 2014

Version 1.3 (March2014.01)

- Update to Miscellaneous Comments
- Additions to Schema:
  - DOT51. Trailer Information (Same As Carrier)
  - DOT51. Trailer Information (Same As Power Unit)
  - DOT51. Trailer Information (Same As Other Trailer)
  - DOT61. Vehicle Owner Personal Information Same As Driver
  - DOT62. Electronic Mail Address
  - DOT63. Telephone

- Update to Schema:
  - Crash Summary
  - C2. Crash Classification (Trafficway Class Type)
  - C6. Crash Location (various subelements)
  - C7. First Harmful Event
  - C8. "Location of First Harmful Event Relative to Trafficway"
  - C12. "Light Condition"
  - C13. "Trafficway Surface Condition"
  - C15 Contributing Circumstances, Road
  - C16. Relation to Junction (Crash Specific Location)
  - C17. Type of Intersection
  - C18. School Bus Related
  - C19. Work Zone - Related (Worker Presence)
  - DOT7. Diagram
  - P1. Name of Person
  - P4. PersonType
  - P8. Restraint Systems / Motorcycle Helmet Use (Helmet Use)
  - P11. Driver License Jurisdiction
  - P12. Driver License Number Class And Endorsements (Class)
  - P13. Speeding Related
  - P15. Violation Statutes
  - P16. Driver Distracted By
  - P19. Alcohol Test
  - P21. Drug Test
  - P23. Non-Motorist Action/Circumstances Prior to Crash (To Or From School)
  - V2. Vehicle Unit Type and Number
  - V8. Vehicle Body Type
  - V10. Special Function of Vehicle
  - V16. Roadway Alignment and Grade
  - V17. Traffic Control Device Type
  - V18. Vehicle Action
  - V19. Vehicle Damage (Initial Contact Point)
  - V19. Vehicle Damage (Extent of Vehicle Damage)
  - V22. Bus Use
  - V23. Hit and Run Status
  - V25. Contributing Circumstances Vehicle
  - V26. Motor Carrier Identification (Commercial Or Non Commercial)
  - V27. Gross Vehicle Weight Rating
  - V28. Vehicle Configuration
  - V29. Cargo Body Type
  - V30. Hazardous Materials
  - DOT18. Related Case Identifier
  - DOT31. Non-Motorist Distracted By
  - DOT32. Direction on Which Nonmotorist Was Traveling (Log Direction)
  - DOT50. Power Unit Information (Information Same As carrier)
  - DOT56. NonBusSeatingPosition

- Removal from XML Schema:
  - DOT22. Nonmotorist Number
  - DOT28. Name of Roadway On Which Non-Motorist was Traveling
- Updates to Acceptance Rules:
  - Rule 1
  - Rule 7
  - Rule 12
  - Rule 16
  - Rule 17
  - Rule 18
  - Rule 29
  - Rule 42
  - Rule 43
  - Rule 44
  - Rule 45
- Additions to Acceptance Rules:
  - Rule 46
  - Rule 47
  - Rule 48

## **May 30, 2014**

Version May2014.01

- Remove requirement for C3, CrashDate and CrashTime. These are now optional fields and we will accept XML files that do not have these values filled in to handle those cases where the date and/or time is unknown.
- Disabled acceptance rules:
  - Rule 5
  - Rule 17
- Updates to Acceptance Rules:
  - Rule 19
- Additions to Acceptance Rules:
  - Rule 49, If a nonmotorist is classified as a bicyclist, the bicycle appendix data must be completed.
  - Rule 50, The PersonType (P4) in the Driver section must be 1 (Driver).
  - Rule 51, The PersonType (P4) in the Passenger and BusPassenger section must be either 2 (Passenger) or 7 (Occupant of a Motor Vehicle Not in Operation).
  - Rule 52, The ReportRevisionStatus (DOT17) is set to True, but a matching case identifier was not found in the database.
  - Rule 53, The ReportRevisionStatus (DOT17) is not set to True, but a matching case identifier was found in the database.
- Changed the following fields to boolean data types:
  - Crash.CaseSummary.CrashSummary.WereVehiclesMovedPriorToPoliceArrival
  - Crash.MotorVehicle.TrailerInformation.InformationSameAsCarrier
  - Crash.MotorVehicle.TrailerInformation.InformationSameAsPowerUnit
  - Crash.MotorVehicle.TrailerInformation.InformationSameAsOtherTrailer
  - Crash.Vehicle.HitAndRunStatus
- Added the following fields to the schema:

- Crash.Nonmotorist.StrikingMotorVehicleID
- Crash.Nonmotorist.BicycleID
- Remove the requirements for IDOfRoadway and IDOfIntersectingRoadway.
- Added 99 Unknown value to P11. Driver License Jurisdiction.
- Removed 88 Not Applicable option from P17. Condition of Person at Time of Crash.
- Changed P19 Alcohol Test, Type of Test 2=Urine, 3=Breath.
- Added missing options for P7 Seating Position, DOT56 NonBusSeatingPosition.
- Removed 88 Not Applicable from P23 Non-Motorist Action/Circumstance Prior to Crash.
- Added 13 Use of Electronic Device to P24 Non-Motorist Actions/Circumstances at Time of Crash.
- Removed 88 Not Applicable from P25 Non-Motorist Location at Time of Crash.
- Added 06 Other Activity, Inside the vehicle (eating, hygiene, etc.) to DOT31 Non-Motorist Distracted By.
- Added 88 Not Applicable to V22 Bus Use.
- Added 88 Not Applicable to V29 Cargo Body Type.
- Modified the SourceOfInformation field to allow from 1 to 9 alpha-numeric characters.
- Replaced the Motorist section with separate Driver, Passenger, and BusPassenger sections.
- Added DOT19 OfficerSignature element.
- Updated V20. SequenceOfEvents Event minimum occurrences to 1.
- Updated V25. ContributingCircumstancesVehicle minimum occurrences to 1.
- Updated C11. WeatherCondition minimum occurrences to 1.
- Updated P14. DriverActions minimum occurrences to 1.
- Updated P17. ConditionOfPersonAtTimeOfCrash Condition Code minimum occurrences to 1.
- Updated P24. NonMotoristActionsOrCircumstancesAtTimeofCrash ActionOrCircumstance minimum occurrences to 1.
- Updated P26. NonMotoristSafetyEquipment SafetyEquipment minimum occurrences to 1.
- Updated DOT51. TrailerInformation minimum occurrences to 1.

## June 16, 2014

Version June2014.01

- Set minOccurs to 0 for nillable elements:
  - StreetAddressOrPostOfficeBox
  - City
  - StateCode
  - CountryName
  - PostalCode
  - NameOfIntersectingRoadway
  - OffsetFromNearestLandmark
  - DistanceFromNearestLandmark
  - UnitOfMeasure
  - DirectionFromNearestLandmark
  - DescriptionOfNearestLandmark
  - RelatedCaseIdentifiers
  - AddressOfPerson
  - ElectronicMailAddress
  - Telephone
  - DriversLicense
  - ViolationStatutes

- ConditionOfPersonAtTimeOfCrash
- AlcoholTest
- DrugTest
- TransportedToFirstMedicalFacility
- ActionTakenByOfficer
- NonBusSeatingPosition
- BusSeatingPosition
- RestraintSystems
- SpeedingRelated
- DriverActions
- DriverDistractedBy
- VehicleMake
- VehicleModelYear
- VehicleModel
- VehicleColor
- TotalOccupantsInVehicle
- SpecialFunctionOfVehicleInOperation
- EmergencyVehicleUse
- PostedStatutorySpeedLimit
- DirectionOfTravelBeforeCrash
- TrafficwayDescription
- TotalLanesInRoadway
- VehicleAction
- VehicleDamage
- HitAndRunStatus
- Towed
- TowedTo
- ContributingCircumstancesVehicle
- VehicleOwnerInformation
- ElectronicMailAddress
- Telephone
- InsurancePolicy
- PowerUnitInformation
- TrailerInformation
- GrossVehicleWeightRating
- VehicleConfiguration
- CargoBodyType
- HazardousMaterials
- MotorCarrierIdentification
- DriversLicenseIssuedBy
- DriverLicenseNumberClassAndEndorsements
- VehicleIdentificationNumber
- PropertyDamage
- Class
- CommercialDriverLicense
- Endorsements
- NameOfOwner
- PhysicalAddressOfOwner

- MotorVehicleRegistrationStateAndYear
- MotorVehicleLicensePlateNumber
- MotorVehicleRegistrationWasInvalid
- MotorVehicleRegistrationPlateWasMissing
- VehicleBodyType
- BusUse
- WasSerialNumberRemoved
- WereBikeLanesOrSharrowsPresent
- InformationSameAsCarrier
- PowerUnitOwnerName
- PowerUnitOwnerAddress
- VehicleWasNotOnRoadway
- Made the following fields required:
  - TrafficwayClassType
  - TrafficwayOwnershipType
  - Latitude
  - Longitude
  - FirstHarmfulEvent
  - LocationOfFirstHarmfulEventRelativeToTheTrafficway
  - MannerOfCrashCollisionImpact
  - WeatherCondition
  - LightCondition
  - TrafficSurfaceCondition
  - ContributingCircumstancesEnvironment
  - ContributingCircumstancesRoad
  - RelationToJunction
  - CrashSpecificLocation
  - TypeOfIntersection
  - SchoolBusRelated
  - SourceOfInformation
  - OfficerSignature
  - ApprovalDate
  - SequenceOfEvents
  - MostHarmfulEventForThisVehicle
- Added “Other” and “Unknown” as to the Country enumeration.
- Updated DOT56: “Seating Position for Non Bus Vehicles”, added fourth row seating positions.
- Added 88 “Not applicable” as a valid value for DOT34 WitnessStatementSource, DOT35 WitnessObservationVerification, and DOT36 WitnessStatementType.
- Removed the 75 character limit on the OfficerSignature field so we can accept image data.
- Added 99 Unknown as possible value for CommercialDriverLicense and Class.

## June 25, 2014

Version June2014.02

- Updated the Requirements for Electronic Submission of Crash Data section.
- Removed the Submitting Crash Reports Via PDF Files section.

## **July 17, 2014**

Version July2014.01

- Modified acceptance rule A38, remove the part about airbags and add motorcycle to the list of vehicles for which ejection is not applicable.
- Disable warning W20, The ejection status of the motorist is inconsistent with the vehicle body type.
- Add acceptance rule A52, The ejection status of the motorist is inconsistent with the vehicle body type.
- Add acceptance rule A53, If the vehicle type is a bus, the passengers must be in the BusPassenger section.
- Fixed warning W21 to allow helmet use 88 (Not Applicable).

## **October 29, 2014**

Version October2014.01

- Modified warning rule W16 to include October in the list of months where the warning is generated when light conditions are dark but the time is between 7:00am and 4:00pm.

## **October 31, 2014**

Version October2014.02

- Added 97 as an option for C8 LocationOfFirstHarmfulEventRelativeToTheTrafficway.
- Added 88 as an option for P17 ConditionOfPersonAtTimeOfCrash.

## **November 17, 2014**

Version November2014.02

- Change the validation for rule A1 to allow 88 and 99 as valid values for TrafficwayDescription, if the accident occurred on a trafficway.
- Change rules A43 and A45 to allow Test Refused as a valid response if the test type is specified.
- Add warning W26: If the crash is not at an intersection, then direction and distance from nearest landmark is required.
- Add warning W27: If CountOfMotorVehicles (DOT65) = 1 and there are no bicycles, then First Harmful Event (C7) must not be 14 (Motor Vehicle in Operation) or 15 (Parked Motor Vehicle), and no Sequence of Events (V20) can be 22 (Motor Vehicle in Motion) or 23 (Parked Motor Vehicle).
- Add warning W28: Most Harmful Event for this Motor Vehicle (V21) must be included in at least one Sequence of Events (V20) for each vehicle involved in the crash.

## **December 15, 2014**

Version November2014.02

- Change the enumeration value for Norfolk to 98.

## **January 9, 2015**

Version January2015.01

- Re-numbered edit rules W26-W28 to A54-A56 but kept the severity as warnings for now. Eventually these will become errors.
- Add new edit rules A57-A67, and new warnings W26 and W27.

**January 21, 2015**

Version January2015.02

- Modified edit rules A60 and A61 to exclude vehicles that are parked, non-collision vehicles, or unknown.

**February 6, 2015**

Version February2015.01

- Clarified the wording for edit rule A30.

**February 12, 2015**

Version February2015.02

- Added edit rules A68 and A69 to prohibit crash and approval dates in the future.

**February 18, 2015**

Version February2015.03

- Modified edit rule A55 to make sure First Harmful Event (C7) is not 14 (Motor Vehicle in Operation) or 15 (Parked Motor Vehicle) in a single vehicle crash.
- Added edit rule A70 to make sure no Sequence of Events (V20) is 22 (Motor vehicle in Motion) or 23 (Parked Motor Vehicle) in a single vehicle crash.
- Added edit rule A71 to make sure Manner of Impact (C9) is blank or 88 (Not Applicable) in a single vehicle crash.

**February 25, 2015**

Version February2015.04

- Disable edit rules A7 and A51.
- Add W28 to replace edit rule A7, "If First Harmful Event (C7) = 17 (Work Zone/Maintenance Equipment) then Work Zone (C19) must = 2 (Yes) and Work Zone Location (C19), Work Zone Type (C19), Workers Present (C19) and Enforcement Present (C19) are required fields and their values cannot be 88 (Not Applicable)."
- Clarify rule A4.

**March 13, 2015**

Version March2015.01

- Disable edit rule A52 because it's functionally equivalent to rule A38.
- Add new rules 72-111, currently implemented as warnings. Eventually rules 4 and 54-111 will become hard edit rules. Effective date TBD.
- Clarify rules 42 and 43.

## Contents

General Comments	16
Schema Versioning	19
Miscellaneous Comments	19
XML Schema Element Definitions	21
typePreamble	21
Document Originator	21
Document Statistics	22
DocumentOptions	22
typePhysicalAddress	23
Street Address or Post Office Box	23
City	23
State Code	23
Country Name	26
Postal Code	32
typeCaseSummary	32
Crash Summary	32
C3. "Crash Date and Time"	34
DOT5. Crash Severity	35
C5. Crash City/Place	35
DOT6. Crash Town ID	39
C6. Crash Location	43
C7. "First Harmful Event"	46
C8. "Location of First Harmful Event Relative to Trafficway"	47
C9. "Manner of Impact"	48
C11. "Weather Condition"	48
C12. "Light Condition"	49
C13. "Trafficway Surface Condition"	49
C14. "Contributing Circumstances, Environment"	50
C15. "Contributing Circumstances, Road"	50
C16. "Relation to Junction"	51
C17. "Type of Intersection"	52
C18. "School Bus Related"	52
C19. "Work Zone - Related (Construction/Maintenance/Utility)"	52

DOT7. Diagram	54
DOT8. Were Vehicles Moved Prior to Police Arrival at Scene	55
DOT9. Narrative	55
Law Enforcement Summary	55
typePerson 59	
DOT19. Person ID	59
P1. Name of Person	59
P2. Date of Birth	59
P3. Gender	60
P4. Person Type	60
Address Of Person	61
DOT59. Electronic Contact Info	61
DOT62. Electronic Mail Address	62
DOT63. Telephone	62
P5. Injury Status	62
Driver License	63
P15. Violation Statutes	65
P17. Condition of Person at Time of Crash	66
P19. Alcohol Test	66
P21. Drug Test	67
P28. Transported to First Medical Facility By	68
DOT24. Action Taken By Officer	69
typeMotorist 69	
DOT25. Motorist Personal Information	69
P6. Motor Vehicle Unit Number of Person	69
P7. Seating Position	70
P8. Restraint Systems / Helmet Use	72
P9. Air Bag Deployment	73
P10. Ejection Status	73
P13. Speeding Related	73
P14. Driver Actions	74
P16. Driver Distracted By	75
typeNonmotorist	75
DOT27. Non-Motorist Personal Information	75
P22. Non-Motorist Number	75

DOT28. Name of Roadway On Which Non-Motorist was Traveling	75
DOT29. Location Of NonMotorist	76
DOT32. Direction on Which Nonmotorist Was Traveling	77
P23. Non-Motorist Action/Circumstances Prior to Crash	78
P24. Non-Motorist Actions/Circumstances At Time Of Crash	79
P25. Non-Motorist Location at Time Of Crash	80
P26. Non-Motorist Safety Equipment	80
P27. Unit Number of Motor Vehicle Striking Non-Motorist	81
DOT31. Non-Motorist Distracted By	82
StrikingMotorVehicleID	82
BicycleID	82
typeWitness 82	
DOT32. Witness Personal Information	83
DOT34. Witness Statement Source	83
DOT35. Witness Observation Verification	83
DOT36. Witness Statement Type	83
typeVehicle 84	
V1. Vehicle Identification Number (VIN)	84
V2. Vehicle Unit Type and Number	84
V5. Vehicle Make	85
V6. Vehicle Model Year	85
V7. Vehicle Model	85
DOT37. Vehicle Color	85
DOT61. Vehicle Owner Information Same As Driver	86
V9. Total Occupants in Vehicle	86
V10. Special Function of Vehicle	86
V11. Emergency Vehicle Use	87
V12. Vehicle Posted Statutory Speed Limit	87
V13. Direction Of Travel Before Crash	88
V14. Trafficway Description	88
V15. Total Lanes In Roadway	89
V16. Roadway Alignment and Grade	89
V17. Traffic Control Device Type	90
V18. Vehicle Action	91
V19. Vehicle Damage	91

V20. Sequence of Events	94
V21. Most Harmful Event for this Vehicle	95
V23. Hit and Run	96
V24. Towed	97
DOT33. Towed To	97
V25. Contributing Circumstances Vehicle	97
DOT36. Vehicle Owner Information	98
DOT60. Electronic Contact Info of Owner	98
DOT43. Was Serial Number Removed	100
DOT44. Were Bike Lanes Or Sharrows Present	100
DOT45. Roadway On Which The Vehicle Was Traveling	100
DOT46. Property Damage	101
typeMotorVehicle	101
Vehicle Information	101
V3. Motor Vehicle Registration State and Year	101
V4. Motor Vehicle License Plate Number	103
DOT47. Motor Vehicle Registration Was Invalid	104
DOT48. Motor Vehicle Registration Plate Was Missing	104
V8. Vehicle Body Type	104
V22. Bus Use	105
DOT49. Insurance Policy	105
V26. Motor Carrier Identification	106
DOT50. Power Unit Information	107
DOT51. Trailer Information	108
V27. Gross Vehicle Weight Rating	110
V28. Vehicle Configuration	111
V29. Cargo Body Type	111
V30. Hazardous Materials	112
Vendor Specific	112
Acceptance Rules and Warning Rules	113
Acceptance Rules for Crash Data Elements	113
Warning Rules	122
Requirements for Electronic Submission of Crash Data	126
Contact Information	127
Technical	127

Connecticut Uniform Police Crash Report Design	127
Acceptance and Warning Rules	127
Project Management	127
Website	127

## General Comments

This packet of documents provides details about how to assemble the data files required for the electronic submission of the Connecticut Uniform Police Crash Report, form PR-1. This packet should include, amongst other things, a sample PR-1 in PDF format, an XML schema document, and this specifications document.

This specifications document describes how the information on the PR-1 form relates to the data elements in the XML schema as well as a series of rules to apply to this data for validation purposes. This document is intended primarily for users implementing MMUCC upgrades to e-crash software modules. It is not intended to be a user manual to instruct officers how to use the PR-1.

The sample PR-1 in PDF format is not intended to be used for electronic submissions of crash reports. A PR-1 in a PDF format that can be submitted electronically will be developed at a later point in time. Until then, ***any interim PR-1 file in a PDF format should be considered as an illustration only.***

The documents in this packet should be considered evolving versions rather than final versions. Although the DOT does not expect significant changes in the specifications or in the XML schema, it is likely that some changes will be made as law enforcement agencies and their software vendors have had time to evaluate and comment on these submission requirements. Please reference the "Document History" section of this document to find out what changes were implemented. The Connecticut DOT is committed to providing as much advanced notice as possible when updates are made to the crash data specifications and related documents. With this in mind, the DOT's **DOT Crash Data Collection Initiatives and Programs** website, at <http://www.ct.gov/dot/crashinitiative>, should be consulted regularly for any published changes.

While great efforts have been made to provide detailed documentation of the use of every value that may be entered into the PR-1, it is ***the PR-1 form itself that should be viewed as the governing authority rather than this documentation.*** Therefore, if there is a contradiction between what is on the PR-1, the specifications document, and the XML schema then it should be assumed that the PR-1 form supersedes both the specifications document and the XML schema. If errors are found in either the Specifications Document or in the XML schema, those errors should be reported to the Office of Information Systems at the Connecticut DOT. Contact information is available later in this document.

All information entered into a PR-1 will be represented in a crash data file that conforms to the structure and restrictions defined in the accompanying XML schema and this document. With few exceptions, all elements described in the XML schema must be present in the crash data file although most elements are not required to have a value. Requiring all elements to be included in the crash data file, regardless of the value, allows for more comprehensive auditing of the data, and, as a result, provides greater certainty that the data describing the crashes is as was intended.

***If a crash data file is submitted as an XML file and that XML file does not conform to the XML schema, the entire crash data file will not be accepted by the DOT.***

Although some XML elements do not require values, the DOT highly recommends providing values whenever possible. In the absence of a value, a value of neither "Unknown" nor "Not Applicable" can be assumed. If no value was provided on the PR-1 then the DOT recommends indicating that lack of value

using the nil attribute. This recommendation is made because the nil attribute is an explicit representation of no value and because an 'empty' element is semantically different from having no value. For example:

```
<NameOfIntersectingRoadway xsi:nil="true" />
```

For example, consider element C11. Weather Conditions which allows for up to two instances of values. If the only applicable weather condition is Clear then the second occurrence of this element should be identified with a nil attribute. Alternatively, the second occurrence could be assigned the value for 'Not Applicable'.

***It should be noted that the codes for "Unknown" (99), "Not Applicable" (88), and "Other" (97) may be used only for elements that require an enumerated value and are not valid for free-form elements, such as those for a person's name, telephone number, or date of birth.***

While efforts were made to name the XML elements using easily recognizable names, some names were generalized. Consider, for example, that all motor vehicles are vehicles but not all vehicles are motor vehicles. Many of the element names defined in the MMUCC standard are specific to motor vehicles whereas the corresponding elements in the schema may use names that are more universal. For example, MMUCC defines elements with names such as "Motor Vehicle Make" and "Motor Vehicle Model" whereas the schema uses "Vehicle Make" and "Vehicle Model" to accommodate non-motorized vehicles.

With a small number of exceptions, each element found in the MMUCC standard has a corresponding element within the XML schema. These elements are documented with the MMUCC element identifiers, P1, C6, V2, etc. Elements that were added by the Connecticut DOT have identifiers with a prefix of DOT. The MMUCC standard is documented at <http://www.mmucctraining.us/> and includes detailed explanations and illustrations of various element values. This document and the XML schema file contains general comments for the use of elements added by the DOT although detailed explanations on how the officer is to interpret the values for these elements will be provided at a later date in an end-user training manual.

There is a very limited number of MMUCC elements that do not have a corresponding element in the PR-1 or in the XML schema, such as:

- Link Node System (*under C6. Crash Location*)
- Year of Motor Vehicle Registration (*under V3. Motor Vehicle Registration State and Year*)
- Law Enforcement Suspects Drug Use (*P18*)
- Law Enforcement Suspect Alcohol Use (*P20*)
- Crash County (*C4*)

There may not be a one-to-one relationship for each and every element in the XML schema with each and every field on the PR-1 form. Some elements in the XML schema are generic in nature so they could be used for multiple entries on the PR-1. For example, "PostalCode," which is described once in the XML schema but may be used to describe part of the physical address for a driver, a passenger, a vehicle owner, a witness, or a carrier. Similarly, some of these generic elements may not always be used. For example, the "TowedTo" exist for all vehicles - motor vehicles and non-motor vehicles - although bicycles are never expected to get towed so do not have a "Towed To" field on the PR-1. In such cases, the DOT recommends that these unused elements have a nil attribute with a value of "true" or,

alternatively, have the unused elements be populated with the value for 'Not Applicable'. Some elements have a value list that may not allow all values in every instance. Consider, for example, "Restraint Systems" which is defined for all motorists regardless of if a motorist is a driver or a passenger. This element includes values for various child restraint systems and booster seats. While these values are applicable to passengers, they are not applicable to the drivers.

Some element values in the crash data file may need to be derived from the entries on the PR-1 form. For example is the "Crash Severity" field, which should be computed as the value of the Injury Status of the most-severe injury of all persons involved in the crash. Another example is when the vehicle owner is the same as driver. The police officer will simply check the "Information same as driver" checkbox although the crash data file will not contain an element for same as driver. Instead, the data file should duplicate the data from the driver's personal information fields in the owner's personal information fields.

Some items on the PR-1 are for display purposes only and do not have a corresponding element within the XML schema. For example, the "Info same as carrier" found at the top of *Appendix B: Commercial Vehicle* is intended to be a user interface element that will cause the automatic population of the trailer owner elements from the corresponding elements found elsewhere.

The PersonID element is intended to be a sequence of all persons involved in the crash. For example, consider a crash that involved two motor vehicles, a bicyclist, a pedestrian and two witnesses, with vehicle 1 having a driver and two passengers and vehicle 2 having a driver and one passenger then the various identifiers would be as follows:

Vehicle 1:	VehicleID = 1
Vehicle 2:	VehicleID = 2
Bicycle:	VehicleID = 3
Vehicle 1 Driver:	PersonID = 1; VehicleID = 1;
Vehicle 1 Passenger:	PersonID = 2; VehicleID = 1;
Vehicle 1 Passenger:	PersonID = 3; VehicleID = 1;
Vehicle 2 Driver:	PersonID = 4; VehicleID = 2;
Vehicle 2 Passenger:	PersonID = 5; VehicleID = 2;
Bicyclist:	PersonID = 6; VehicleID = 3;
Pedestrian:	PersonID = 7;
Witness:	PersonID = 8;
Witness:	PersonID = 9;

There has been an attempt to standardize values, when possible, to make data-entry consistent across all fields of the PR-1. One way this was accomplished was to use the value 99 as the standard value for "Unknown". Even when an element shows a list of acceptable values that do not explicitly include 99, if the PR-1 section title has a notation "For all boxes: 99=Unknown" then this value is considered valid for that element. In general, the value of 1 is used for 'No', the value 2 is used for 'Yes', the value 88 is for 'Not Applicable', and the value 97 is for "Other". ***These "standardized values" do not apply to elements that have non-numeric data types, such as a street address, names, telephone numbers, postal codes, dates, etc.***

There is a collection of acceptance rules that are based upon logical relationships between data elements. For example, in a two vehicle collision both vehicles cannot be parked. These acceptance rules will be applied by the DOT to each submitted crash data file. This document also provides rules that are not strictly acceptance rules but rules that should alert the user of suspicious data, such as when the lighting conditions indicate 'Daylight' although the time of the crash is near Midnight. The DOT recommends that these additional "warning rules" be implemented in the software to warn the officer of the potential conflict.

***If the crash data for any given report fails in one or more acceptance rules, that report will not be accepted.*** The sender will be notified of the success or failure of the reports along with information describing the nature of any failures. By default, the sender will be notified via email using the email address(es) included in the collection of the TransmitterEmailAddress element of the crash data file.

It should be noted that there are two elements named VendorSpecific that are included in the schema - one at the start of the schema and the other within each instance of a crash report. The intention of these elements is to provide a mechanism for vendors to add data for auditing or tracing which will not be used by the Connecticut DOT. Similarly, there is an element to indicate if the file contains instances of test cases rather than of production data.

## Schema Versioning

It is strongly recommended that the most-current version of the XML schema be used. While the DOT expects to allow vendors a limited period of time to update their systems with each new schema update, the duration of this period will be decided upon on a case-by-case basis. After this period, files submitted using an XML schema other than the current schema may be rejected.

## Miscellaneous Comments

- Law Enforcement Agency Identifiers are assigned by the Office of Information Systems at the Connecticut DOT; Please contact the Office of Information Systems for the value of the identifiers of the agencies that you are involved with
- Transmitter Identifiers are assigned by the Office of Information Systems at the Connecticut DOT; please contact the Department of Transportation Office of Information Systems (OIS) for the value of your identifier
- A Law Enforcement Agency Identifier is not the same as a Transmitter Identifier as each identifies a different kind of entity; While some law enforcement agencies may submit ("transmit") their own data directly to the DOT, other agencies may employ the services of their software vendor to make the actual electronic submission, therefore a distinction must be made between which organization authored the report and which organization transmitted that same report
- In a 24-hour clock, Midnight is considered 00:00, Noon is 12:00, and the day ends after 23:59; the PR-1 form expects this time to be entered without a colon, such as 2359
- Witnesses are not considered non-motorists; they merely observe the crash
- Bicyclists are considered non-motorists although they do operate a non-motorized vehicle
- If more than one party is to be notified of the success/failure of a submission, more than one email address may be provided in the TransmitterEmailAddress element

- The values displayed on the PR-1 form itself include leading zeros while the underlying values for each element do not include leading zeros. The inclusion of leading zeros on the form itself was done to encourage those filling out the form by hand to transcribe values that would be more clearly understood. When data is submitted electronically, these leading zeros are not expected
- Although Connecticut law demands that crash reports are submitted no later than five days of the completion of the crash report, the DOT encourages agencies to submit crash reports as quickly as possible
- Note that the data type of 'Token' is a XML standard data type that contains string information but does not contain line feeds, carriage returns, tabs, leading and trailing spaces, or multiple spaces
- In some of the examples used in this document, it is assumed that the XML instance file references not just the current Crash Data XML schema published by the DOT but also certain W3.org standards for schemas, namely, XMLSchema and XMLSchema-instance. For example, consider the following:

```
<Crashes
  xmlns="http://www.ct.gov/dot/schemas/CTCrash_Rev_March2014.01.xsd"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  :
  <GeospatialReferencingSystem xsi:nil="true" />
```

## XML Schema Element Definitions

The following describes each type and element found in the XML Schema document.

Unless explicitly described otherwise with a Schema Item Type of “*Attribute of element*,” all items defined should be considered elements in the XML schema except those items that have a prefix type, in which case the items defined are types. The indentation of definitions is used to denote containership.

### typePreamble

Information that describes what is included in this file, uniquely identifies the sender of the information, and provides certain validation information, etc. The primary purpose of this structure is for acknowledgement and auditing purposes.

#### Document Originator

Name In Schema:	DocumentOriginator
Minimum Occurrences:	1
Maximum Occurrences:	1

#### DOT1. Transmitter ID

A pre-assigned identifier that uniquely identifies the organization submitting this document. This organization may not be necessarily the law enforcement agency that produced a given case since the organization submitting the crash data file may be doing so for multiple law enforcement agencies. Contact the Department of Transportation Office of Information Systems for the values of your identifier.

Schema Item Type:	<i>Attribute of element</i>
Name In Schema:	TransmitterID
Data Type:	string
Data Use:	required
Restrictions on Values, with usage comments:	
Minimum Length:	6
Maximum Length:	6
Pattern :	[0-9]{6}

#### DOT2. Transmitter Email Address

This is the email address of the technical contact(s) at the organization that submitted the crash data file.

Schema Item Type:	Element
Name In Schema:	TransmitterEmailAddress
Data Type:	string
Minimum Occurrences:	1
Maximum Occurrences:	9

### Document Statistics

Name In Schema: DocumentStatistics  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### DOT3. Date and Time Document Generated

The date and time that this document was created.

Schema Item Type: *Attribute of element*  
Name In Schema: DateTimeDocumentGenerated  
Data Type: DateTime

### DOT4. Count Of Cases In Document

The count of cases included in the crash data file.

Schema Item Type: *Attribute of element*  
Name In Schema: TransmitterEmailAddress  
Data Type: nonNegativeInteger

### DocumentOptions

Name In Schema: DocumentOptions  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### Test Case Indicator

Identifies if the file contains instances of test cases rather than of production data.

Name In Schema: TestCaseIndicator  
Data Type: boolean

### Other Indicators

A bitwise value for additional indicators that may be supported in the future.

Name In Schema: OtherIndicators  
Data Type: integer

### Vendor Specific

Allows each vendor to provide data for their own internal use, such as for tracing. This data will not be used by ConnDOT.

Name In Schema: VendorSpecific  
Data Type: string

## typePhysicalAddress

The physical address of an individual or corporation. The size limits for each string are larger than typical to accommodate foreign locations.

### Street Address or Post Office Box

Name In Schema:	StreetAddressOrPostOfficeBox
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Maximum Length:	75

### City

Name In Schema:	City
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Maximum Length:	50

### State Code

Two-character code to identify a state or province.

For details, see MMUCC guideline document, Appendix D: State, Province and FIPS Code ([http://www.mmucc.us/sites/default/files/MMUCC\\_4th\\_Ed\\_0.pdf](http://www.mmucc.us/sites/default/files/MMUCC_4th_Ed_0.pdf))

Name In Schema:	StateCode
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string

Restrictions on Values, with usage comments:

AL	Alabama, USA
AK	Alaska, USA
AZ	Arizona, USA
AR	Arkansas, USA
CA	California, USA
CO	Colorado, USA
CT	Connecticut, USA
DE	Delaware, USA
FL	Florida, USA
GA	Georgia, USA
HI	Hawaii, USA
ID	Idaho, USA
IL	Illinois, USA
IN	Indiana, USA
IA	Iowa, USA
KS	Kansas, USA

KY	Kentucky, USA
LA	Louisiana, USA
ME	Maine, USA
MD	Maryland, USA
MA	Massachusetts, USA
MI	Michigan, USA
MN	Minnesota, USA
MS	Mississippi, USA
MO	Missouri, USA
MT	Montana, USA
NE	Nebraska, USA
NV	Nevada, USA
NH	New Hampshire, USA
NJ	New Jersey, USA
NM	New Mexico, USA
NY	New York, USA
NC	North Carolina, USA
ND	North Dakota, USA
OH	Ohio, USA
OK	Oklahoma, USA
OR	Oregon, USA
PA	Pennsylvania, USA
RI	Rhode Island, USA
SC	South Carolina, USA
SD	South Dakota, USA
TN	Tennessee, USA
TX	Texas, USA
UT	Utah, USA
VT	Vermont, USA
VA	Virginia, USA
WA	Washington, USA
DC	Washington DC, USA
WV	West Virginia, USA
WI	Wisconsin, USA
WY	Wyoming, USA
AS	American Samoa, USA
DS	The U.S. Department of State
FM	Federated States of Micronesia, USA
GU	Guam, USA
MH	Marshall Islands, USA
MP	Northern Mariana Islands, USA
PR	Puerto Rico, USA
PW	Palau, USA
PZ	Panama Canal Zone
UM	United States Minor Outlying Islands (Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll), USA
VI	U.S. Virgin Islands, USA

WK	Wake Island, USA
AB	Alberta, Canada
BC	British Columbia, Canada
MB	Manitoba, Canada
NB	New Brunswick, Canada
NL	Newfoundland and Labrador, Canada
NT	Northwest Territories, Canada
NS	Nova Scotia, Canada
NU	Nunavut, Canada
ON	Ontario, Canada
PE	Prince Edward Island, Canada
QC	Quebec, Canada
SK	Saskatchewan, Canada
YT	Yukon Territory, Canada
AG	Aguascalientes, Mexico
BA	Baja California Norte, Mexico
BJ	Baja California Sur, Mexico
CH	Chihuahua, Mexico
CI	Chiapas, Mexico
CL	Colima, Mexico
CM	Campeche, Mexico
CU	Coahuila de Zaragoza, Mexico
DF	Distrito Federal, Mexico
DO	Durango, Mexico
GR	Guerrero, Mexico
GT	Guanajuato, Mexico
HL	Hidalgo, Mexico
JL	Jalisco, Mexico
MC	Michoacan de Ocampo, Mexico
MR	Morelos, Mexico
MX	Mexico, Mexico
NA	Nayarit, Mexico
OA	Oaxaca, Mexico
PB	Puebla, Mexico
QR	Quintana Roo, Mexico
QU	Queretero de Arteaga, Mexico
SI	Sinaloa, Mexico
SL	San Luis Potosi, Mexico
SO	Sonora, Mexico
TA	Tamaulipas, Mexico
TB	Tabasco, Mexico
TL	Tlaxcala, Mexico
VC	Veracruz-Llava, Mexico
YU	Yucatan, Mexico
ZA	Zacatecas, Mexico

- XX Other commonwealth, territory, Indian nation, U.S. Government, foreign country, etc.,
- 97 Other commonwealth, territory, Indian nation, U.S. Government, foreign country, etc.
- 99 Unknown

**Country Name**

The name of the country; based upon the ISO standard using in NIEM; See [http://release.niem.gov/niem/codes/fips\\_10-4/3.0/fips\\_10-4.xsd](http://release.niem.gov/niem/codes/fips_10-4/3.0/fips_10-4.xsd) for details.

Name In Schema:	CountryName
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	token
Maximum Length:	50

Restrictions on Values, with usage comments:

- Afghanistan
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Anguilla
- Antarctica
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba
- Ashmore and Cartier Islands
- Australia
- Austria
- Azerbaijan
- Bahamas, The
- Bahrain
- Baker Island
- Bangladesh
- Barbados
- Bassas Da India
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bosnia and Herzegovina
- Botswana

Bouvet Island  
Brazil  
British Indian Ocean Territory  
British Virgin Islands  
Brunei  
Bulgaria  
Burkina Faso  
Burma  
Burundi  
Cambodia  
Cameroon  
Canada  
Cape Verde  
Cayman Islands  
Central African Republic  
Chad  
Chile  
China  
Christmas Island  
Clipperton Island  
Cocos (Keeling) Islands  
Colombia  
Comoros  
Congo  
Congo, Democratic Republic Of The  
Cook Islands  
Coral Sea Islands  
Costa Rica  
Cote D'ivoire  
Croatia  
Cuba  
Cyprus  
Czech Republic  
Denmark  
Djibouti  
Dominica  
Dominican Republic  
East Timor  
Ecuador  
Egypt  
El Salvador  
Equatorial Guinea  
Eritrea  
Estonia  
Ethiopia  
Europa Island  
Falkland Islands (Islas Malvinas)  
Faroe Islands

Fiji  
Finland  
France  
French Guiana  
French Polynesia  
French Southern and Antarctic Lands  
Gabon  
Gambia, The  
Gaza Strip  
Georgia  
Germany  
Ghana  
Gibraltar  
Glorioso Islands  
Greece  
Greenland  
Grenada  
Guadeloupe  
Guam  
Guatemala  
Guernsey  
Guinea  
Guinea-Bissau  
Guyana  
Haiti  
Heard Island and Mcdonald Islands  
Honduras  
Hong Kong  
Howland Island  
Hungary  
Iceland  
India  
Indonesia  
Iran  
Iraq  
Ireland  
Isle Of Man  
Israel  
Italy  
Jamaica  
Jan Mayen  
Japan  
Jarvis Island  
Jersey  
Johnston Atoll  
Jordan  
Juan De Nova Island  
Kazakhstan

Kenya  
Kingman Reef  
Kiribati  
Kuwait  
Kyrgyzstan  
Laos  
Latvia  
Lebanon  
Lesotho  
Liberia  
Libya  
Liechtenstein  
Lithuania  
Luxembourg  
Macau  
Macedonia  
Madagascar  
Malawi  
Malaysia  
Maldives  
Mali  
Malta  
Marshall Islands  
Martinique  
Mauritania  
Mauritius  
Mayotte  
Mexico  
Micronesia, Federated States Of  
Midway Islands  
Moldova  
Monaco  
Mongolia  
Montenegro  
Montserrat  
Morocco  
Mozambique  
Namibia  
Nauru  
Navassa Island  
Nepal  
Netherlands  
Netherlands Antilles  
New Caledonia  
New Zealand  
Nicaragua  
Niger  
Nigeria

Niue  
No Man's Land  
Norfolk Island  
North Korea  
Northern Mariana Islands  
Norway  
Oceans  
Oman  
Pakistan  
Palau  
Palmyra Atoll  
Panama  
Papua New Guinea  
Paracel Islands  
Paraguay  
Peru  
Philippines  
Pitcairn Islands  
Poland  
Portugal  
Puerto Rico  
Qatar  
Reunion  
Romania  
Russia  
Rwanda  
Saint Helena  
Saint Kitts and Nevis  
Saint Lucia  
Saint Pierre and Miquelon  
Saint Vincent and The Grenadines  
Samoa  
San Marino  
Sao Tome and Principe  
Saudi Arabia  
Senegal  
Serbia  
Seychelles  
Sierra Leone  
Singapore  
Slovakia  
Slovenia  
Solomon Islands  
Somalia  
South Africa  
South Georgia and The South Sandwich Islands  
South Korea  
Spain

Spratly Islands  
Sri Lanka  
Sudan  
Suriname  
Svalbard  
Swaziland  
Sweden  
Switzerland  
Syria  
Taiwan  
Tajikistan  
Tanzania  
Thailand  
Togo  
Tokelau  
Tonga  
Trinidad and Tobago  
Tromelin Island  
Tunisia  
Turkey  
Turkmenistan  
Turks and Caicos Islands  
Tuvalu  
Uganda  
Ukraine  
Undersea Features  
United Arab Emirates  
United Kingdom  
United States  
United States Virgin Islands  
Uruguay  
Uzbekistan  
Vanuatu  
Vatican City  
Venezuela  
Vietnam  
Wake Island  
Wallis and Futuna  
West Bank  
Western Sahara  
Yemen  
Zambia  
Zimbabwe

### Postal Code

Name In Schema: PostalCode  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Maximum Length: 15

## typeCaseSummary

### Crash Summary

Name In Schema: CrashSummary  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### C1. "Case Identifier"

The unique identifier within a given year that identifies a given crash within the agency.

**Note:** The MMUCC standard requires that the case identifier be unique amongst all crash reports within the state. In Connecticut, a *'Police Case Number'* for any given town may not be unique across all towns within the state so uniqueness across the state will be determined by concatenating this identifier with an identifier of the law enforcement agency that produced the case.

Name In Schema: CaseIdentifier  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Length: 3  
Maximum Length: 50

#### Entity Counts

Used for validation. These values provided here must be the same as the length of certain collections within the crash report.

#### DOT65. "Count of Motor Vehicles"

Used for validation. The total number of motor vehicles described in this crash report.

Name In Schema: CountOfMotorVehicles  
Data Type: nonNegativeInteger  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### **DOT66. "Count of Non-Motorists"**

Used for validation. The total number of non-motorists described in this crash report.

Name In Schema:	CountOfNonmotorists
Data Type:	nonNegativeInteger
Minimum Occurrences:	1
Maximum Occurrences:	1

### **DOT67. "Count of Witnesses"**

Used for validation. The total number of witnesses described in this crash report.

Name In Schema:	CountOfWitnesses
Data Type:	nonNegativeInteger
Minimum Occurrences:	1
Maximum Occurrences:	1

## **C2. "Crash Classification"**

The information of this data element is used to identify ownership of the land where the crash occurred. Identify the characteristics of the crash with respect to its location on or off a trafficway.

Name In Schema:	CrashClassification
Minimum Occurrences:	1
Maximum Occurrences:	1

### **Trafficway Class Type**

Name In Schema:	TrafficwayClassType
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Trafficway, On Road
- 2 Trafficway, Not on Road
- 3 Non-trafficway
- 4 Parking Lot
- 99 Unknown

### Trafficway Ownership Type

Name In Schema: TrafficwayOwnershipType  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 Public Road  
2 Private Road  
88 Not Applicable  
99 Unknown

### C3. "Crash Date and Time

Defines the date and time at which the crash occurred.

Name In Schema: DateAndTimeOfCrash  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### Crash Date

The date (year, month, and day) when the crash occurred.

Note: the standard format for dates is YYYY-MM-DD

Name In Schema: CrashDate  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: date  
Restrictions on Values, with usage comments:  
Minimum Value: 2013-07-15  
Maximum Value: 2050-12-31

#### Crash Time

The time (00:00:00-23:59:00) when the crash occurred.

Note: the standard format for times is HH:MM:SS

Name In Schema: CrashTime  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: time

### DOT5. Crash Severity

This element classifies the overall severity of a crash based upon the most serious level of injury of any person involved in the crash.

Name In Schema: CrashSeverity

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

- K Fatal (Kill)
- A Injury of any Type (Serious, Minor, Possible)
- O Property Damage Only

### C5. Crash City/Place

The city/place (Political Jurisdiction) in which the crash occurred.

Note: This is name of the town rather than a numeric code for the town.

Name In Schema: CrashTownName

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

- Minimum Length: 4 (Avon, Lyme)
  - Maximum Length: 16 (North Stonington)
- Valid Values:

- Andover
- Ansonia
- Ashford
- Avon
- Barkhamsted
- Beacon Falls
- Berlin
- Bethany
- Bethel
- Bethlehem
- Bloomfield
- Bolton
- Bozrah
- Branford
- Bridgeport
- Bridgewater
- Bristol
- Brookfield
- Brooklyn
- Burlington

Canaan  
Canterbury  
Canton  
Chaplin  
Cheshire  
Chester  
Clinton  
Colchester  
Colebrook  
Columbia  
Cornwall  
Coventry  
Cromwell  
Danbury  
Darien  
Deep River  
Derby  
Durham  
Eastford  
East Granby  
East Haddam  
East Hampton  
East Hartford  
East Haven  
East Lyme  
Easton  
East Windsor  
Ellington  
Enfield  
Essex  
Fairfield  
Farmington  
Franklin  
Glastonbury  
Goshen  
Granby  
Greenwich  
Griswold  
Groton  
Guilford  
Haddam  
Hamden  
Hampton

Hartford  
Hartland  
Harwinton  
Hebron  
Kent  
Killingly  
Killingworth  
Lebanon  
Ledyard  
Lisbon  
Litchfield  
Lyme  
Madison  
Manchester  
Mansfield  
Marlborough  
Meriden  
Middlebury  
Middlefield  
Middletown  
Milford  
Monroe  
Montville  
Morris  
Naugatuck  
New Britain  
New Canaan  
New Fairfield  
New Hartford  
New Haven  
Newington  
New London  
New Milford  
Newtown  
Norfolk  
North Branford  
North Canaan  
North Haven  
North  
Stonington  
Norwalk  
Norwich  
Old Lyme

Old Saybrook  
Orange  
Oxford  
Plainfield  
Plainville  
Plymouth  
Pomfret  
Portland  
Preston  
Prospect  
Putnam  
Redding  
Ridgefield  
Rocky Hill  
Roxbury  
Salem  
Salisbury  
Scotland  
Seymour  
Sharon  
Shelton  
Sherman  
Simsbury  
Somers  
Southbury  
Southington  
South Windsor  
Sprague  
Stafford  
Stamford  
Sterling  
Stonington  
Stratford  
Suffield  
Thomaston  
Thompson  
Tolland  
Torrington  
Trumbull  
Union  
Vernon  
Voluntown  
Wallingford

Warren  
Washington  
Waterbury  
Waterford  
Watertown  
Westbrook  
West Hartford  
West Haven  
Weston  
Westport  
Wethersfield  
Willington  
Wilton  
Winchester  
Windham  
Windsor  
Windsor Locks  
Wolcott  
Woodbridge  
Woodbury  
Woodstock

#### **DOT6. Crash Town ID**

The identifier of the city/place (Political Jurisdiction) in which the crash occurred.

Note: This is a numeric code for the town rather than the name of the town and Crash Town ID is not the same as the identifier of the law enforcement agency that authorized this report.

Name In Schema:	CrashTownID
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	positiveInteger
Restrictions on Values:	
Minimum Value:	1
Maximum Value:	169

Valid Values (with usage comments):

1	Andover
2	Ansonia
3	Ashford
4	Avon
5	Barkhamsted
6	Beacon Falls
7	Berlin
8	Bethany
9	Bethel

10	Bethlehem
11	Bloomfield
12	Bolton
13	Bozrah
14	Branford
15	Bridgeport
16	Bridgewater
17	Bristol
18	Brookfield
19	Brooklyn
20	Burlington
21	Canaan
22	Canterbury
23	Canton
24	Chaplin
25	Cheshire
26	Chester
27	Clinton
28	Colchester
29	Colebrook
30	Columbia
31	Cornwall
32	Coventry
33	Cromwell
34	Danbury
35	Darien
36	Deep River
37	Derby
38	Durham
39	East Granby
40	East Haddam
41	East Hampton
42	East Hartford
43	East Haven
44	East Lyme
45	East Windsor
46	Eastford
47	Easton
48	Ellington
49	Enfield
50	Essex
51	Fairfield
52	Farmington
53	Franklin
54	Glastonbury
55	Goshen
56	Granby
57	Greenwich

58	Griswold
59	Groton
60	Guilford
61	Haddam
62	Hamden
63	Hampton
64	Hartford
65	Hartland
66	Harwinton
67	Hebron
68	Kent
69	Killingly
70	Killingworth
71	Lebanon
72	Ledyard
73	Lisbon
74	Litchfield
75	Lyme
76	Madison
77	Manchester
78	Mansfield
79	Marlborough
80	Meriden
81	Middlebury
82	Middlefield
83	Middletown
84	Milford
85	Monroe
86	Montville
87	Morris
88	Naugatuck
89	New Britain
90	New Canaan
91	New Fairfield
92	New Hartford
93	New Haven
94	New London
95	New Milford
96	Newington
97	Newtown
98	Norfolk
99	North Branford
100	North Canaan
101	North Haven
102	North Stonington
103	Norwalk
104	Norwich
105	Old Lyme

106 Old Saybrook  
107 Orange  
108 Oxford  
109 Plainfield  
110 Plainville  
111 Plymouth  
112 Pomfret  
113 Portland  
114 Preston  
115 Prospect  
116 Putnam  
117 Redding  
118 Ridgefield  
119 Rocky Hill  
120 Roxbury  
121 Salem  
122 Salisbury  
123 Scotland  
124 Seymour  
125 Sharon  
126 Shelton  
127 Sherman  
128 Simsbury  
129 Somers  
130 South Windsor  
131 Southbury  
132 Southington  
133 Sprague  
134 Stafford  
135 Stamford  
136 Sterling  
137 Stonington  
138 Stratford  
139 Suffield  
140 Thomaston  
141 Thompson  
142 Tolland  
143 Torrington  
144 Trumbull  
145 Union  
146 Vernon  
147 Voluntown  
148 Wallingford  
149 Warren  
150 Washington  
151 Waterbury  
152 Waterford  
153 Watertown

- 154 West Hartford
- 155 West Haven
- 156 Westbrook
- 157 Weston
- 158 Westport
- 159 Wethersfield
- 160 Willington
- 161 Wilton
- 162 Winchester
- 163 Windham
- 164 Windsor
- 165 Windsor Locks
- 166 Wolcott
- 167 Woodbridge
- 168 Woodbury
- 169 Woodstock

**C6. Crash Location**

Identifies the location where the crash occurred.

Name In Schema: CrashLocation  
 Minimum Occurrences: 1  
 Maximum Occurrences: 1

**Geospatial Referencing System**

The geospatial position of the crash.

Name In Schema: GeospatialReferencingSystem  
 Minimum Occurrences: 1  
 Maximum Occurrences: 1

**Latitude**

Name In Schema: Latitude  
 Minimum Occurrences: 1  
 Maximum Occurrences: 1  
 Data Type: float  
 Restrictions on Values, with usage comments:  
 Minimum Value: 40.6  
 Maximum Value: 42.3

### Longitude

Name In Schema: Longitude  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: float  
Restrictions on Values, with usage comments:  
    Minimum Value: -73.9  
    Maximum Value: -71.4

### Linear Referencing System

Name In Schema: LinearReferencingSystem  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### Name of Roadway

The name of the roadway, such as 'Elm St' or 'Valley View Dr.'

Name In Schema: NameOfRoadway  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
    Minimum Length: 1  
    Maximum Length: 50

### Identifier of Roadway

The road number, route number, interstate number, etc. of the roadway, such as 'US-1', 'CT-172', or 'I-84'.

Name In Schema: IDOfRoadway  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
    Minimum Length: 1  
    Maximum Length: 15

### **Name of Intersecting Roadway**

The name of the intersecting roadway, if any, such as 'Elm Street' or 'Valley View Drive'.

Name In Schema:	NameOfIntersectingRoadway
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Minimum Length:	1
Maximum Length:	50

### **Identifier of Intersecting Roadway**

The road number, route number, interstate number, etc. of the nearest intersecting roadway, if any, such as 'US-1', 'CT-172', or 'I-84'.

Name In Schema:	IDOfIntersectingRoadway
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Minimum Length:	1
Maximum Length:	15

### **Offset from Nearest LandMark**

Describes the location of the crash by referencing a distance from the nearest intersecting roadway or landmark; e.g. '0.1 miles south of Derby town line'.

Name In Schema:	OffsetFromNearestLandmark
Minimum Occurrences:	0
Maximum Occurrences:	1

### **Distance from Nearest Landmark**

Name In Schema:	DistanceFromNearestLandmark
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	float
Restrictions on Values:	
Minimum Value:	0

### Unit of Measure

Name In Schema:	UnitOfMeasure
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Miles	
Feet	
Tenths of Mile	
Meters	
Kilometers	

### Direction from Nearest LandMark

Name In Schema:	DirectionFromNearestLandmark
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values, with usage comments:	
N	North (or generally Northerly)
E	East (or generally Easterly)
S	South (or generally Southerly)
W	West (or generally Westerly)

### Description of Nearest LandMark

A textual description to identify the landmark or provide other information to identify the location.

Name In Schema:	DescriptionOfNearestLandmark
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Maximum Length:	255

### C7. "First Harmful Event"

The first injury or damage-producing event that characterizes the crash type.

Name In Schema:	FirstHarmfulEvent
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	nonNegativeInteger
Restrictions on Values, with usage comments:	
1	Overturn/Rollover
2	Fire / Explosion
3	Immersion, Full or Partial
4	Jackknife
5	Cargo/Equipment Loss or Shift

6	Fell/Jumped from Vehicle
7	Thrown or Falling Object
8	Other Non-Collision
9	Pedestrian
10	Pedalcycle/PedalCyclist
11	Other Non-motorist
12	Railway Vehicle (train, engine)
13	Animal Other Than Deer (live)
14	Motor Vehicle in Operation
15	Parked Motor Vehicle
16	Struck by Falling, Shifting Cargo Or Anything Set in Motion by Motor Vehicle
17	Work Zone/Maintenance Equipment
18	Other Non-Fixed Object
19	Impact Attenuator/Crash Cushion
20	Bridge Overhead Structure
21	Bridge Pier or Support
22	Bridge Rail
23	Cable Barrier
24	Culvert
25	Curb
26	Ditch
27	Embankment
28	Guardrail Face
29	Guardrail End
30	Concrete Traffic Barrier
31	Other Traffic Barrier
32	Tree (standing)
33	Utility Pole/Light Support
34	Traffic Sign Support
35	Traffic Signal Support
36	Fence
37	Mailbox
38	Other Post, Pole or Support
39	Other Fixed Object (wall, building, tunnel, etc.)
40	Deer
99	Unknown

**C8. "Location of First Harmful Event Relative to Trafficway"**

The location of the first harmful event as it relates to its position within or outside the trafficway.

Name In Schema: LocationOfFirstHarmfulEventRelativeToTheTrafficway

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 On Roadway
- 2 Shoulder

3	Median
4	Roadside
5	Gore
6	Separator
7	In Parking Lane or Zone
8	Off Roadway, Location Unknown
9	Outside Right-of-Way (trafficway)
88	Unknown
97	Other
99	Unknown

### **C9. "Manner of Impact"**

The identification of the manner in which two vehicles in operation initially came together without regard to the direction of force. This data element refers only to crashes where the first harmful event involves a collision between two motor vehicles in operation.

Name In Schema: MannerOfImpact

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

1	Front to rear
2	Front to front
3	Angle
4	Sideswipe, same direction
5	Sideswipe, opposite direction
6	Rear to side
7	Rear to rear
88	Not Applicable
97	Other
99	Unknown

### **C11. "Weather Condition"**

The prevailing atmospheric conditions that existed at the time of the crash.

Name In Schema: WeatherCondition

Minimum Occurrences: 1

Maximum Occurrences: 2

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

1	Clear
2	Cloudy
3	Fog, Smog, Smoke
4	Rain
5	Sleet or Hail
6	Freezing Rain or Freezing Drizzle
7	Snow

8	Blowing Snow
9	Severe Crosswinds
10	Blowing Sand, Soil, Dirt
88	Not Applicable
97	Other
99	Unknown

### **C12. "Light Condition"**

The type/level of light that existed at the time of the crash.

Name In Schema:	LightCondition
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	nonNegativeInteger
Restrictions on Values, with usage comments:	
1	Daylight
2	Dawn
3	Dusk
4	Dark-Lighted
5	Dark-Not Lighted
6	Dark-Unknown Lighting
97	Other
99	Unknown

### **C13. "Trafficway Surface Condition"**

The roadway surface condition at the time and place of a crash.

Name In Schema:	TrafficSurfaceCondition
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	nonNegativeInteger
Restrictions on Values, with usage comments:	
1	Dry
2	Wet
3	Snow
4	Slush
5	Ice / Frost
6	Moving Water
7	Sand
8	Mud, Dirt, Gravel
9	Oil
10	Standing Water
97	Other
99	Unknown

#### **C14. "Contributing Circumstances, Environment"**

Apparent environmental conditions which may have contributed to the crash.

Name In Schema: ContributingCircumstancesEnvironment

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

0	None
1	Weather Conditions
2	Visual Obstruction(s)
3	Glare
4	Animal(s) in Roadway
88	Not Applicable
97	Other
99	Unknown

#### **C15. "Contributing Circumstances, Road"**

Apparent condition of the road which may have contributed to the crash.

Name In Schema: ContributingCircumstancesRoad

Minimum Occurrences: 3

Maximum Occurrences: 3

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

0	None
1	Backup Due to Prior Crash
2	Backup Due to Prior Non-Recurring Incident
3	Backup Due to Regular Congestion
4	Toll Booth / Plaza Related
5	Road Surface Condition (wet, icy, snow, slush, etc.)
6	Debris
7	Rut, Holes, Bumps
8	Work Zone (construction / maintenance / utility)
9	Worn, Travel-Polished Surface
10	Obstruction in Roadway
11	Traffic Control Device Inoperative, Missing, or Obscured
12	Shoulders (none, low, soft, high)
13	Non-Highway Work
88	Not Applicable
97	Other
99	Unknown

### **C16. "Relation to Junction"**

The coding of this data element is based on the location of the first harmful event of the crash. It identifies the crash's location with respect to presence in a junction or proximity to components typically in junction or interchange areas.

Name In Schema: RelationToJunction

Minimum Occurrences: 1

Maximum Occurrences: 1

#### **Crash Specific Location**

Name In Schema: CrashSpecificLocation

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Non-Junction
- 2 Intersection
- 3 Intersection-Related
- 4 Entrance / Exit Ramp
- 5 Entrance / Exit Ramp-Related
- 6 Railway Grade Crossing
- 7 Crossover-Related
- 8 Driveway Access
- 9 Driveway Access-Related
- 10 Shared-Use Path or Trail
- 11 Through Roadway
- 12 Acceleration / Deceleration Lane
- 13 On a Bridge
- 14 HOV Lane
- 15 Service or Rest Area
- 16 Weigh Station
- 17 Other Location Not Listed Above Within an Interchange Area (median, shoulder and roadside)
- 97 Other
- 99 Unknown

### **C17. "Type of Intersection"**

Indicates if the crash took place at an intersection, and if so, what kind of intersection.

Note: An intersection consists of two or more roadways that intersect at the same level.

Name In Schema:       TypeofIntersection

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type:                       nonNegativeInteger

Restrictions on Values, with usage comments:

- 1       Not at Intersection
- 2       Four-Way Intersection
- 3       T-Intersection
- 4       Y-Intersection
- 5       L-Intersection
- 6       Traffic Circle
- 7       Roundabout
- 8       Five-Point, or More
- 99      Unknown

### **C18. "School Bus Related"**

Indicates whether a school bus or a motor vehicle functioning as a school bus for a school-related purpose is involved in the crash. The school bus, with or without a passenger on board, must be directly involved as a contact motor vehicle or indirectly involved as a non-contact motor vehicle (children struck when boarding or alighting from the school bus, two vehicles colliding as the result of the stopped school bus, etc.).

Name In Schema:       SchoolBusRelated

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type:                       nonNegativeInteger

Restrictions on Values, with usage comments:

- 1       No
- 2       Yes, School Bus Directly Involved
- 3       Yes, School Bus Indirectly Involved
- 99      Unknown

### **C19. "Work Zone - Related (Construction/Maintenance/Utility)"**

A crash that occurs in or related to a construction, maintenance, or utility work zone, whether or not workers were actually present at the time of the crash. 'Work zone-related' crashes may also include those involving motor vehicles slowed or stopped because of the work zone, even if the first harmful event occurred before the first warning sign.

Name In Schema:       WorkZoneRelated

Minimum Occurrences: 1

Maximum Occurrences: 1

### Is Crash Related To A Workzone

Indicates if the crash was in or near a construction, maintenance, or utility work zone.

Name In Schema: IsCrashRelatedToAWorkZone

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 No
- 2 Yes. If yes then all other sibling elements should be provided.
- 99 Unknown

### Location Of Crash Relative To Work Zone

Name In Schema: LocationOfCrashRelativeToWorkZone

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Before the First Work Zone Warning Sign
- 2 Advance Warning Area
- 3 Transition Area
- 4 Activity Area
- 5 Termination Area
- 88 Not Applicable
- 99 Unknown

### Type Of Work Zone

Name In Schema: TypeOfWorkZone

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Lane Closure
- 2 Lane Shift / Crossover
- 3 Work on Shoulder or Median
- 4 Intermittent or Moving Work
- 88 Not Applicable
- 99 Unknown

### Worker Presence

Name In Schema: WorkerPresence  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 No  
2 Yes  
88 Not Applicable  
99 Unknown

### Law Enforcement Presence

Name In Schema: LawEnforcementPresence  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 No  
2 Yes  
88 Not Applicable  
99 Unknown

### DOT7. Diagram

A graphical representation of the crash scene and the events of the crash.

Name In Schema: LawEnforcementPresence  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Notes:

- Assume encoded Base64
- The preferred format for the data is the XAML vector format
- If the underlying data is a vector format and that format is not XAML then contact the DOT technical staff to discuss if that format can be supported
- If the underlying data is in a standard raster format, then the native image should render to dimensions no greater than 8 inches wide and 3.5 inches tall, have a native resolution between 72 dpi and 300 dpi, and be one of the following formats:
  1. BMP (Windows Bitmap Format), BMP Specification v5
  2. GIF (Graphics Interchange Format 89a), GIF Specification 89a/89m
  3. JPEG (Joint Photographic Experts Group), JFIF Specification 1.02
  4. PNG (Portable Network Graphics), PNG Specification 1.2
  5. TIFF (Tagged Image File Format), TIFF Specification 6.0
  6. JPEG XR (Windows Media Photo/HD Photo)
  7. DDS (DirectDraw Surface)

### **DOT8. Were Vehicles Moved Prior to Police Arrival at Scene**

This indicates if the vehicle(s) were moved prior to police officers arriving on the scene.

Name In Schema: WereVehiclesMovedPriorToPoliceArrival  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **DOT9. Narrative**

A textual description describing the events related to the crash, the people involved, and any other information provided by the investigating police officer.

NOTE: Normally, any information that is provided in the "Narrative Continued" appendix should be appended to the value of this Narrative element although, alternatively, additional occurrences of this element could be used to support the "Narrative Continued" appendix.

NOTE: Rich Text is supported.

Name In Schema: Narrative  
Minimum Occurrences: 1  
Maximum Occurrences: Unbounded  
Data Type: string

### **Law Enforcement Summary**

Affiliation of the person completing the crash report. Since the ConnDOT will not accept crash reports from the public, this element will always contain the Law Enforcement Agency identifier. Contact the Department of Transportation Office of Information Systems for the values of each Law Enforcement Agency identifier.

Name In Schema: LawEnforcementSummary  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### **C10. Source of Information**

The Identifier of the law enforcement agency producing the crash report.

Name In Schema: SourceOfInformation  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Length: 1  
Maximum Length: 9

### **Officer Information**

Name In Schema: OfficerInformation  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### **DOT10. Officer First Name**

Identifies the first name of the law enforcement officer responsible for submitting the case.

Name In Schema: OfficerFirstName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 75

#### **DOT11. Officer Last Name**

Identifies the last name of the law enforcement officer responsible for submitting the case.

Name In Schema: OfficerLastName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 75

### DOT12. Badge Number

Identifies the badge number of the law enforcement officer responsible for submitting the case.

Name In Schema: BadgeNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 75

### DOT13. Supervisor Name

Identifies the supervisor name of the law enforcement officer responsible for submitting the case.

Name In Schema: SupervisorName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 75

### DOT19. Officer Signature

Identifies of the officer signature of the law enforcement officer responsible for submitting the case.

Name In Schema: OfficerSignature  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string

### DOT14. Approval Date

Specified the date and time that the report was approved by the supervisor. The time portion is needed to distinguish between any revisions of a given case.

**Note: Do not use the "Z notation" to indicate Greenwich Mean Time; instead use local time that indicates hours, minutes, and seconds. Please note that the "T" character is used to delimit the date from the time.**

Name In Schema: ApprovalDate  
Data Type: dateTime  
Restrictions on Values, with usage comments:  
Minimum Value: 2013-07-15T00:00:00  
Maximum Value: 2050-12-31T23:59:59.999999999

### DOT15. Police Case Status

Indicates if the law enforcement agency considers the case closed or open.

Name In Schema: PoliceCaseStatus  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
    O     Open  
    C     Closed

### DOT16. Crash Report Submissions Date

Specified date that the report was submitted.

*Note: Do not use the "Z notation" to indicate Greenwich Mean Time; instead use local time that indicates hours, minutes, and seconds. Please note that the "T" character is used to delimit the date from the time.*

Name In Schema: CrashReportSubmissionDateTime  
Data Type: dateTime  
Restrictions on Values, with usage comments:  
    Minimum Value: 2013-07-15T00:00:00  
    Maximum Value: 2050-12-31T23:59:59.999999999

### DOT17. Report Revision Status

Specifies if this report is a revision to a previously submitted case.

Name In Schema: ReportRevisionStatus  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### DOT18. Related Case Identifier

Unique identifiers for cases that are somehow related to this crash.

Name In Schema: RelatedCaseIdentifiers  
Minimum Occurrences: 0  
Maximum Occurrences: 20  
Data Type: string  
Restrictions on Values, with usage comments:  
    Maximum Length: 255

## typePerson

The person data elements describe the characteristics, actions, and consequences to the persons involved in the crash.

### DOT19. Person ID

The unique number assigned to each person involved in the crash.

Name In Schema: PersonID  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
Maximum Length: 1  
Maximum Length: 99

### P1. Name of Person

The full name of the individual involved in the crash.

Name In Schema: NameOfPerson  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 255

### P2. Date of Birth

P2. "Date of Birth": The year, month, and day of birth, (or age to be used only when date of birth cannot be obtained), of the person involved in a crash.

Name In Schema: DateOfBirth  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### Birth Date

The year, month, and day of birth of the person involved in a crash.

Name In Schema: BirthDate  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: date  
Restrictions on Values, with usage comments:  
Maximum Value: 1890-01-01  
Maximum Value: 2030-12-31

### **DOT20. Birth Date is Unknown**

Name In Schema: BirthDateIsUnknown  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: boolean

### **Age**

Identifies the person's age, in years, with respect to the person's last birthday.

Name In Schema: Age  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: integer

### **P3. Gender**

The Gender of the person involved in the crash.

Name In Schema: Gender  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Male  
2 Female  
99 Unknown

### **P4. Person Type**

Type of person involved in a crash.

Name In Schema: PersonType  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Driver  
2 Passenger  
3 Pedestrian  
4 Other Pedestrian (wheelchair, person in a building, skater, pedestrian conveyance)  
5 Bicyclist  
6 Other Cyclist  
7 Occupant of a Motor Vehicle Not in Operation (parked, etc.)  
8 Occupant of a Non-Motor Vehicle Transportation Device  
9 Witness  
99 Unknown

### Address Of Person

The physical address of the individual involved in the crash, which includes street address, city or town, state or province, and postal code.

Name In Schema: AddressOfPerson  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: typePhysicalAddress

### DOT59. Electronic Contact Info

Electronic contact information, such as telephone, email, fax, etc.

***NOTE: This element has been removed from the schema.***

Name In Schema: ElectronicContactInfo  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximun Length: 75

### DOT21. Contact Type

Electronic contact information, such as telephone, email, fax, etc.

***NOTE: This element has been removed from the schema.***

Name In Schema: ContactType  
Minimum Occurrences: 1  
Maximum Occurrences: 10  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Phone  
2 CellPhone  
3 HomePhone  
4 OfficePhone  
5 Email  
6 Text  
7 FAX

### DOT22. Contact Details

The telephone number or email address of the contact in a format appropriate for the contact type.

***NOTE: This element has been removed from the schema.***

Name In Schema: ContactDetails  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string

Restrictions on Values, with usage comments:  
Maximum Length: 75

### **DOT62. Electronic Mail Address**

The email address of the person

Name In Schema: ElectronicMailAddress  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Maximum Length: 75

### **DOT63. Telephone**

The telephone number of the person

Name In Schema: Telephone  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 15 (assume the telephone number if formatted)

### **P5. Injury Status**

The injury severity level for a person Involved in a crash. The determination of which attribute to assign should be based on the latest information available at the time the report is completed, except as described below for fatal Injuries.

Name In Schema: InjuryStatus  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
K Fatal Injury (K)  
A Suspected Serious Injury (A)  
B Suspected Minor Injury (B)  
C Possible Injury (C)  
O No Apparent Injury (O)

## Driver License

Note: This element could be used to provide other identification, such as the Identification Number of a non-motorist.

Name In Schema: DriversLicense  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### P11. Driver License Jurisdiction

The geographic or political entity issuing a driver license. Includes the States of the United States (including the District of Columbia and outlying areas), Indian Nations, U.S. Government, Canadian Provinces, and Mexican States (including the Distrito Federal), as well as other jurisdictions.

Name In Schema: DriverLicenseJurisdiction  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Not Licensed
- 2 State
- 3 Tribal Nation
- 4 U.S. Government
- 5 Canadian Province
- 6 Mexican State
- 7 International License (other than Mexico, Canada)
- 8 Valid License (Other County)
- 88 Not applicable
- 99 Unknown

### DOT23. Driver License Issued By

With U.S., drivers licenses, this value should be the two-character code for the state that issued the license, although non-U.S. drivers licenses and other types of identity cards could contain other descriptive information.

Name In Schema: DriversLicenseIssuedBy  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 75

## P12. Driver License Number Class And Endorsements

P12. "Driver License Number, Class, CDL and Endorsements": A unique set of alphanumeric characters assigned by the authorizing agent issuing a driver license to the individual.

Name In Schema: DriverLicenseNumberClassAndEndorsements  
Minimum Occurrences: 1  
Maximum Occurrences : 1  
Data Type: positiveInteger

### License Number

Name In Schema: LicenseNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Length: 1  
Maximum Length: 20

### Class

Name In Schema: Class  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
0 None  
1 Class A  
2 Class B  
3 Class C  
4 Class D  
5 Class M  
88 Not Applicable  
99 Unknown

### Commercial Driver License

Indicates if the drivers license is considered a comercial drivers licence.

Name In Schema: CommercialDriverLicense  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 No  
2 Yes  
99 Unknown

## Endorsements

Indicates which endorsements the person has applied to their drivers license.

Name In Schema: Endorsements

Minimum Occurrences: 0

Maximum Occurrences 12

Data Type: string

Restrictions on Values, with usage comments:

0	None / Not Applicable
A	Activity Vehicles
F	Taxi, Livery vehicle, Service bus, Motor bus or Motor coach
H	Hazardous Materials
M	Motorcycles
N	Tank Vehicle
P	Passenger
Q	Fire Fighting Vehicles
S	School Bus
T	Double/Triple Trailers
V	Student Transportation Vehicles
X	Combination of Tank Vehicle and Hazardous Materials

## P15. Violation Statutes

P15. "Violation Codes": All violation codes, if any, which apply to this person.

Name In Schema: ViolationStatutes

Minimum Occurrences: 0

Maximum Occurrences: 1

### Violation Code

Name In Schema: ViolationCode

Minimum Occurrences: 1

Maximum Occurrences: 99

Data Type: string

Restrictions on Values, with usage comments:

Maximum Length: 256

### **P17. Condition of Person at Time of Crash**

Any relevant condition of the individual (motorist or non-motorist) that is directly related to the crash.

Name In Schema: ConditionOfPersonAtTimeOfCrash  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### **Condition Code**

Name In Schema: ConditionCode  
Minimum Occurrences: 1  
Maximum Occurrences: 2  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Apparently Normal  
2 Physically Impaired  
3 Emotional (depressed, angry, disturbed, etc.)  
4 Ill (sick), Fainted  
5 Asleep or Fatigued  
6 Under the Influence of Medications/Drugs/Alcohol  
88 Not Applicable  
97 Other  
99 Unknown

### **P19. Alcohol Test**

Indication of the presence of alcohol by test, type and result.

Name In Schema: AlcoholTest  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### **Test Status**

Name In Schema: TestStatus  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Test Not Given  
2 Test Refused  
3 Test Given  
99 Unknown If Tested

### Type of Test

Name In Schema: TypeOfTest  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Blood  
2 Urine  
3 Breath  
88 Not Applicable  
97 Other

### Test Result

Name In Schema: TestResult  
*Note: This element was removed from the schema.*

## P21. Drug Test

Indication of the presence of drug by test, type and result.

Name In Schema: DrugTest  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### Test Status

Name In Schema: TestStatus  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
1 Test Not Given  
2 Test Refused  
3 Test Given  
99 Unknown If Tested

### Type of Test

Name In Schema: TypeOfTest  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Blood  
2 Urine  
88 Not Applicable  
97 Other

### Test Result

Name In Schema: TestResult  
*Note: This element was removed from the schema.*

## **P28. Transported to First Medical Facility By**

Type and identity of unit providing transport to the first medical facility receiving the person.

Name In Schema: TransportedToFirstMedicalFacilityBy  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### **Transport Source**

Name In Schema: TransportSource  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Not Transported
- 2 EMS Air
- 3 EMS Ground
- 4 Law Enforcement
- 97 Other
- 99 Unknown

### **EMS Company Name**

Company Name or ID for EMS agency that responds to transport the person to the first medical facility.

Name In Schema: EMSCompanyName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Maximum Length: 100

### **EMS Response Run Number**

Name In Schema: EMSResponseRunNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Maximum Length: 100

### **Name Or Number Of Medical Facility Receiving Person**

Name In Schema: NameOrNumberOfMedicalFacilityReceivingPerson  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Maximum Length: 255

### **DOT24. Action Taken By Officer**

Specifies what action was taken by the police officer with regards to this person.

Name In Schema: ActionTakenByOfficer  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
0 None Taken  
1 Verbal Warning  
2 Written Warning  
3 Infraction  
4 Arrest/Summons

## **typeMotorist**

### **DOT25. Motorist Personal Information**

Name In Schema: MotoristPersonalInformation  
Data Type: typePerson

### **P6. Motor Vehicle Unit Number of Person**

The unique number assigned for this crash to the motor vehicle in which this person was an occupant. Persons ejected or who fall from a vehicle are still considered occupants.

Name In Schema: MotorVehicleUnitNumberOfPerson  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values:  
Minimum Value: 1  
Maximum Value: 99

## P7. Seating Position

The location for this occupant in, on, or outside of the motor vehicle prior to the first event in the sequence of events.

Name In Schema: SeatingPosition  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### DOT56. NonBusSeatingPosition

Name In Schema: NonBusSeatingPosition  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 11 First Row, Left Seat (or driver, if the vehicle is a bus)
- 12 First Row, Middle Seat
- 13 First Row, Right Seat
- 18 First Row, Other Seat
- 19 First Row, Unknown
- 21 Second Row, Left Seat
- 22 Second Row, Middle Seat
- 23 Second Row, Right Seat
- 28 Second Row, Other Seat
- 29 Second Row, Unknown
- 31 Third Row, Left Seat
- 32 Third Row, Middle Seat
- 33 Third Row, Right Seat
- 38 Third Row, Other Seat
- 39 Third Row, Unknown
- 41 Fourth Row, Left Seat
- 42 Fourth Row, Middle Seat
- 43 Fourth Row, Right Seat
- 48 Fourth Row, Other Seat
- 49 Fourth Row, Unknown
- 50 Sleep Section of Cab (Truck)
- 51 Other passenger in enclosed passenger or cargo area (or any passenger if the vehicle is a bus)
- 52 Other passenger in unenclosed passenger or cargo area
- 53 Other passenger in passenger or cargo area, unknown if enclosed
- 54 Trailing Unit
- 55 Riding on vehicle exterior
- 88 Not Applicable
- 99 Unknown

### **DOT57. BusSeatingPosition**

Name In Schema: NonBusSeatingPosition

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

#### FIRST DIGIT(S) - ROW POSITION

2 Row 2 (first row behind driver)

3 Row 3

4 Row 4

: :

Continue counting as many rows as contained on the bus.

#### FOLLOWING LETTER-SEAT POSITION

A Window Left

B Middle Left

C Aisle Left

D Standing in Aisle

E Aisle Right

F Middle Right

G Window Right

#### OTHER CASES

11 Driver of the bus

1D Standing in the front of the bus

51 Other passenger in Enclosed Passenger Cabin

55 Riding on Motor Vehicle Exterior

88 Not Applicable

99 Unknown

## P8. Restraint Systems / Helmet Use

The restraint equipment in use by the occupant, or the helmet use by a cyclist, at the time of the crash.

Name In Schema: RestraintSystems  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### Restraint System

Name In Schema: RestraintSystem  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 0 None Used-Motor Vehicle Occupant
- 1 Shoulder and Lap Belt Used
- 2 Shoulder Belt only Used
- 3 Lap Belt Only Used
- 4 Restraint Used Type Unknown
- 5 Child Restraint System Forward Facing
- 6 Child Restraint System Rear Facing
- 7 Booster Seat
- 8 Child Restraint Type Unknown
- 88 Not Applicable
- 97 Other
- 99 Unknown

### Helmet Use

Name In Schema: HelmetUse  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No Helmet
- 2 DOT-Compliant Motorcycle Helmet
- 3 Helmet, Other Than DOT-Compliant Motorcycle Helmet
- 4 Helmet, Unknown If DOT-Compliant
- 88 Not Applicable
- 99 Unknown If Helmet Worn

### **P9. Air Bag Deployment**

Deployment status of an air bag relative to the position in the vehicle for this occupant.

Name In Schema: AirBagDeployment

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Not Deployed
- 2 Deployed-Front
- 3 Deployed-Side
- 4 Deployed-Curtain
- 5 Deployed-Other (knee, air belt, etc)
- 6 Deployed-Combination
- 88 Not applicable
- 99 Unknown

### **P10. Ejection Status**

Occupant completely or partially thrown from the interior of the motor vehicle, excluding motorcycles, as a result of a crash.

Name In Schema: EjectionStatus

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Not Ejected
- 2 Ejected, Partially
- 3 Ejected, Totally
- 88 Not Applicable
- 99 Unknown

### **P13. Speeding Related**

Indication of whether the investigating officer suspects that the driver involved in the crash was speeding based on verbal or physical evidence and not on speculation alone.

Name In Schema: SpeedingRelated

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No
- 2 Racing
- 3 Exceeded Speed Limit
- 4 Too Fast for Conditions
- 99 Unknown

#### **P14. Driver Actions**

The actions by the driver that may have contributed to the crash. This data element is based on the judgment of the law enforcement officer investigating the crash and need not match Violation Codes (P15).

Name In Schema: DriverActions

Minimum Occurrences: 1

Maximum Occurrences: 4

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No Contributing Action
- 2 Ran Off Roadway
- 3 Failed to Yield Right-of-Way
- 4 Ran Red Light
- 5 Ran Stop Sign
- 6 Disregarded Other Traffic Sign
- 7 Disregarded Other Road Markings
- 8 Improper Turn
- 9 Improper Backing
- 10 Improper Passing
- 11 Wrong Side or Wrong Way
- 12 Followed Too Closely
- 13 Failed to Keep in Proper Lane
- 14 Operated Motor Vehicle in Reckless or Aggressive Manner
- 15 Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner
- 16 Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway, etc.
- 17 Over-Correcting/Over-Steering
- 18 Overtaking Cyclist
- 88 Not Applicable
- 97 Other Contributing Action
- 99 Unknown

### **P16. Driver Distracted By**

Distractions which may have influenced the driver performance. The distractions can be inside the motor vehicle (internal) or outside the motor vehicle (external).

Name In Schema: DriverDistractedBy

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Not Distracted
- 2 Manually Operating an Electronic Communication Device (texting, typing, dialing)
- 3 Talking on Hands-Free Electronic Device
- 4 Talking on Hand-Held Electronic Device
- 5 Other Activity, Electronic Device
- 6 Passenger
- 7 Other (eating, personal hygiene, etc.)
- 8 Outside the Vehicle (includes unspecified external distractions)
- 99 Unknown if Distracted

## **typeNonmotorist**

### **DOT27. Non-Motorist Personal Information**

Personal Information for the Nonmotorist: The name, address, gender, etc.

Name In Schema: NonmotoristPersonalInformation

Data Type: typePerson

### **P22. Non-Motorist Number**

The unique number assigned to the non-motorist involved in the crash. Note: this is intended to be a sequence.

*Note: This element has been removed from the schema; use PersonID instead.*

Name In Schema: NonMotoristNumber

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

Minimum Value: 1

Maximum Value: 99

### **DOT28. Name of Roadway On Which Non-Motorist was Traveling**

*This element was removed from the schema; Use DOT30. Description Of Location instead*

**DOT29. Location Of NonMotorist**

Identifies where the non-motorist was at the time of the crash.

Name In Schema: LocationOfNonmotorist

Minimum Occurrences: 1

Maximum Occurrences: 1

**DOT30. Description Of Location**

Roadway On Which Nonmotorist Was Traveling/Located": Identifies the roadway/location of the non-motorist.

Name In Schema: DescriptionOfLocation

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

Minimum Length: 1

Maximum Length: 250

**DOT31. NonMotorist Was Not In Roadway**

Indicates if the Nonmotorist was not in a roadway at the time of the crash.

Name In Schema: NonmotoristWasNotInRoadway

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: boolean

### **DOT32. Direction on Which Nonmotorist Was Traveling**

The Direction which the nonmotorist was traveling on the roadway.

Name In Schema: DirectiononWhichNonmotoristWasTraveling  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### **Log Direction**

Name In Schema: LogDirection  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string

Restrictions on Values, with usage comments:

- N Northbound (or generally Northbound)
- S Southbound (or generally Southbound )
- E Eastbound (or generally Eastbound )
- W Westbound (or generally Westbound )

#### **Direction Is Unknown**

Name In Schema: DirectionIsUnknown  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **P23. Non-Motorist Action/Circumstances Prior to Crash**

The action of the non-motorist immediately prior to the crash and an indication of whether the non-motorist was walking/cycling to/from school.

Name In Schema: NonMotoristActionOrCircumstancePriorToCrash  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### **Actions or Circumstances**

Name In Schema: ActionOrCircumstance  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 0 None
- 1 Crossing Roadway
- 2 Waiting to Cross Roadway
- 3 Walking/Cycling along Roadway with Traffic (In or Adjacent to Travel Lane)
- 4 Walking/Cycling along Roadway Against Traffic (In or Adjacent to Travel Lane)
- 5 Walking/Cycling on Sidewalk
- 6 In Roadway - Other
- 7 Adjacent to Roadway (e.g., Shoulder, Median)
- 8 Working in Trafficway (Incident Response)
- 97 Other
- 99 Unknown

#### **To Or From School**

Name In Schema: ToOrFromSchool  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 No
- 2 Yes
- 88 Not Applicable
- 99 Unknown

## P24. Non-Motorist Actions/Circumstances At Time Of Crash

The actions/circumstances of the non-motorist that may have contributed to the crash. This data element is based on the judgment of the law enforcement officer investigating the crash.

Name In Schema: NonMotoristActionsOrCircumstancesAtTimeofCrash  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### Action Or Circumstance

Name In Schema: ActionOrCircumstance  
Minimum Occurrences: 1  
Maximum Occurrences: 2  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No Improper Action
- 2 Dart/Dash
- 3 Failure to Yield Right-Of-Way
- 4 Failure to Obey Traffic Signs, Signals, or Officer
- 5 In Roadway Improperly (Standing, Lying, Working, Playing)
- 6 Disabled Vehicle Related (Working on, Pushing, Leaving/Approaching)
- 7 Entering/Exiting Parked/Standing Vehicle
- 8 Inattentive (Talking, eating, etc.)
- 9 Not Visible (Dark Clothing, No Lighting, etc.)
- 10 Improper Turn/Merge
- 11 Improper Passing
- 12 Wrong-Way Riding or Walking
- 13 Use of Electronic Device
- 88 Not Applicable
- 97 Other
- 99 Unknown

## P25. Non-Motorist Location at Time Of Crash

The location of the non-motorist with respect to the roadway at the time of crash.

Name In Schema: NonMotoristLocationAtTimeofCrash

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Intersection-Marked Crosswalk
- 2 Intersection-Unmarked Crosswalk
- 3 Intersection – Other
- 4 Midblock-Marked Crosswalk
- 5 Travel Lane-Other Location
- 6 Bicycle Lane
- 7 Shoulder/Roadside
- 8 Sidewalk
- 9 Median/Crossing Island
- 10 Driveway Access
- 11 Shared-Use Path or Trail
- 12 Non-Trafficway Area
- 13 Sharrow
- 97 Other
- 99 Unknown

## P26. Non-Motorist Safety Equipment

The safety equipment used by the non-motorist.

Name In Schema: NonMotoristSafetyEquipment

Minimum Occurrences: 1

Maximum Occurrences: 1

### Safety Equipment

Name In Schema: SafetyEquipment

Minimum Occurrences: 1

Maximum Occurrences: 2

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 0 None
- 1 Helmet
- 2 Protective Pads Used (elbows, knees, shins,etc.)
- 3 Reflective Clothing (jacket, backpack, etc.)
- 4 Lighting
- 5 ANSI Approved Bicycle helmet
- 88 Not Applicable
- 97 Other
- 99 Unknown

### **P27. Unit Number of Motor Vehicle Striking Non-Motorist**

Number assigned to identify the motor vehicle that struck the non-motorist in the crash. Assign 0 if the Non-motorist was not struck by any vehicle. If the vehicle striking the non-motorist is a bicycle then use that bicycle's VehicleID. If the Nonmotorist was not struck then provide the value of 0 (zero).

Name In Schema: StrikingMotorVehicleID

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

Minimum Value: 0

Maximum Value: 99

### **DOT31. Non-Motorist Distracted By**

Distractions which may have influenced the non-motorist's actions.

Name In Schema: NonmotoristDistractedBy  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Not Distracted  
2 Manually Operating an Electronic Communication Device (texting, typing, dialing)  
3 Talking on Hands-Free Electronic Device  
4 Talking on Hand-Held Electronic Device  
5 Other Activity, Electronic Device  
6 Other Activity, Inside Vehicle (eating, personal hygiene, etc.)  
7 Other, Outside Vehicle  
99 Unknown if Distracted

### **StrikingMotorVehicleID**

The ID of the motor vehicle that struck the nonmotorist, if any.

Name In Schema: StrikingMotorVehicleID  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger

### **BicycleID**

The ID of the bicycle ridden by the nonmotorist, if any.

Name In Schema: BicycleID  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger

## **typeWitness**

### **DOT32. Witness Personal Information**

Name In Schema: WitnessPersonalInformation  
Data Type: typePerson

### **DOT34. Witness Statement Source**

Describes how the witness acquired the information included in the statement.

Name In Schema: WitnessStatementSource  
Minimum Occurrences: 1  
Maximum Occurrences: 4  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Observed Crash Occur  
2 Overheard Statements by Persons Involved  
3 Observed Illegal Activity by Persons Involved in the Crash Prior to Police Arrival  
4 Observed other illegal behavior by a vehicle involved in the crash or resulting in the crash occurring

### **DOT35. Witness Observation Verification**

Describes the ways in which the witness' statement was verified

Name In Schema: WitnessObservationVerification  
Minimum Occurrences: 1  
Maximum Occurrences: 3  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Sight lines verified by reporting officer  
2 Sight lines verified by other officer  
3 Sight lines confirmed by an other witness  
4 Verification not possible  
5 Verification not undertaken  
88 Not applicable

### **DOT36. Witness Statement Type**

Describes the type of statement, if any, that was provided by the witness.

Name In Schema: WitnessStatementType  
Minimum Occurrences: 1  
Maximum Occurrences: 2  
Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No statement taken
- 2 Provided written statement
- 3 Willing to provide written statement
- 4 Oral statement only
- 5 Statement Confirmed by other witness
- 88 Not applicable

## typeVehicle

### V1. Vehicle Identification Number (VIN)

A unique combination of alphanumeric or numeric characters assigned to a specific vehicle that is designated by the manufacturer. The VIN should have 17 alphanumeric characters for motor vehicles manufactured after 1980 although additional characters are supported to accommodate vehicles that are not motor vehicles, such as serial numbers on bicycles, which may use a serial number standard that is different than automotive VINs.

Name In Schema: VehicleIdentificationNumber  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string

Restrictions on Values, with usage comments:

- Maximum Length: 1
- Maximum Length: 50

### V2. Vehicle Unit Type and Number

Vehicle unit type and number assigned to uniquely identify each vehicle involved in the crash. This number is not assigned to people.

Name In Schema: VehicleUnitTypeAndNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### Unit Type

Name In Schema: UnitType  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Vehicle in Operation
- 2 Parked Vehicle
- 3 Working Vehicle/Equipment
- 4 Non-Collision Vehicle
- 99 Unknown

#### Unit Number

Name In Schema: UnitNumber  
Minimum Occurrences: 1

Maximum Occurrences: Unbounded  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
Minimum Value: 1  
Maximum Value: 100

### **V5. Vehicle Make**

The distinctive (coded) name applied to a group of vehicles by a manufacturer.

Name In Schema: VehicleMake  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Length: 1  
Maximum Length: 30

### **V6. Vehicle Model Year**

The year which is assigned to a motor vehicle by the manufacturer, in the format YYYY.

Name In Schema: VehicleModelYear  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Value: 1900  
Maximum Value: 2050

### **V7. Vehicle Model**

The manufacturer-assigned code denoting a family of vehicles (within a make) that have a degree of similarity in construction, such as body, chassis, etc.

Name In Schema: VehicleModel  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Minimum Length: 1  
Maximum Length: 30

### **DOT37. Vehicle Color**

The primary color of the vehicle.

Name In Schema: VehicleColor  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string

Restrictions on Values, with usage comments:

Maximum Length: 30

### **DOT61. Vehicle Owner Information Same As Driver**

Indicates that the Personal Information for the vehicle owner is the same as the information collected for the driver of the vehicle.

Name In Schema: VehicleOwnerInformationSameAsDriver

Data Type: boolean

### **V9. Total Occupants in Vehicle**

The total number of injured and uninjured occupants (including the driver) in this vehicle involved in the crash, including persons in or on the vehicle at the time of the crash.

Name In Schema: TotalOccupantsInVehicle

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

Minimum Value: 0

Maximum Value: 99

### **V10. Special Function of Vehicle**

Special Function of Motor Vehicle in Operation": The type of special function being served by this vehicle regardless of whether the function is marked on the vehicle. Note: name of element ins schema was renamed from SpecialFunctionOfVehicleInTransport.

Name In Schema: SpecialFunctionOfVehicleInOperation

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 No Special Function
- 2 Taxi
- 3 Vehicle Used as School Bus
- 4 Vehicle Used as Other Bus
- 5 Military
- 6 Police
- 7 Ambulance
- 8 Fire Truck
- 9 Non-Transport Emergency Services Vehicle
- 10 Incident Response
- 99 Unknown

### V11. Emergency Vehicle Use

Indicates operation of any vehicle that is legally authorized by a government authority to respond to emergencies with or without the use of emergency warning equipment, such as a police vehicle, fire truck, or ambulance while actually engaged in such response.

Name In Schema: EmergencyVehicleUse

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Non-Emergency Situation, Non Transporting Patient
- 2 Non-Emergency Transport of Passenger
- 3 Emergency Operation, Emergency Warning Equipment Not in Use
- 4 Emergency Operation, Emergency Warning Equipment in Use
- 88 Not Applicable
- 99 Unknown

### V12. Vehicle Posted Statutory Speed Limit

The posted/statutory 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, etc.

Name In Schema: PostedStatutorySpeedLimit

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Not Posted
- 5 Speed Limit is 5 mph
- 10 Speed Limit is 10 mph
- 15 Speed Limit is 15 mph
- 20 Speed Limit is 20 mph
- 25 Speed Limit is 25 mph
- 30 Speed Limit is 30 mph
- 35 Speed Limit is 35 mph
- 40 Speed Limit is 40 mph
- 45 Speed Limit is 45 mph
- 50 Speed Limit is 50 mph
- 55 Speed Limit is 55 mph
- 60 Speed Limit is 60 mph
- 65 Speed Limit is 65 mph
- 70 Speed Limit is 70 mph
- 75 Speed Limit is 75 mph
- 80 Speed Limit is 80 mph
- 85 Speed Limit is 85 mph
- 88 Not applicable
- 99 Unknown speed limit

### V13. Direction Of Travel Before Crash

The direction of a vehicle's travel on the roadway before the crash. Notice that this is not a compass direction, but a direction consistent with the designated direction of the road. For example, the direction of a State-designated North-South highway must be either northbound or southbound even though a motor vehicle may have been traveling due east as a result of a short segment of the highway having an east-west orientation.

Name In Schema: DirectionOfTravelBeforeCrash  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### Log Direction

Name In Schema: LogDirection  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
N Northbound  
S Southbound  
E Eastbound  
W Westbound

#### Direction is Unknown

Name In Schema: DirectionIsUnknown  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### V14. Trafficway Description

Indication of whether or not the trafficway for this vehicle is divided and whether it serves one-way or two-way traffic. A divided trafficway is one on which roadways for travel in opposite directions are physically separated by a median.

Name In Schema: TrafficwayDescription  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
1 Two-Way, Not Divided  
2 Two-Way, Not Divided, With a Continuous Left Turn Lane  
3 Two-Way, Divided, Unprotected (Painted > 4 Feet) Median  
4 Two-Way, Divided, Positive Median Barrier  
5 One-Way Trafficway  
88 Not Applicable  
99 Unknown

### V15. Total Lanes In Roadway

Total number of lanes in the roadway on which this vehicle was traveling.

Name In Schema: TotalLanesInRoadway  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
    Minimum Value: 0  
    Maximum Value: 20

### V16. Roadway Alignment and Grade

The geometric or layout and inclination characteristics of the roadway in the direction of travel for this vehicle.

Name In Schema: RoadwayAlignmentAndGrade  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### Roadway Alignment

Name In Schema: RoadwayAlignment  
Minimum Occurrences: 0  
Maximum Occurrences: unbounded  
Data Type: positiveInteger  
Restrictions on Values, with usage comments:  
    1 Straight  
    2 Curve Left  
    3 Curve Right  
    99 Unknown

#### Roadway Grade

Name In Schema: RoadwayGrade  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
    1 Level  
    2 Uphill  
    3 Hillcrest  
    4 Downhill  
    5 Sag (bottom)  
    99 Unknown

## V17. Traffic Control Device Type

The type of traffic control device (TCD) applicable to this vehicle at the crash location.

Name In Schema: TrafficControlDevice

Minimum Occurrences: 1

Maximum Occurrences: 1

### Device Type

Name In Schema: DeviceType

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 No Control Device
- 2 Person (including flagger, law enforcement, crossing guard, etc.)
- 3 Traffic Control Signal
- 4 Flashing Traffic Control Signal
- 5 School Zone Sign/Device
- 6 Stop Sign
- 7 Yield Sign
- 8 Warning Sign
- 9 Railway Crossing Device
- 10 Marked Uncontrolled Crosswalk
- 11 Pedestrian Button
- 12 Bicycle Detection
- 97 Other
- 99 Unknown

### Device Status

Name In Schema: DeviceStatus

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 No, Not Functioning
- 2 Yes, Functioning
- 3 Missing
- 88 Not Applicable
- 99 Unknown

### V18. Vehicle Action

The controlled maneuver for this motor vehicle prior to the beginning of the sequence of events.

Name In Schema: VehicleAction  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Straight Ahead
- 2 Negotiating a Curve
- 3 Backing
- 4 Changing Lanes
- 5 Overtaking/Passing
- 6 Turning Right
- 7 Turning Left
- 8 Making U-Turn
- 9 Leaving Traffic Lane
- 10 Entering Traffic Lane
- 11 Slowing
- 12 Parked
- 13 Stopped in Traffic
- 14 Overtaking/Passing Cyclist
- 15 Wrong Way (or Wrong Side)
- 16 Traveling in Bike Lane
- 97 Other
- 99 Unknown

### V19. Vehicle Damage

The first child element, Initial Contact Point on Vehicle, is intended to collect the approximate contact point on this ehicle associated with this vehicle's initial harmful event. If the initial harmful event does not involve a collision, then code Non-Collision (refer to glossary). The second child element, Damaged Areas, identifies all areas damaged on the vehicle as a result of this crash. The third child element, Extent of Damage, identifies the extent to which the damage affects the vehicle's operability rather than the cost to repair.

Name In Schema: VehicleDamage  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### Initial Contact Point

Name In Schema: InitialContactPoint

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Sector 1 (North by NorthEast) in the 12-point Clock Diagram
- 2 Sector 2 (NorthEast) in the 12-point Clock Diagram
- 3 Sector 3 (East) in the 12-point Clock Diagram
- 4 Sector 4 (SouthEast) in the 12-point Clock Diagram
- 5 Sector 5 (South by SouthEast) in the 12-point Clock Diagram
- 6 Sector 6 (South) in the 12-point Clock Diagram
- 7 Sector 7 (South by SouthWest) in the 12-point Clock Diagram
- 8 Sector 8 (SouthWest) in the 12-point Clock Diagram
- 9 Sector 9 (West) in the 12-point Clock Diagram
- 10 Sector 10 (NorthWest) in the 12-point Clock Diagram
- 11 Sector 11 (North by NorthWest) in the 12-point Clock Diagram
- 12 Sector 12 (North) in the 12-point Clock Diagram
- 13 Non-Collision
- 14 Top
- 15 Undercarriage
- 16 Cargo loss
- 99 Unknown

### Damaged Areas

Name In Schema: DamagedAreas  
Minimum Occurrences: 1  
Maximum Occurrences: 17  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 0 None
- 1 Sector 1 (North by NorthEast) in the 12-point Clock Diagram
- 2 Sector 2 (NorthEast) in the 12-point Clock Diagram
- 3 Sector 3 (East) in the 12-point Clock Diagram
- 4 Sector 4 (SouthEast) in the 12-point Clock Diagram
- 5 Sector 5 (South by SouthEast) in the 12-point Clock Diagram
- 6 Sector 6 (South) in the 12-point Clock Diagram
- 7 Sector 7 (South by SouthWest) in the 12-point Clock Diagram
- 8 Sector 8 (SouthWest) in the 12-point Clock Diagram
- 9 Sector 9 (West) in the 12-point Clock Diagram
- 10 Sector 10 (NorthWest) in the 12-point Clock Diagram
- 11 Sector 11 (North by NorthWest) in the 12-point Clock Diagram
- 12 Sector 12 (North) in the 12-point Clock Diagram
- 14 Top
- 15 Undercarriage
- 17 All Areas
- 88 Not Applicable
- 99 Unknown

### Extent of Vehicle Damage

Name In Schema: ExtentOfVehicleDamage  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 No Damage
- 2 Minor Damage
- 3 Functional Damage
- 4 Disabling Damage
- 99 Unknown

## V20. Sequence of Events

The events in sequence related to this motor vehicle, including both non-collision as well as collision events.

Name In Schema: SequenceOfEvents  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### Event

Name In Schema: Event  
Minimum Occurrences: 1  
Maximum Occurrences: 4  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Overturn/Rollover
- 2 Fire / Explosion
- 3 Immersion, Full or Partial
- 4 Jackknife
- 5 Cargo/Equipment Loss or Shift
- 6 Equipment Failure (blown tire, brake failure, etc.)
- 7 Separation of Units
- 8 Ran Off Roadway Right
- 9 Ran Off Roadway Left
- 10 Cross Median
- 11 Cross Centerline
- 12 Downhill Runaway
- 13 Fell/Jumped From Vehicle
- 14 Reentering Roadway
- 15 Thrown or Falling Object
- 16 Other Non-Collision
- 17 Pedestrian
- 18 Pedalcycle / Pedalcyclist
- 19 Other Non-motorist
- 20 Railway Vehicle (train, engine)
- 21 Animal (live)
- 22 Motor Vehicle In Transport
- 23 Parked Motor Vehicle
- 24 Struck By Falling, Shifting Cargo or Anything Set in Motion By Motor Vehicle
- 25 Work Zone/Maintenance Equipment
- 26 Other Non-Fixed Object
- 27 Impact Attenuator/Crash Cushion
- 28 Bridge Overhead Structure
- 29 Bridge Pier or Support
- 30 Bridge Rail
- 31 Cable Barrier
- 32 Culvert
- 33 Curb

34	Ditch
35	Embankment
36	Guardrail Face
37	Guardrail End
38	Concrete Traffic Barrier
39	Other Traffic Barrier
40	Tree (standing)
41	Utility Pole
42	Traffic Sign Support
43	Traffic Signal Support
44	Other Post, Pole, or Support
45	Fence
46	Mailbox
47	Other Fixed Object (wall,building, tunnel, etc.)
48	Light Support
88	Not Applicable
99	Unknown

**V21. Most Harmful Event for this Vehicle**

Event that resulted in the most severe injury or, if no injury, the greatest property damage involving this vehicle.

Name In Schema: MostHarmfulEventForThisVehicle  
 Minimum Occurrences: 1  
 Maximum Occurrences: 1

**Event**

Name In Schema: Event  
 Minimum Occurrences: 1  
 Maximum Occurrences: 1  
 Data Type: nonNegativeInteger  
 Restrictions on Values, with usage comments:

1	Overturn/Rollover
2	Fire / Explosion
3	Immersion, Full or Partial
4	Jackknife
5	Cargo/Equipment Loss or Shift
6	Equipment Failure (blown tire, brake failure, etc.)
7	Separation of Units
8	Ran Off Roadway Right
9	Ran Off Roadway Left
10	Cross Median
11	Cross Centerline
12	Downhill Runaway
13	Fell/Jumped From Motor Vehicle
14	Reentering Roadway
15	Thrown or Falling Object
16	Other Non-Collision

17	Pedestrian
18	Pedalcycle / Pedalcyclist
19	Other Non-motorist
20	Railway Vehicle (train, engine)
21	Animal (live)
22	Motor Vehicle In Operation
23	Parked Motor Vehicle
24	Struck By Falling, Shifting Cargo or Anything Set in Motion By Motor Vehicle
25	Work Zone/Maintenance Equipment
26	Other Non-Fixed Object
27	Impact Attenuator/Crash Cushion
28	Bridge Overhead Structure
29	Bridge Pier or Support
30	Bridge Rail
31	Cable Barrier
32	Culvert
33	Curb
34	Ditch
35	Embankment
36	Guardrail Face
37	Guardrail End
38	Concrete Traffic Barrier
39	Other Traffic Barrier
40	Tree (standing)
41	Utility Pole
42	Traffic Sign Support
43	Traffic Signal Support
44	Other Post, Pole, or Support
45	Fence
46	Mailbox
47	Other Fixed Object (wall,building, tunnel, etc.)
48	Light Support
88	Not Applicable
99	Unknown

### **V23. Hit and Run**

Refers to cases where the vehicle or the driver of the vehicle in operation is a contact vehicle in the crash and departs the scene without stopping to render aid or report the crash.

Name In Schema:	HitAndRunStatus
Minimum Occurrences:	0
Maximum Occurrences:	1
Data Type:	boolean

## V24. Towed

Disabling damage implies damage to the motor vehicle that is sufficient to require the motor vehicle to be towed or carried from the scene. Towed Due to Disabling Damage identifies if a vehicle involved in a crash is removed from the scene due to damage incurred. Towing assistance without removal of the ehicle from the scene, such as pulling a vehicle out of a ditch, is not considered to be towed for the purposes of this element.

Name In Schema: Towed  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 Towed Due to Disabling Damage  
2 Towed But not Due to Disabling Damage  
3 Not Towed  
99 Unknown

## DOT33. Towed To

The location that the vehicle was towed to.

Name In Schema: TowedTo  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Maximum Occurrences: 255

## V25. Contributing Circumstances Vehicle

Pre-existing motor vehicle defects or maintenance conditions that may have contributed to the crash. Up to two conditions may be provided.

Name In Schema: ContributingCircumstancesVehicle  
Minimum Occurrences: 0  
Maximum Occurrences: 2  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
0 None  
1 Brakes  
2 Exhaust System  
3 Body, Doors  
4 Steering  
5 Power Train  
6 Suspension  
7 Tires  
8 Wheels  
9 Lights (head, signal, tail)  
10 Windows/Windshield  
11 Mirrors

- 12 Wipers
- 13 Truck Coupling/Trailer Hitch/Safety Chains
- 14 Pothole/Cracked/Failing Pavement
- 15 Debris in Roadway (sand, glass, etc.)
- 97 Other
- 88 Not Applicable
- 99 Unknown

**DOT36. Vehicle Owner Information**

The Information of the Owner of the Vehicle.

Name In Schema: VehicleOwnerInformation

Minimum Occurrences: 0

Maximum Occurrences: 1

**P1. Name Of Owner**

Note: The full name of the owner of the vehicle (Last, First, Middle, Suffix).

Name In Schema: NameOfOwner

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: string

Maximum Length: 255

**DOT40. Physical Address of Owner**

The physical address of the individual involved in the crash.

Name In Schema: PhysicalAddressOfOwner

Minimum Occurrences: 0

Maximum Occurrences: 1

Type: typePhysicalAddress

**DOT60. Electronic Contact Info of Owner**

Electronic contact information, such as telephone, email, fax, etc.

**Note: This element has been removed from the schema. See DOT62. Electronic Mail Address and DOT63. Telephone.**

Name In Schema: ElectronicContactInfo

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

Maximum Length: 75

### DOT41. Contact Type

Electronic contact information, such as telephone, email, fax, etc.

*Note: This element has been removed from the schema. See DOT62. Electronic Mail Address and DOT63. Telephone.*

Name In Schema: ContactType

Minimum Occurrences: 1

Maximum Occurrences: 10

Data Type: positiveInteger

Restrictions on Values, with usage comments:

- 1 Phone
- 2 CellPhone
- 3 HomePhone
- 4 OfficePhone
- 5 Email
- 6 Text
- 7 FAX

### DOT42. Contact Details

The telephone number or email address of the contact in a format appropriate for the contact type.

*Note: This element has been removed from the schema. See DOT62. Electronic Mail Address and DOT63. Telephone.*

Name In Schema: ContactDetails

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values:

Maximun Length: 75

### DOT62. Electronic Mail Address

The email address of the person.

Name In Schema: ElectronicMailAddress

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values:

Maximun Length: 75

### **DOT63. Telephone**

The telephone number of the person.

Name In Schema: Telephone  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Maximum Length: 15

### **DOT43. Was Serial Number Removed**

Indicates if the serial number (or VIN) was removed, destroyed, or were not present.

Name In Schema: WasSerialNumberRemoved  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: boolean

### **DOT44. Were Bike Lanes Or Sharrows Present**

Indicates if bike lanes or sharrows were present in the roadway in which this vehicle was traveling.

Name In Schema: WereBikeLanesOrSharrowsPresent  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: boolean

### **DOT45. Roadway On Which The Vehicle Was Traveling**

The name of the roadway, such as 'Elm Street' or 'Valley View Drive'.

Name In Schema: RoadwayOnWhichVehicleWasTraveling  
Minimum Occurrences: 1  
Maximum Occurrences: 1

#### **Name Of Roadway On Which Vehicle Was Traveling**

Name In Schema: NameOfRoadwayOnWhichVehicleWasTraveling  
Minimum Occurrences: 1  
Minimum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Minimum Length: 1  
Maximum Length: 50

#### **Vehicle Was Not On Roadway**

Name In Schema: VehicleWasNotOnRoadway  
Minimum Occurrences: 0

Maximum Occurrences: 1  
Data Type: boolean

### **DOT46. Property Damage**

The nature and extent of damage to property, public or private, by the involved vehicle.

Name In Schema: PropertyDamage  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### **Name Of Property Owner**

Name In Schema: NameOfPropertyOwner  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
    Minimum Length: 1  
    Maximum Length: 75

#### **Description of Damage**

Name In Schema: DescriptionOfDamage  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
    Minimum Length: 1

## **typeMotorVehicle**

### **Vehicle Information**

Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: typeVehicle

### **V3. Motor Vehicle Registration State and Year**

The State, commonwealth, territory, Indian nation, U.S. government, foreign country, etc., issuing the registration plate and the year of registration as indicated on the registration plate displayed on the motor vehicle. For foreign countries, MMUCC requires only the name of the country. Border States may want to collect the name of individual Canadian Provinces or Mexican states.

Name In Schema: MotorVehicleRegistrationStateAndYear  
Minimum Occurrences: 1  
Maximum Occurrences: 1

## Motor Vehicle Registration State

Name In Schema: MotorVehicleRegistrationState

Minimum Occurrences: 1

Maximum Occurrences: 1

Data Type: string

Restrictions on Values, with usage comments:

AL	Alabama, USA
AK	Alaska, USA
AS	American Samoa, USA
AZ	Arizona, USA
AR	Arkansas, USA
CA	California, USA
CO	Colorado, USA
CT	Connecticut, USA
DE	Delaware, USA
FL	Florida, USA
GA	Georgia, USA
GU	Guam, USA
HI	Hawaii, USA
ID	Idaho, USA
IL	Illinois, USA
IN	Indiana, USA
IA	Iowa, USA
KS	Kansas, USA
KY	Kentucky, USA
LA	Louisiana, USA
ME	Maine, USA
MD	Maryland, USA
MA	Massachusetts, USA
MI	Michigan, USA
MN	Minnesota, USA
MS	Mississippi, USA
MO	Missouri, USA
MT	Montana, USA
NE	Nebraska, USA
NV	Nevada, USA
NH	New Hampshire, USA
NJ	New Jersey, USA
NM	New Mexico, USA
NY	New York, USA
NC	North Carolina, USA
ND	North Dakota, USA
MP	Northern Mariana Islands, USA
OH	Ohio, USA
OK	Oklahoma, USA
OR	Oregon, USA
PA	Pennsylvania, USA
PR	Puerto Rico, USA

RI	Rhode Island, USA
SC	South Carolina, USA
SD	South Dakota, USA
TN	Tennessee, USA
TX	Texas, USA
VI	U.S. Virgin Islands, USA
UM	United States Minor Outlying Islands (Baker Island, Howland Island, Jarvis Island, JohnstonAtoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll, Wake Island), USA
UT	Utah, USA
VT	Vermont, USA
VA	Virginia, USA
WA	Washington, USA
DC	Washington DC, USA
WV	West Virginia, USA
WI	Wisconsin, USA
WY	Wyoming, USA
AB	Alberta, Canada
BC	British Columbia, Canada
MB	Manitoba, Canada
NB	New Brunswick, Canada
NL	Newfoundland and Labrador, Canada
NT	Northwest Territories, Canada
NS	Nova Scotia, Canada
NU	Nunavut, Canada
ON	Ontario, Canada
PE	Prince Edward Island, Canada
QC	Quebec, Canada
SK	Saskatchewan, Canada
YT	Yukon Territory, Canada
XX	Other commonwealth, territory, Indian nation, U.S. Government, foreign country, etc.,
97	Other commonwealth, territory, Indian nation, U.S. Government, foreign country, etc.
99	Unknown

#### **V4. Motor Vehicle License Plate Number**

The alphanumeric identifier or other characters, exactly as displayed, on the registration plate or tag affixed to the motor vehicle. For combination trucks, motor vehicle platenumber is obtained from the power unit or tractor.

Name In Schema:	MotorVehicleLicensePlateNumber
Minimum Occurrences:	1
Maximum Occurrences:	1
Data Type:	string
Restrictions on Values:	
Minimum Length:	1
Maximum Length:	10

### **DOT47. Motor Vehicle Registration Was Invalid**

Label on PR-1: Invalid Plate  
Name In Schema: MotorVehicleRegistrationWasInvalid  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **DOT48. Motor Vehicle Registration Plate Was Missing**

Label on PR-1: No Plate  
Name In Schema: MotorVehicleRegistrationPlateWasMissing  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **V8. Vehicle Body Type**

The category indicating the general configuration or shape of a motor vehicle distinguished by characteristics such as number of doors, rows of seats, windows, or roof line. Personal conveyances such as skateboards, motorized toy cars, and wheelchairs are not considered motor vehicles.

Name In Schema: VehicleBodyType  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Passenger Car
- 2 (Sport) Utility Vehicle
- 3 Passenger Van
- 4 Cargo Van (10,000 lbs/4,536 kg or less)
- 5 Pick Up
- 6 Motor Home
- 7 School Bus
- 8 Transit Bus
- 9 Motor Coach
- 10 Other Bus
- 11 Motorcycle
- 12 Moped
- 13 Low Speed Vehicle
- 14 Golf Cart
- 15 All Terrain Vehicle (ATV)
- 16 Snowmobile
- 17 Other Light Trucks (10,000 lbs (4,536 kg) or less)
- 18 Medium / Heavy Trucks (more than 10,000 lbs (4,536 kg))
- 97 Other
- 99 Unknown

## V22. Bus Use

This element describes the common type of bus service this vehicle was being used as at the time of the crash. Buses are any motor vehicle with seats to transport nine (9) or more people, including the driver's seat. This element does not include vans which are owned and operated for personal use.

Name In Schema: BusUse  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger

Restrictions on Values, with usage comments:

- 1 Not a bus
- 2 School
- 3 Transit/Commuter
- 4 Intercity
- 5 Charter/Tour
- 6 Shuttle
- 88 Not Applicable
- 99 Unknown

## DOT49. Insurance Policy

Motor Vehicle Insurance Policy Information

Name In Schema: InsurancePolicy  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### Name Of Issuing Insurance Company

Name In Schema: NameOfIssuingInsuranceCompany  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Minimum Length: 1  
Maximum Length: 100

### Policy Number

Name In Schema: PolicyNumber  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values:  
Minimum Length: 1  
Maximum Length: 100

### Expiration Date

Name In Schema: ExpirationDate  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: date  
Restrictions on Values:  
    Mimimum Length: 2000-01-01  
    Maximum Length: 2030-12-31

### V26. Motor Carrier Identification

The identification number, name and address of an individual, partnership or corporation responsible for the transportation of persons or property as indicated on the shipping manifest.

Name In Schema: MotorCarrierIdentification  
Minimum Occurrences: 1  
Maximum Occurrences: 1

### US DOT Number

Name In Schema: USDOTNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: token  
Restrictions on Values:  
    Maximum Length: 8

### State Issued Identification Number

Note: Not required unless there is the US DOT Number is absent.

Name In Schema: StateIssuedIdentificationNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: token  
Restrictions on Values:  
    Maximum Length: 20

### State Issuing Identification Number

Name In Schema: StateIssuingIdentificationNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values: See *StateCode* from *typePhysicalAddress*

### Carrier Name

Name In Schema: CarrierName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: token  
Restrictions on Values:  
Maximum Length: 75

### Carrier Address

Name In Schema: CarrierAddress  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: typePhysicalAddress

### Commercial Or Non Commercial

Name In Schema: CommercialOrNoncommercial  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 Interstate Carrier  
2 Intrastate Carrier  
3 Not in Commerce/Government  
4 Not in Commerce/Other Truck  
99 Unknown

## DOT50. Power Unit Information

### Power Unit Information

Name In Schema: PowerUnitInformation  
Minimum Occurrences: 0  
Maximum Occurrences: 1

### Information Same As Carrier

Name In Schema: InformationSameAsCarrier  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: boolean

### Power Unit Owner Name

Name In Schema: PowerUnitOwnerName  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 100

### **Power Unit Owner Address**

Name In Schema: PowerUnitOwnerAddress  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Type: typePhysicalAddress

### **DOT51. Trailer Information**

Name In Schema: TrailerInformation  
Minimum Occurrences: 0  
Maximum Occurrences: 2

### **Information Same As Carrier**

Name In Schema: InformationSameAsCarrier  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **Information Same As PowerUnit**

Name In Schema: InformationSameAsPowerUnit  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **Information Same As Other Trailer**

Name In Schema: InformationSameAsOtherTrailer  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: boolean

### **Trailer Owner Name**

Name In Schema: TrailerOwnerName  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Data Type: string  
Restrictions on Values, with usage comments:  
Maximum Length: 100

### **Trailer Owner Address**

Name In Schema: TrailerOwnerAddress  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: typePhysicalAddress

**DOT52. Trailer License Plate Number**

The alphanumeric identifier or other characters, exactly as displayed, on the registration plate or tag affixed to the trailer.

Name In Schema: TrailerLicensePlateNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: string  
Restrictions on Values, with usage comments:  
    Minimum Length: 1  
    Maximum Length: 10

**DOT64. Trailer License Plate Issuing State Code**

Indicates the state that issued the license plate of the trailer.

Name In Schema: TrailerLicensePlateIssuingStateCode  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: string  
Restrictions on Values:  
    *See StateCode for specification*

**DOT53. Trailer License Plate Was Expired**

Name In Schema: TrailerLicensePlateWasExpired  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: boolean

**DOT54. Trailer License Plate Was Missing**

Name In Schema: TrailerLicensePlateWasMissing  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: boolean

### DOT55. Trailer Vehicle Identification Number

A unique combination of alphanumeric or numeric characters assigned to a specific vehicle that is designated by the manufacturer. The VIN should have 17 alphanumeric characters for motor vehicles manufactured after 1980 although additional characters are supported to accommodate vehicles that are not motor vehicles, such as serial numbers on bicycles, which may use a serial number standard that is different than automotive VINs.

Name In Schema: TrailerVehicleIdentificationNumber  
Minimum Occurrences: 1  
Maximum Occurrences: 1  
Type: string  
Restrictions on Values, with usage comments:  
    Minimum Length: 1  
    Maximum Length: 50

### V27. Gross Vehicle Weight Rating

The Gross Vehicle Weight Rating (GVWR) is the amount recommended by the manufacturer as the upper limit to the operational weight for a motor vehicle and any cargo (human or other) to be carried. The Gross Combination Weight Rating (GCWR) is the sum of all GVWRs for each unit in a combination unit motor vehicle. Thus for single-unit trucks there is no difference between the GVWR and the GCWR. For combination trucks (truck tractors pulling a single semi-trailer, truck tractors pulling double or triple trailers, trucks pulling trailers, and trucks pulling other motor vehicles) the GCWR is the total of the GVWRs of all units in the combination.

Name In Schema: GrossVehicleWeightRating  
Minimum Occurrences: 0  
Maximum Occurrences: 1  
Data Type: nonnegativeInteger  
Restrictions on Values, with usage comments:  
    1 10,000 lbs or less  
    2 10,001-26,000 lbs  
    3 More than 26,000 lbs  
    88 Not Applicable  
    99 Unknown

## V28. Vehicle Configuration

Indicates the general configuration of this motor vehicle.

Name In Schema: VehicleConfiguration

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonnegativeInteger

Restrictions on Values, with usage comments:

- 1 Vehicle 10,000 pounds or less placarded for hazardous materials
- 2 Single-Unit Truck (2-axle and GVWR more than 10,000 lbs)
- 3 Single-Unit Truck (3 or more axles)
- 4 Truck Pulling Trailer(s)
- 5 Truck Tractor (bobtail)
- 6 Truck Tractor/Semi-Trailer
- 7 Truck Tractor/Double
- 8 Truck Tractor/Triple
- 9 Truck More than 10,000 lbs, cannot Classify
- 10 Bus/Large Van (seats for 9-15 occupants, including driver)
- 11 Bus (seats for more than 15 occupants, including driver)
- 99 Unknown

## V29. Cargo Body Type

The type of body for buses and trucks more than 10,000 lbs GVWR.

Name In Schema: CargoBodyType

Minimum Occurrences: 0

Maximum Occurrences: 1

Data Type: nonnegativeInteger

Restrictions on Values, with usage comments:

- 1 No Cargo Body
- 2 Bus
- 3 Van/Enclosed Box
- 4 Grain/chips/gravel
- 5 Pole-Trailer
- 6 Cargo Tank
- 7 Log
- 8 Intermodal Container Chassis
- 9 Vehicle Towing Another Vehicle
- 10 Flatbed
- 11 Dump
- 12 Concrete Mixer
- 13 Auto Transporter
- 14 Garbage/Refuse
- 88 Not Applicable
- 97 Other
- 99 Unknown

### V30. Hazardous Materials

Indication of whether or not the motor vehicle had a hazardous materials placard as required by Federal/State regulations, and whether or not hazardous materials were released.

Name In Schema: HazardousMaterials  
Minimum Occurrences: 0  
Maximum Occurrences: 1

#### Hazardous Materials Placard Display

Name In Schema: HazardousMaterialsPlacardDisplay  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 No  
2 Yes  
88 Not Applicable

#### Hazardous Materials Placard Number

Name In Schema: HazardousMaterialsPlacardNumber  
Data Type: token  
Restrictions on Values, with usage comments:  
Maximum Length: 4

#### Hazardous Materials Placard Class Number

Name In Schema: HazardousMaterialsPlacardClassNumber  
Data Type: token  
Restrictions on Values, with usage comments:  
Maximum Length: 1

#### Were Hazardous Materials Released

Name In Schema: WereHazardousMaterialsReleased  
Data Type: nonNegativeInteger  
Restrictions on Values, with usage comments:  
1 No  
2 Yes  
88 Not Applicable

### Vendor Specific

Allows each vendor to provide data for their own internal use, such as for tracing. This data will not be used by ConnDOT.

Name In Schema: VendorSpecific  
Data Type: string  
Minimum Occurrences: 0  
Maximum Occurrences: unbounded

## Acceptance Rules and Warning Rules

This section describes a collection of acceptance rules that are based upon logical relationships between data elements which will be applied to any crash data file that is submitted. A simple example of such a rule is in a two vehicle collision both vehicles cannot be parked.

These acceptance rules will be applied by the DOT to each submitted crash data file. If a crash report within a file is found to contain any crash data that violates any of these acceptance rules then only that crash report will not be acceptable. If crash data is not accepted then the sender will be notified of this failure along with information describing the nature of the failure. By default, the sender will be notified via email using the email address(es) included in the TransmitterEmailAddress element of the crash data file.

***It should be noted that acceptance rules are applied only to those files that conform to the XML schema. If a submitted file does not conform to the XML schema then the entire file is rejected.***

In addition to acceptance rules, this document describes provides rules that are not strictly acceptance rules but rules that should warn the user of suspicious data, such as when the lighting conditions indicate Daylight although the time of the crash is near Midnight. The DOT recommends that these additional rules be implemented in the software to warn the officer of the potential conflict.

### Acceptance Rules for Crash Data Elements

1. If Trafficway Class (C2) = 1 (Trafficway, On Road) then Trafficway Description (V14) is a required field for each vehicle involved in the crash.
2. If First Harmful Event (C7) = 9 (Pedestrian) then at least one involved person must have Non-Motorist Person Type (P4) = 3 (Pedestrian).
3. If First Harmful Event (C7) = 11 (Other Non-motorist) then at least one involved person must have Non-Motorist Person Type (P4) = 04 (Other Pedestrian (wheelchair, person in a building, skater, pedestrian conveyance)), 8 (Occupant of a Non-Motor Vehicle Transportation Device), or 9 (Unknown type of Non-Motorist).
4. If First Harmful Event (C7) = 14 (Motor Vehicle in Operation) then Manner of Impact (C9) cannot be 88.
5. DISABLED: If Manner of Impact (C9) contains a value, then First Harmful Event (C7) must = 14 (Motor Vehicle in Operation).
6. If First Harmful Event (C7) = 15 (Parked Motor Vehicle) then Motor Vehicle Action (V18) for the struck vehicle must = 12 (Parked).
7. DISABLED: If First Harmful Event (C7) = 17 (Work Zone/Maintenance Equipment) then Work Zone (C19) must = 2 (Yes) and Work Zone Location (C19), Work Zone Type (C19), Workers Present (C19) and Enforcement Present (C19) are required fields and their values cannot be 88 "Not Applicable".
8. If Crash Specific Location (C16) any of the following
  - 1 (Non-Junction)
  - 4 (Entrance / Exit Ramp),

- 5 (Entrance / Exit Ramp-Related),
- 6 (Railway Grade Crossing),
- 7 (Crossover-Related),
- 8 (Driveway Access),
- 9 (Driveway Access-Related),
- 10 (Shared-Use Path or Trail),
- 11 (Through Roadway),
- 12 (Acceleration / Deceleration Lane),
- 13 (On A Bridge), or
- 14 (HOV Lane),

then Type of Intersection (C17) must = 1 (Not an Intersection).

9. If Type of Intersection (C17) = 1 (Not an Intersection) then Crash Specific Location (C16) must not = 2 (Intersection), or 3 (Intersection-Related).
10. If Crash Specific Location (C16) = 2 (Intersection) or 3 (Intersection-Related) then Type of Intersection (C17) must equal one of the following:
  - 2 (Four-Way Intersection),
  - 3 (T-Intersection),
  - 4 (Y-Intersection),
  - 5 (L-Intersection),
  - 6 (Traffic Circle),
  - 7 (Roundabout), or
  - 8 (Five-Point, or More)
11. If Type of Intersection (C17) equals any of the following values:
  - 2 (Four-Way Intersection),
  - 3 (T-Intersection),
  - 4 (Y-Intersection),
  - 5 (L-Intersection),
  - 6 (Traffic Circle),
  - 7 (Roundabout), or
  - 8 (Five-Point, or More)

then Crash Specific Location (C16) must = 2 (Intersection) or 3 (Intersection-Related).
12. If School Bus Related (C18) = 2 (Yes, School Bus Directly Involved) then Body Type (V8) must = 7 (School Bus) for at least one involved vehicle.
13. If Crash Severity (CD1) = 'Fatal' then at least one involved person must have Injury Status (P5) = 'K' (Fatal Injury).
14. If Crash Severity (CD1) = 'Injury' then at least one involved person must have Injury Status (P5) = 'A' (Suspected Serious Injury), 'B' (Suspected Minor Injury), or 'C' (Possible Injury) and no involved person may have Injury Status (P5) = 'K' (Fatal Injury).
15. If Crash Severity (CD1) = 'PDO' then Injury Status (P5) = 'O' (No Apparent Injury) for all persons.

16. If any involved vehicle has a Body Type (V8) = 7 (School Bus) then School Bus Related (C18) must = 2 (Yes, School Bus Directly Involved).
17. DISABLED: If Body Type (V8) equals any of the following values:  
1 (Passenger Car),  
2 ((Sport) Utility Vehicle),  
3 (Passenger Van),  
4 (Cargo Van (<10,000 lbs. GVWR)),  
5 (Pickup),  
6 (Motor Home),  
7 (School Bus),  
8 (Transit Bus),  
9 (Motorcoach),  
10 (Other Bus),  
17 (Other Light Trucks (10,000 lbs. GVWR or less)), or  
18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)),  
then Restraint System (P8-1) must not = 88 (Not Applicable) for each person in/on the vehicle.
18. If Body Type (V8) has a value equal to any of the following:  
11 (Motorcycle),  
12 (Moped),  
15 (All Terrain Vehicle (ATV)), or  
16 (Snowmobile)  
then Restraint System (P8) must = 88 (Not Applicable) and Helmet Use (P8) is a required field for each person in/on the vehicle.
19. If Body Type (V8) has a value equal to any of the following:  
12 (Moped),  
13 (Low Speed Vehicle),  
14 (Golf Cart),  
15 (All Terrain Vehicle (ATV)), or  
16 (Snowmobile)  
then Airbag (P9) must = 88 (Not Applicable).
20. If Body Type (V8) = 11 (Motorcycle) or 12 (Moped) then Seating Position (P7) must be one of the following values:  
11 (Front-Left),  
12 (Front-Middle),  
21 (Second-Left),  
31 (Third-Left),  
52 (Other Passenger in Unenclosed Passenger or Cargo Area),  
54 (Trailing Unit),  
55 (Riding on Motor Vehicle Exterior (non-trailing unit)), or  
99 (Unknown).

21. If Body Type (V8) = 17 (Other Light Trucks (10,000 lbs. GVWR or less)), or 18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)) then Seating Position (P7) must have one of the following values:
- 11 (Front-Left),
  - 12 (Front-Middle),
  - 13 (Front-Right),
  - 21 (Second-Left),
  - 22 (Second-Middle),
  - 23 (Second-Right),
  - 50 (Sleeper Section of Cab (Truck)),
  - 51 (Other Passenger in Enclosed Passenger or Cargo Area),
  - 52 (Other Passenger in Unenclosed Passenger or Cargo Area),
  - 53 (Other Passenger in Passenger or Cargo Area Unknown if Enclosed or Unenclosed),
  - 54 (Trailing Unit),
  - 55 (Riding on Motor Vehicle Exterior (non-trailing unit)), or
  - 99 (Unknown).
22. If Traffic Control Device Type (V17) equals any of the following values:
- 3 (Traffic Control Signal),
  - 4 (Flashing Traffic Control Signal),
  - 5 (School Zone Sign/Device),
  - 6 (Stop Sign),
  - 7 (Yield Sign),
  - 8 (Warning Sign), or
  - 9 (Railway Crossing Device)
- then Traffic Control Device Status (V17) must not = 88 (Not Applicable).
23. If Traffic Control Device Status (V17) has any of the follow values
- 1 (No),
  - 2 (Yes),
  - 3 (Missing), or
  - 99 (Unknown)
- then Traffic Control Device Type (V17) must not = 1 (No Control Device).
24. If Traffic Control Device Type (V17) = 1 (No Control Device) then Traffic Control Device Status (V17) must = 88 (Not Applicable).
25. If Traffic Control Device Status (V17) = 88 (Not Applicable) then Traffic Control Device Type (V11) must = 1 (No Control Device).
26. Motor Vehicle Action (V18) must not = 12 (Parked) or 13 (Stopped in Traffic) for every vehicle involved in the crash.
27. If Damaged Areas (V19) = 00' (None) then Towed (V24) must not = 1 (Towed Due to Disabling Damage).
28. If Towed (V24) = 1 (Towed Due to Disabling Damage) then Damaged Areas (V19) must not = 00' (None).

29. If Non-Motorist Person Type (P4) has a value equal to any of the following:  
 3 (Pedestrian),  
 4 (Other Pedestrian),  
 5 (Bicyclist),  
 6 (Other Cyclist),  
 8 (Occupant of a Non-Motor Vehicle Transportation Device), or  
 9 (Unknown type of Non-Motorist)  
 then the following elements must contain non-null values:  
 Non-Motorist Action/Circumstances Prior to Crash (P23),  
 Non-Motorist Action/Circumstances at Time of Crash (P24),  
 Non-Motorist Location at Time of Crash (P25),  
 Non-Motorist Safety Equipment (P26), or  
 Vehicle Number Striking Non-Motorist (P27)
30. If any of the following elements contain a value:  
 Non-Motorist ID (P22),  
 Non-Motorist Action/Circumstances Prior to Crash (P23),  
 Non-Motorist Action/Circumstances at Time of Crash (P24),  
 Non-Motorist Location at Time of Crash (P25),  
 Non-Motorist Safety Equipment (P26), or  
 Vehicle Number Striking Non-Motorist (P27)  
 then Non-Motorist Person Type (P4) must contain one of the following values:  
 3 (Pedestrian),  
 4 (Other Pedestrian),  
 5 (Bicyclist),  
 6 (Other Cyclist),  
 7 (Occupant of a Motor Vehicle Not in Operation),  
 8 (Occupant of a Non-Motor Vehicle Transportation Device), or  
 9 (Unknown type of Non-Motorist).
31. If Injury Status (P5) = 'K' (Fatal Injury) for any involved persons, then Crash Severity (DOT5) must contain a value of 'K' (Fatal Injury).
32. If Injury Status (P5) for any involved persons contains a value of:  
 A (Suspected Serious Injury),  
 B (Suspected Minor Injury), or  
 C (Possible Injury)  
 then Crash Severity (DOT5) must = 'K' (Fatal Injury) or 'A' (Injury).
33. If Injury Status (P5) = 'O' (No Apparent Injury) for all involved persons, then Crash Severity (DOT5) must = 'O' (Property Damage Only).
34. If Seating Position (P7) = 11 (Front-Left) then Restraint System (P8) must not contain any of the following values:  
 5 (Child Restraint System Forward Facing),  
 6 (Child Restraint System Rear Facing),

- 7 (Booster Seat), or
  - 8 (Child Restraint Type Unknown).
35. If Seating Position (P7) = 50 (Sleeper Section of Cab (Truck)) then Body Type (V8) must be equal to one of the following values:
- 17 (Other Light Trucks (10,000 lbs. GVWR or less)),
  - 18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)), or
  - 97 (Other).
36. If Seating Position (P7) any of the following values:
- 50 (Sleeper Section of Cab (Truck)),
  - 54 (Trailing Unit), or
  - 55 (Riding on Motor Vehicle Exterior (non-trailing unit)),
- then Restraint System (P8) must equal one of the following values:
- 0 (None Used-Motor Vehicle Occupant),
  - 88 (Not Applicable),
  - 97 (Other), or
  - 99 (Unknown).
37. If Restraint System (P8) is not 88 (Not Applicable) and Helmet Use (P8) does not contain a value then Body Type (V8) must equal one of the following values:
- 1 (Passenger Car),
  - 2 ((Sport) Utility Vehicle),
  - 3 (Passenger Van),
  - 4 (Cargo Van (<10,000 lbs. GVWR)),
  - 5 (Pickup),
  - 6 (Motor Home),
  - 7 (School Bus),
  - 8 (Transit Bus),
  - 9 (Motorcoach),
  - 10 (Other Bus),
  - 13 (Low Speed Vehicle),
  - 14 (Golf Cart),
  - 17 (Other Light Trucks (10,000 lbs. GVWR or less)),
  - 18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)), or
  - 97 (Other).

38. If Ejection (P10) = 88 (Not Applicable) then Body Type (V8) must have one of the following values:
  - 11 (Motorcycle),
  - 12 (Moped),
  - 13 (Low Speed Vehicle),
  - 14 (Golf Cart),
  - 15 (All Terrain Vehicle (ATV)),
  - 16 (Snowmobile), or
  - 97 (Other).
  
39. If Driver Actions (P14) = 8 (Improper Turn) then Motor Vehicle Action (V18) must have one of the following values:
  - 6 (Turning Right),
  - 7 (Turning Left), or
  - 8 (Making a U-Turn).
  
40. If Driver Actions (P14) = 09 (Improper Backing) then Motor Vehicle Action (V18) must = 3 (Backing).
41. If Driver Actions (P14) = 10 (Improper Passing) then Motor Vehicle Action (V18) must = 5 (Overtaking/Passing Motor Vehicle) or (Overtaking/Passing Cyclist).
42. If Alcohol Test Status (P19) = 3 (Test Given) or 2 (Test Refused) then Type of Alcohol Test (P19) cannot be blank or 88 (Not Applicable).
43. If Type of Alcohol Test (P19) contains a value other than 88 (Not Applicable) then Alcohol Test Status (P19) must = 3 (Test Given) or 2 (Test Refused).
44. If Drug Test Status (P21) = 3 (Test Given) then Type of Drug Test (P21) is a required field.
45. If Type of Drug Test (P21) contains a value then Drug Test Status (P21) must = 3 (Test Given) or 2 (Test Refused).
46. If PersonType (P4) = 1 (Driver) then the SeatingPosition (P7) cannot indicate a row greater than 1.
47. The value of the PersonID field for each person must be unique.
48. The value of the VehicleID field for each vehicle must be unique.
49. If a nonmotorist is classified as a bicyclist, the bicycle appendix data must be completed.
50. The PersonType (P4) in the Driver section must be 1 (Driver).
51. DISABLED: The PersonType (P4) in the Passenger and BusPassenger section must be either 2 (Passenger) or 7 (Occupant of a Motor Vehicle Not in Operation).
52. The ejection status (P10) cannot have a value of 88 (Not Applicable) if the vehicle type has an enclosed passenger compartment.
53. If the vehicle type is a bus, the passengers must be in the BusPassenger section.
54. If TypeOfIntersection (C17) is Not at Intersection (01) or Unknown (99), then distance, units, direction, and name of nearest intersecting road, town line, or mile marker must be specified.
55. If CountOfMotorVehicles (DOT65) = 1 and there are no bicycles, then First Harmful Event (C7) must not be 14 (Motor Vehicle in Operation) or 15 (Parked Motor Vehicle).

56. Most Harmful Event for this Motor Vehicle (V21) must be included in at least one Sequence of Events (V20) for each vehicle involved in the crash.
57. The value of Weather Condition (C11) cannot be blank or 88 (Not Applicable) for all occurrences.
58. The value of Contributing Circumstances, Environmental (C14) cannot be blank or 88 (Not Applicable) for all occurrences.
59. The value of Contributing Circumstances, Road (C15) cannot be blank or 88 (Not Applicable) for all occurrences.
60. The value of Sequence of Events (V20) cannot be blank or 88 (Not Applicable) for all occurrences unless Vehicle Unit Type (V2) is 02 (Parked Motor Vehicle), 04 (Non-Collision Vehicle), or 99 (Unknown).
61. The value of Contributing Circumstances, Vehicle (V25) cannot be blank or 88 (Not Applicable) for all occurrences unless Vehicle Unit Type (V2) is 02 (Parked Motor Vehicle), 04 (Non-Collision Vehicle), or 99 (Unknown).
62. The value of Damaged Areas (V19) cannot be blank or 88 (Not Applicable) for all occurrences.
63. The value of Driver Actions (P14) cannot be blank or 88 (Not Applicable) for all occurrences.
64. The value of Non-Motorist Action/Circumstances at Time of Crash (P24) cannot be blank or 88 (Not Applicable) for all occurrences.
65. The value of Non-Motorist Safety Equipment (P26) cannot be blank or 88 (Not Applicable) for all occurrences.
66. The value of Condition at Time of Crash (P17) cannot be blank or 88 (Not Applicable) for all occurrences.
67. The crash must contain at least one vehicle.
68. The Crash Date (C3) must be prior to the current date.
69. The Approval Date (DOT14) must be prior to the current date.
70. If CountOfMotorVehicles (DOT65) = 1 and there are no bicycles, then no Sequence of Events (V20) can be 22 (Motor Vehicle in Motion) or 23 (Parked Motor Vehicle).
71. If CountOfMotorVehicles (DOT65) = 1 and there are no bicycles, then Manner of Impact (C9) must be blank or 88 (Not Applicable).
72. NameOfRoadwayOnWhichVehicleWasTraveling (DOT45) must be included unless VehicleWasNotOnRoadway is true.
73. If IsCrashRelatedToAWorkZone (C19) = yes, then LocationOfCrashRelativeToWorkZone cannot be blank or 88.
74. If IsCrashRelatedToAWorkZone (C19) = yes, then TypeOfWorkZone cannot be blank or 88.
75. If IsCrashRelatedToAWorkZone (C19) = yes, then WorkerPresence cannot be blank or 88.
76. If IsCrashRelatedToAWorkZone (C19) = yes, then LawEnforcementPresence cannot be blank or 88.
77. If the vehicle is not a bicycle, then VehicleBodyType (V18) must be indicated.
78. If PersonType (P4) is driver or passenger, then either NonBusSeatingPosition or BusSeatingPosition (P7) is required.
79. If PersonType (P4) is driver or passenger, then RestraintSystem (P8) is required.
80. If PersonType (P4) is driver or passenger, then HelmetUse (P8) is required.
81. If PersonType (P4) is driver or passenger, then InjuryStatus (P5) is required.

82. If PersonType (P4) is driver or passenger, then TransportedToFirstMedicalFacilityBy (P28) is required.
83. DISABLED: If PersonType (P4) is driver or passenger, then EjectionStatus (P10) is required.
84. DISABLED: If PersonType (P4) is driver or passenger, then AirbagDeployment (P9) is required.
85. If PersonType (P4) is driver or non-motorist, then ConditionOfPersonAtTimeOfCrash (P17) is required.
86. If PersonType (P4) is driver or non-motorist, then ActionTakenByOfficer (DOT24) is required.
87. If PersonType (P4) is driver or non-motorist, then AlcoholTestStatus (P19) is required.
88. If PersonType (P4) is driver or non-motorist, then TypeOfAlcoholTest (P19) is required.
89. If PersonType (P4) is driver or non-motorist, then DrugTestStatus (P21) is required.
90. If PersonType (P4) is driver or non-motorist, then TypeOfDrugTest (P21) is required.
91. DISABLED: If PersonType (P4) is driver, then DriversLicenseIssuedBy (DOT23) is required.
92. DISABLED: If PersonType (P4) is driver, then LicenseNumber (P12) is required.
93. DISABLED: If PersonType (P4) is driver, then License Class (P12) is required.
94. DISABLED: If PersonType (P4) is driver, then CommercialDriverLicense (P12) is required.
95. DISABLED: If PersonType (P4) is driver, then Endorsements (P12) is required.
96. If PersonType (P4) is driver, then SpeedingRelated (P13) is required.
97. If PersonType (P4) is driver, then DriverActions (P14) is required.
98. If PersonType (P4) is driver, then DriverDistractedBy (P16) is required.
99. If PersonType (P4) is non-motorist, then NonMotoristActionOrCircumstancesPriorToCrash (P23) is required.
100. If PersonType (P4) is non-motorist, then ToOrFromSchool (P23) is required.
101. If PersonType (P4) is non-motorist, then NonMotoristActionOrCircumstancesAtTimeOfCrash (P24) is required.
102. DISABLED: If PersonType (P4) is non-motorist, then NonMotoristLocationAtTimeOfCrash (P25) is required.
103. If PersonType (P4) is non-motorist, then NonMotoristSafetyEquipment (P26) is required.
104. DISABLED: If PersonType (P4) is non-motorist, then NonMotoristDistractedBy (DOT31) is required.
105. VehicleAction (V18) is required.
106. VehicleDamage (V19) InitialContactPoint is required.
107. VehicleDamage (V19) DamagedAreas is required.
108. VehicleDamage (V19) ExtentOfVehicleDamage is required.
109. RoadwayAlignment (V16) is required.
110. RoadwayGrade (V16) is required.
111. TrafficControlDevice (V17) DeviceType is required.
112. TrafficControlDevice (V17) DeviceStatus is required.
113. SpecialFunctionOfVehicleInOperation (V10) is required.
114. EmergencyVehicleUse (V11) is required.
115. IsCrashRelatedToAWorkZone (C19) is required.

## Warning Rules

The following describes conditions which should alert the user of suspicious data. The DOT highly recommends incorporating these rules into any software used to electronically collect crash data.

1. The First Harmful Event (C7) has a value of 10 (Pedalcycle/Pedalcyclist) although no involved persons have a value for Non-Motorist Person Type (P4) that is either 5 (Bicyclist), or 6 (Other Cyclist).
2. The First Harmful Event (C7) = 12 (Railway Vehicle (train, engine)) although Crash Specific Location (C16) does not contain the value of 6 (Railway Grade Crossing).
3. The value of Weather Condition (C11) is one of the following:
  - 5 (Sleet or Hail),
  - 6 (Freezing Rain/Drizzle),
  - 7 (Snow), or
  - 8 (Blowing Snow)although the month that the crash occurred in May, June, July, August, or September.
4. The Trafficway Surface Conditions (C13) = 1 (Dry) although the Weather Condition (C11) contains one of the following values:
  - 4 (Rain),
  - 5 (Sleet or Hail),
  - 6 (Freezing Rain/Drizzle),
  - 7 (Snow), or
  - 8 (Blowing Snow).
5. The value of Trafficway Surface Conditions (C13) contains one of the following
  - 3 (Snow),
  - 4 (Slush) or
  - 5 (Ice/Frost)although the month that the crash occurred in May, June, July, August, or September.
6. The Crash Date indicates a month of December, January, or February and the Light Conditions (C12) has a value of 1 (Daylight) although (C3) Crash Time is between 18:30 and 6:15. Note: dawn in December may be as early as 7:00 am and sunset comes as late as 5:45 in February.
7. The Crash Date indicates a month of March or November and the Light Conditions (C12) = 1 (Daylight) although (C3) Crash Time is between 20:00 and 05:30. Note: Switches between Daylight Savings Time and Standard Time usually occur in early March and early November. Also, dawn in March may be as early as 6:15 am and sunset comes as late as 7:15 pm in November.

8. The Crash Date indicates a month of April, May, June, July, August, September, or October and the Light Conditions (C12) = 1 (Daylight) although (C3) Crash Time is between 21:15 and 05:00. Note: dawn in April may be as early as 5:45 am and sunset comes as late as 8:30 in June.
9. The Crash Date indicates a month of December, January, or February and the Light Conditions (C12) has a value of 2 (Dawn) although (C3) Crash Time is not between 6:00 EST and 8:00. Note: dawn in February may be as early as 6:30 am and dawn comes as late as 7:30 in December.
10. The Crash Date indicates a month of March or November and the Light Conditions (C12) has a value of 2 (Dawn) although (C3) Crash Time is not between 5:45 and 8:00. Note: dawn in March may be as early as 6:15 am and dawn comes as late as 7:30 am in November.
11. The Crash Date indicates a month of April, May, June, July, August, September, or October and the Light Conditions (C12) has a value of 2 (Dawn) although (C3) Crash Time is not between 4:45 and 8:00. Note: dawn in June may be as early as 5:15 am and as late as 7:30 am in October.
12. The Crash Date indicates a month of December, January, or February and the Light Conditions (C12) has a value of 3 (Dusk) although (C3) Crash Time is not between 3:45 pm and 6:15 pm. Note: dusk in December may be as early as 4:15 pm and dusk comes as late as 5:45 pm in February.
13. The Crash Date indicates a month of March or November and the Light Conditions (C12) has a value of 3 (Dusk) although (C3) Crash Time is not between 4:15 pm and 7:45 pm. Note: dusk in November may be as early as 4:45 pm and dusk comes as late as 7:15 pm in March.
14. The Crash Date indicates a month of April, May, June, July, August, September, or October and the Light Conditions (C12) has a value of 3 (Dusk) although (C3) Crash Time is not between 5:15 pm and 9:00 pm. Note: dusk in October may be as early as 5:45 pm and as late as 8:30 pm in June.
15. The Crash Date indicates a month of November, December, January, February, or March and Light Conditions (C12) equals one of the following values:
  - 4 (Dark - Lighted),
  - 5 (Dark - Not Lighted), or
  - 6 (Dark Unknown Lighting)although (C3) Crash Time is between 08:00 and 15:00.
16. The Crash Date indicates a month of April, May, June, July, August, September, or October and Light Conditions (C12) equals one of the following values:
  - 4 (Dark - Lighted),
  - 5 (Dark - Not Lighted), or
  - 6 (Dark Unknown Lighting)although (C3) Crash Time is between 07:00 and 16:00.

17. The Body Type (V8) contains one of the following values

- 12 (Moped),
- 13 (Low Speed Vehicle),
- 14 (Golf Cart),
- 15 (All Terrain Vehicle (ATV)), or
- 16 (Snowmobile)

although the driver's age, as derived from P2 (Date of Birth), is less than 3 years.

18. The Body Type (V8) contains one of the following values:

- 1 (Passenger Car),
- 2 ((Sport) Utility Vehicle),
- 3 (Passenger Van),
- 4 (Cargo Van (<10,000 lbs. GVWR)),
- 5 (Pickup Truck),
- 6 (Motor Home),
- 7 (School Bus),
- 8 (Transit Bus),
- 9 (Motorcoach),
- 10 (Other Bus),
- 11 (Motorcycle),
- 17 (Other Light Trucks (10,000 lbs. GVWR or less)),
- 18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)), or
- 97 (Other)

although the driver's age, as derived from P2 (Date of Birth), is less than 16 years.

19. If Body Type (V8) equals any of the following values

- 1 (Passenger Car)
  - 2 ((Sport) Utility Vehicle),
  - 3 (Passenger Van),
  - 4 (Cargo Van (<10,000 lbs. GVWR)),
  - 5 (Pickup),
  - 6 (Motor Home),
  - 7 (School Bus),
  - 8 (Transit Bus),
  - 9 (Motorcoach),
  - 10 (Other Bus),
  - 17 (Other Light Trucks (10,000 lbs. GVWR or less)), or
  - 18 (Medium/Heavy Trucks (more than 10,000 lbs. GVWR)),
- and Helmet Use (P8) contain a value other than 88 (Not Applicable).

20. DISABLED: If Body Type (V8) has a value equal to any of the following

- 11 (Motorcycle)

- 12 (Moped)
- 13 (Low Speed Vehicle)
- 14 (Golf Cart)
- 15 (All Terrain Vehicle (ATV))
- 16 (Snowmobile)

and Ejection (P10) does not have a value of 88 (Not Applicable).

21. If Restraint System (P8) = 88 (Not Applicable) and Helmet Use (P8) contains a value and Body Type (V8) is not one of the following values:
  - 11 (Motorcycle),
  - 12 (Moped),
  - 13 Low Speed Vehicle),
  - 14 (Golf Cart),
  - 15 (All Terrain Vehicle (ATV)),
  - 16 (Snowmobile), or
  - 97 (Other).
22. If the number of characters in Narrative (DOT9) is less than 100.
23. If either the value of Longitude or the value of Latitude, under C6 Crash Location, is not provided.
24. The ReportRevisionStatus (DOT17) is set to True, but a matching case identifier was not found in the database.
25. The ReportRevisionStatus (DOT17) is not set to True, but a matching case identifier was found in the database.
26. The value of Witness Statement Source on the Witness Appendix cannot be blank or 88 (Not Applicable) for all occurrences.
27. The crash should contain at least one driver.
28. If First Harmful Event (C7) = 17 (Work Zone/Maintenance Equipment) then Work Zone (C19) must = 2 (Yes) and Work Zone Location (C19), Work Zone Type (C19), Workers Present (C19) and Enforcement Present (C19) are required fields and their values cannot be 88 (Not Applicable).

## Requirements for Electronic Submission of Crash Data

There are several important requirements for submitting crash data in electronic form.

1. Each crash data file shall contain only one crash report.
2. Crash data will be submitted electronically as XML files that conform to the XML schema defined by the Connecticut DOT. Any XML file that does not conform to the XML schema will be rejected.
3. The name of each file submitted should be unique and consist of the town name, agency ID, and case number. For example, in the file name WestHartford\_CT0015501\_111-222-333.xml, WestHartford is the town name, CT0015501 is the agency ID, and 111-222-333 is the case number.
4. File submissions will be made via Secure FTP to ftp://sfile.ct.gov and each agency transmitting files will be provided with unique credentials. Please contact the Connecticut Department of Transportation Office of Information Systems to obtain these credentials.

*Please note that Secure FTP is an enhanced, secure form of the FTP protocol that is not always accessible with traditional FTP client software. Agencies submitting files to the DOT Secure FTP folder may need to obtain client software that can utilize Secure FTP. One such client software is WinSCP, which may be obtained for free from <http://winscp.net>.*

5. When a file is processed for submission by the Connecticut DOT, a log file with the same name will be placed in the same FTP folder as the data file. If the data is processed successfully, the XML file will be removed. If there are errors, an email notification will be sent to any address specified in the TransmitterEmailAddress field in the XML file, as well as any transmitter technical contact email addresses in our database.
6. Beginning January 1, 2015, DOT will be implementing for the first time a systematic process requiring the submission of electronic crash data on a mutually agreed upon schedule. This will enable the Department to better manage and address case file errors and omissions without major disruption to the acceptance and processing of crash data.
7. Each agency must be certified before crash data can be submitted electronically. The DOT must be contacted and test files submitted for verification of the process.

## Contact Information

### Technical

**Rory Belanger**

DOT Office of Information Services  
860-594-3535  
Rory.Belanger@ct.gov

### Connecticut Uniform Police Crash Report Design

**Eric Jackson, Ph.D.**

Director, Connecticut Transportation Safety Research Center  
860-486-8426  
e.Jackson@enr.uconn.edu

**Mario Damiata**

UCONN Transportation Safety Research Center  
860-595-2024  
Mario.Damiata@ct.gov

### Acceptance and Warning Rules

**Kerry Ross**

DOT Office of Crash Data Analysis  
860-594-2087  
Kerry.Ross@ct.gov

**Eugene Interlandi**

DOT Office of Crash Data Analysis  
860-594-2096  
Eugene.Interlandi@ct.gov

### Project Management

**Maribeth Wojenski**

Bureau of Policy and Planning  
860-594-2045  
Maribeth.wojenski@ct.gov

### Website

Crash Data Collection Initiatives and Programs  
<http://www.ct.gov/dot/crashinitiative>