# Accident Records Database Coding and Data Entry Procedures

#### BACKGROUND INFORMATION

Section 17C-4 of the West Virginia State Code requires that any motor vehicle accident, which occurs on a public highway in the state and results in bodily injury to or death of any person or total property damage to an apparent extent of five hundred dollars or more, be reported to the West Virginia Division of Motor Vehicles (DMV), within twenty four hours of the completion of the investigation. In order to provide a means with which to collect the required information, the Department of Transportation has developed the West Virginia Uniform Traffic Crash Report Form DMV-17-F (hereafter referred to as UTCR). Whenever a traffic accident occurs, the investigating officer completes a UTCR and forwards the report to DMV, who in turn forwards the form to the West Virginia Division of Highway's for processing. The following information describes the method of extracting data from the UTCR to the Accident Code Form DT-58, for entry into the West Virginia Traffic Records Database.

### TRANSCRIPTION PROCESS

The UTCR has been numerically coded so that each data field can be correlated with the DT-58 Form. The following details the process of coding an accident for entry into the database.

### CODING

1. RECORD NUMBER: The record number for each report will be generated

automatically.

CODED BY: Enter or select the initials of the person coding the

report.

3. ACCIDENT DATE: Enter or select the date on which the accident

occurred, in the numeric format of mm-dd-yy. Verify the validity of the date, being alert to dates that are obviously in error, such as future dates or dates at the beginning of a year with the previous year's date. If date is not legible, use the date of completion, which appears at the bottom of page

two of the UTCR.

EXAMPLE: UTCR: June 5,2002 DT-58: 06-05-02

# **Location Information Table**

Field Name	Data Type	Field Size	Description
LOC_SER_NO	Text	9	Accident Record Number
LOC_DATE	Date/Time		Date of Accident
LOC_DAY	Text	1	Day of Week
LOC_TIME	Text	4	Time of Accident
LOC_ACCD_TYPE	Text	1	Accident Type 1
LOC ACCD TYPE2	Text	1	Accident Type 2
LOC REPT BY	Text	1	Accident Reported By
LOC_COUNTY	Text	2	County
LOC CITY	Text	3	City
LOC HIGHWAY CLASS	Text	1	Highway Classification
LOC RTE1	Text	6	Route
LOC RTE2	Text	6	Intersecting Route
LOC ST1	Text	20	Street
LOC ST2	Text	20	Intersecting Street
LOC MAX SPEEDI	Text	1	Max Speed Posted/ Not
LOC MAX SPEED2	Text	I	Max Speed Rt 2 P/N-P
LOC RAMP CODE	Text	1	Ramp (for Interstate)
LOC RDWAY CHAR	Text	1	Roadway Characteristics
LOC REL RDWAY	Text	1	Loc of 1st Impact
LOC CNTL ACC	Text	1	Loc on Control Access Hway
LOC CNTL ACC DIR	Text	1	Control Access Direction
LOC DIST FT	Text	4	Distance from Intersection
LOC DIR	Text	i	Direction from Intersection
LOC SPEC REF	Text	1	Special Reference
LOC MILE POST	Text	5	Milepost
LOC TOLRNCE	Text	4	Tolerance of Milepost
LOC LIGHT	Text	1	Lighting Condition
LOC WEATHR	Text	1	Weather Condition
LOC RDWAY SURF	Text	1	Roadway Surface
LOC RDWAY TYPE	Text	1	Roadway Type
LOC TRAF CNTL DEVC	Text	1	Traffic Control
LOC CNTL FUNC	Text	1	Traffic Control Functioning
LOC MANNR COL	Text	2	Manner of Collision
LOC LANES MRKD	Text	1	Lanes Marked
LOC NO LANES	Text	1	Number of Lanes
LOC POLICE AGENCY	Text	5	Reporting Agencies
LOC NUM VEHICLES	Integer		Number of Vehicles
LOC TOTAL FATALITY	Integer		Total Fatalities
LOC TOTAL INJURIES	Integer		Total Injuries
LOC ON PAV CD	Text	1	Total illimics
LOC EMS RUNI	Text	6	EMS Number
LOC EMS RUN2	Text	6	EMS Number
LOC EMS RUN3	Text	6	EMS Number
LOC PROPERTY OWNER	Text	1	
			Other Damaged Prop Owner
LOC_SPEED1	Text	2	Posted Speed Limit
LOC_SPEED2	Text	2	Posted Speed Limit Rt2

4. DAY OF WEEK:

Select the day of the week on which the accident occurred. If the day is not specified on the UTCR, determine the correct day of week by using the date of the accident and enter accordingly.

EXAMPLE:

UTCR: Sunday

DT-58: 7

5. TIME OF DAY:

Enter the time at which the accident occurred, using military notation in the range 0001 through 2400. Convert times not reported as such, to military time. Use the conversion table beginning on page 13 for assistance.

Example:

UTCR: 12:01 a.m. (midnight)

DT-58: 0001

6. REPORTED BY:

Select the type of reporting agency marked on the UTCR. If no code has been marked, refer to the Police Agency code entered at the bottom of Page 2 of the UTCR and use the following procedure to select the appropriate reporting agency.

- If the code begins with "SP" code as 1 for State Police.
- If the code is numeric, the last two digits are not "00", and step 4 does not apply, code as 2 for City Police.
- If the code is numeric and the last two digits are "00", code as 3 for Sheriff's Department.
- For any other agency, such as Campus Police or the Department of Natural Resources (DNR), code as 4 for Other
- 7. **REPORTING AGENCY:** Select the O.R.I. Number (or corresponding reporting agency) listed on page 2 of the UTCR.
- 8. REPORTING AGENCY REFERENCE: If the reporting agency has written any sort of reference number, specific to their agency on the UTCR, enter it here.
- COUNTY: Enter or select the appropriate county listed on the UTCR.

# Vehicle Information

Field Name	Data Type	Field Size	Description
VEH_SER_ID	Text	9	Accident Record Number
VEH_VEHICLE_NO	Text	2	Vehicle Number
VEH_VEH_OWNER	Text	15	Vehicle Owner's Last Name
VEH_ZIP	Text	9	Vehicle Owner's Zip Code
VEH_VEH_ST	Text	2	Vehicle's License State
VEH_PLATE_NO	Text	9	Vehicle Plate Number
VEH_VIN_NO	Text	20	Vehicle VIN Number
VEH_VEH_STYLE	Text	2	Vehicle Body Style
VEH_VEH_YEAR	Text	4	Vehicle Model Year
VEH_VEH_PLATE_CLAS	Text	3	Vehicle Plate Class
VEH_VEH_DIR	Text	1	Vehicle Direction of Travel
VEH_ON_RTE_NUM	Text	1	Vehicle Traveling on Rt 1 or 2
VEH_DRIVEABLE	Text	1	Vehicle Driveable
VEH_INSURANCE	Text	1	Vehicle Compulsory Insurance
VEH_TOWED	Text	1	Vehicle Towed
VEH_EXTENT_DAMAGE	Text	1	Vehicle Extent Damaged
VEH_IMPACT_POINT	Text	2	Point of Impact
VEH_CIRCUM1	Text	2	Contributing Circumstances
VEH_CIRCUM2	Text	2	Contributing Circumstances
VEH_CIRCUM3	Text	2	Contributing Circumstances
VEH_TOTAL_OCUPANTS	Integer		Total Occupants of Vehicle
VEH_FIRE_OCC	Text	1	Fire Occuarance
VEH_HAZ_CARGO	Text	1	Vehicle Carrying Haz. Mat.
VEH_VSN_OBSCURED	Text	2	Vision Obscured By
VEH_SEQ_EVENTS1	Text	2	Seq. Event 1
VEH_SEQ_EVENTS2	Text	2	Seq. Event 2
VEH_SEQ_EVENTS3	Text	2	Seq. Event 3
VEH_SEQ_EVENTS4	Text	2	Seq. Event 4
VEH_MOST_HARMFUL	Text	2	Most Harmful Event

#### 10. CITY OR TOWN:

If the NEAR box is marked, do not enter or select a city code in this field. If the IN box is marked, verify that the county, route, and milepost location of the accident corresponds to a location shown on the straight-line logs to be located within a city or town. If the UTCR says the accident occurred in the city, but the straight-line logbook shows it is outside of the city limits, the accident must be recorded outside of the city, therefore leave this field empty and move on to the next field. If the location listed on the UTCR is shown on the straight-line logs as being within a city's corporate limits, select the city or town from the list.

#### 11. HIGHWAY CLASS:

This information may actually change from what is written on the UTCR. Using the straight-line logbooks, verify that what has been marked is correct. Be cautious of County Routes marked as West Virginia Routes and other errors. Also watch for overlapping routes and be sure to use the route designation used in the straight-line logbooks. Remember, just because an accident occurs within the city limits, does not mean it occurred on a city street. The only time city street should be marked is if the route is not on the West Virginia highway system. Accidents occurring on WVDOH owned right of way such as rest areas, entrance and exit ramps, and truck escape ramps should be coded for the highway classification, which they are connected to. Private property, parking lots, unknown locations, alleys, and driveways are all coded as Other (6).

#### 12. ROUTE 1:

Determining the correct six-digit code for the route information may be the most difficult step in the coding an accident, however, it is important to keep in mind that this information is vital to locating and analyzing any accident. The following information should assist in correctly coding the route location of any accident. It is strongly suggested that the entire section be closely reviewed before selecting the route code as there are many different rules and exceptions to rules in this coding process.

## **Driver Information**

Field Name	Data Type	Field Size	Description
DRV_SER_NO	Text	9	Accident Record Number
DRV_VEH_NO	Text	2	Vehicle Number
DRV_DRIVER_LAST	Text	15	Driver's Last Name
DRV_DRIVER_FIRST	Text	12	Driver's First Name
DRV_DRIVER_MID	Text	1	Driver's Middle Initial
DRV_DRIVER_SUFFIX	Text	3	Driver's Suffix
DRV_DRIVER_ZIP	Text	9	Driver's Zip Code
DRV_DOB	Date/Time		Driver's Date of Birth
DRV_SSN	Text	9	Driver's Social Security #
DRV_LIC_NO	Text	17	Driver's License Number
DRV_LIC_TYPE	Text	1	Driver's License Type
DRV_LIC_ST	Text	2	Driver's License State
DRV_DRIVER_COND	Text	1	Driver Condition
DRV_TEST_GIVEN	Text	1	Sobriety Test Given
DRV_TYPE_TEST	Text	111	Type of Test Given
DRV_TEST_RESULTS	Text	2	Sobriety Test Results
DRV_DRIVER_ACTION	Text	2	Driver Action

### Coding Single Number Routes (Interstate, US, WV, and CR)

All Interstate, US, WV, and County Routes not having an auxiliary designation, such as Alternate, Business, etc., have a route code consisting of the route number preceded by as many zeros as necessary to fill all six digits of the code.

Route	Code As
Interstate 64	000064
US 60	000060
WV2	000002
CR 360	000360

### Coding County Routes Consisting of a Number Over a Number

County Routes, which consist of a number over a number, are written with the top number filling the first three spaces and the bottom number filling the last three spaces, to obtain a complete six-digit code.

County Route	Code As
CR 119/31	119031
CR 5/11	005011
CR 18/21	018021

### Coding Routes with Auxiliary Designations

If a route has one of the following designations, insert the appropriate code letter in the **second** position of the six-digit code.

Auxiliary Designation	Code	Code As
Alternate	A	0A0003
Business	B	0B0003
Emergency	M	0M0003
Truck	T	0T0003
Spur	P	0P0003
Expressway	X	0X0022
Loop	L	0L0060
Connector	C	0C0060
Turnpike	$TP^*$	0TP077
* Special Code Filling .	2nd & 3nd	<sup>1</sup> Positions

# Occupant Information Table

Field Name	Data Type	Field Size	Related Table
OCC_SER_NO	Text	9	Accident Record Number
OCC_VEH_NO	Text	2	Vehicle Number
OCC_PERSON_NO	Text	3	Person Number
OCC_SEX	Text	1	Gender of Occupant
OCC_AGE	Text	3	Age of Occupant
OCC_INJURY_CD	Text	1	Injury Severity of Occ
OCC_FIRST_AID_BY	Text	1	First Aid Performed By
OCC_SEATING_POS	Text	2	Seating Position
OCC_OCCUPANT_PROT	Text	1	Occupant Protection
OCC_EJECTED_CD	Text	1	Ejection
OCC_AIRBAG_CD	Text	1	Airbag Deployed
OCC_EXTRIC_CD	Text	1	Extricated
OCC_MED_TYPE	Text	1	Medical Transport
OCC_PED_CLOTH_CD	Text	1	Clothing Color
OCC_PED_ACTION_CD	Text	I	Pedestrian Action

### Coding Routes with Directional Designations

If a route has one of the following directional designations insert the appropriate code letter in the **third** position of the six-digit code.

Directional Designation	Code	Code As
Northbound	N	00N002
Southbound	S	00S002
Eastbound	E	00E002
Westbound	W	00W002

### Instructions for Coding Accidents when Route is Difficult to Determine

- If an accident occurs on a route with overlapping designations, then:
  - a) The route with the lowest coded highway classification takes precedence. That is to say, Interstate outranks US, US routes outrank WV routes, and WV routes outrank County Routes.
  - b) In the event that an accident occurs on overlapping routes with the same highway classification, the lowest numbered route takes precedence.
  - c) In the instance that the route numbers also would be equal, the route with the lowest alphabetical auxiliary code would have precedence.
  - d) If all of the above information is equal, then the route with the lowest alphabetical directional designation should be given preference.
- If an accident occurs within the confines of an intersection, the accident should be coded on the route with the lowest designation, using the rules listed above.
- 3. When trying to determine what route number on which to code an accident that occurred on overlapping or intersecting County Routes, single number routes have precedence over routes identified with a number over a number. In the case of two routes labeled by a number over a number, the route with the smallest top number receives preference. Otherwise, the above rules apply.

Examples: County Route 13 has preference over County Route 3/1. County Route 1 has preference over County Route 9/10.

### Following are several examples of routes and their correct codes.

Route	Code As
WV 14 Alternate	0A0014
US 119 Business, Eastbound	0BE119
US 2 Westbound	00W002
Turnpike - Interstate 77	0TP077
County Route 1	000001
County Route 36	000036
County Route 5/11	005011
County Route 18/119	018119
County Route 219/4	219004

#### 13. STREET 1:

The Street 1 field is a descriptive field, which should only be utilized to describe the location of an accident that occurs within a municipality, therefore, if the City field was not previously coded, the Street 1 field should be left blank. Whenever an accident is coded, as being within the city limits the Street 1 field is required. A municipal accident can occur either on a route that has a city street name, on a route with no street name, or on a city street that is not a route. The following are instructions for properly coding accidents occurring in each of these circumstances.

#### Municipal Accidents Occurring on a Route with a City Street Name

For instances when accident occurs on a route with a city street name, the Routel field should be coded as described above in #11. Before coding Street1, the straight-line logbooks should be consulted to determine whether or not a route has a city street name as well as to insure that both the route number and the street name coincide. If Routel and Street1 do not agree, try to reconcile them, keeping in mind that the information in Routel should receive preference over Street1 at all times. In the event that you are unable to match the route information with the street name given on the UTCR and you are unable to determine a more correct street name for the route at that particular location, treat the accident as a municipal accident occurring on a route without a city street name. Otherwise, Street1 should be coded as descriptively as possible using a twenty-character field and applying the following rules.

 The following abbreviations should be utilized when describing the type of street.

Street Type	Abbreviation
Avenue	Ave
Boulevard	Blvd
Drive	Dr
Heights	Hgts
Lane	Ln
Road	Rd
Street	St

2. All streets with numerical names should be coded numerically.

Example: Twenty-seventh Street should be 27th St

Directional references for streets should be coded according to the following information. However, street with directional names should not be abbreviated.

Directional Reference	Code As
North	N
South	S
East	E
West	W

# Municipal Accidents Occurring on a Route without a City Street Name

For instances when accident occurs on a route without a city street name, the Routel field should be coded as described above in #11. As Street1 is a required field when an accident occurs within a municipality, it should be coded as descriptively as possible using a twenty-character field and applying the following rules.

Highway Classification	Abbreviation
Interstate	I
US Route	US
WV Route	WV
County Route	CR
West Virginia Turnpike	WVTP
Harp Route	Harp

### Municipal Accidents Occurring on a City Street that is not a Route

In the event of an accident occurring on a city street that <u>is not</u> a state maintained route, highway classification 5 should be coded in step 10 above. Coding a 5 as the highway classification will allow Route1 in step 13 to be left blank. The twenty-digit Street1 code should then be written by following the rules listed above.

### Municipal Accidents Not Occurring on a Route or a City Street

For any municipal accident which occurred off the roadway (in a parking lot, alley driveway, etc.), enter "Private Property" in the Street1 field and make sure box 6 is marked in the Highway Classification field. Also, you may occasionally come across an accident report for which your cannot determine the route or street location from the data contained in either the location or descriptive sections of the UTCR, when this happens, "Unknown Location" should be entered in the Street1 field.

#### 14. ROUTE 2:

Route 2 is intended to assist in the location of intersection accidents and should only be coded for accidents occurring at or near (less than 250 feet from) an intersection. It should be coded according to the same rules as described for coding Route 1 in step 11, with one very important difference, the instructions for coding accidents when route is difficult to determine should be changed to the following:

#### Instructions for Coding Accidents when Route is Difficult to Determine

- If an accident occurs within the confines of an intersection, the second route for the accident should be coded on the route with the second lowest designation, using the rules listed below.
  - a) The route with the second lowest coded highway classification takes precedence. That is to say, Interstate outranks US, US routes outrank WV routes, and WV routes outrank County Routes.
  - b) In the event that an accident occurs on overlapping routes with the same highway classification, the second lowest numbered route takes precedence.
  - c) In the instance that the route numbers also would be equal, the route with the second lowest alphabetical auxiliary code would have precedence.

d) If all of the above information is equal, then the route with the second lowest alphabetical directional designation should be given preference.

#### 15. STREET 2:

Street2 is intended to assist in locating accidents that occur within a municipality and therefore, is a required element for all accidents occurring inside of corporate limits. As with Route 1 and Street1, Route2 and Street2 should coincide, otherwise preference should be given to Route2. The rules presented above in #12 should be followed when entering Street2 as well. As with Street1, if there is no Street 2 available or the accident occurred on private property the words "Unknown Location" or "Private Property" should be entered respectively.

16. SPEED LIMIT(1&2):

Code as stated on the UTCR, otherwise leave it blank.

17. POSTED / NOT POSTED (1&2): This field is intended to describe whether or not the speed limit was posted on the road on which the accident occurred. Enter P if Posted is checked on the UTCR, enter N if Not Posted is checked on the UTCR. otherwise leave it blank.

18. RAMP CODE:

If the accident occurred on a Controlled Access Facility, use the straight-line logbooks to determine the correct ramp code. Also, if an interstate accident involves a vehicle that was turning through the median enter ramp code X. For the time being, this code can only be entered for Route 1, so Ramp

#### 19. MILEPOST:

Using the information provided on the UTCR, use the straight-line logbooks to determine the milepost at which the accident occurred. The milepost field is a five-character field. The first three digits represent whole numbers, while the last two represent decimals. See the following examples:

Milepost	Code As
0.00	00000
0.05	00005
8.00	00800
27.94	02794
110.02	11002

If a milepost cannot be determined by using the straight-line logbooks, milepost must be calculated between two (2) known mileposts. This is done by calculating the difference in the two (2) known mileposts (subtracting the smallest from the largest), and dividing this number by two (2). If the calculated number is even use that number, otherwise add .01 to it. Finally, add that number to the smallest milepost. Use this number as the calculated milepost. The <u>number</u> you add to the smallest milepost will be your tolerance in step 19.

EXAMPLE: An accident occurs somewhere between County Route 3/2 and the Post Office, with no other information given.

County Route 3/2 is located at 3.01 US Post Office is located at 6.06.

To calculate a milepost for the accident:

- 1. 6.06 3.01 = 3.05
- 2.  $3.05 / 2 = 1.525 \sim 1.53$
- $3. \quad 1.53 + 3.01 = 4.54$
- 4.54 is your Calculated Milepost and 1.53 is your Tolerance.

If the accident occurred on a City Street or Private Property, leave the milepost blank.

#### 20. TOLERANCE:

A tolerance is an estimated distance, which indicates the accuracy of a milepost assigned to an accident. It is to be determined for each milepost accident using the following guidelines:

	If Location Is:	Tolerance:
1.	Found exactly in straight-line logbook.	0002
2.	Reference made on UTCR in tenths of a mile:	
	0.1 - 0.9  miles	0005
	1.0 – 2.9 miles	0010
	3.0 - 4.9  miles	0020
	5.0 – 9.9 miles	0030
	10.0 or more miles	0040
3.	Reference on UTCR is in approximate miles:	
	Less Than 1 Mile	0010
	I – 3 Miles	0020
	3 – 5 Miles	0030
	5 – 10 Miles	0040
	Over 10 Miles	0050

### Examples:

Location:	Tolerance:
150' East of Jack's Exxon	0002
About Half a Mile South of CR 6	0010
.8 Miles West of Wheeling City Limits	0005
4.2 Miles East of Wheeling City Limits	0020
Charleston in Front of Ponderosa	0002

21. FEET FROM REFERENCE: When the officer reports that an accident occurs near an intersection or some other reference point, mark the number of feet from that intersection. If the information is reported in miles, use the enclosed table to convert the data to feet.

#### 22. VEHICLE NUMBER:

Assign a number, beginning at 1, to each vehicle involved in the incident. Enter that number in this field. Since coding fields are provided for only ten (10) or fewer vehicles, the Special Instructions field should be utilized in the rare situation that greater than ten (10) vehicles were involved in the incident.

## 23. DRIVER SOBRIETY TEST:

24. VEHICLE STYLE: Select appropriate style code from the list.

25. VEHICLE PLATE CLASS: Select appropriate plate class from list.