

Transportation System Network (TSN)

TSAR REFERENCE CARD (AXR262)

CONTENTS

**COLLISION DEFINITION TABLE
HIGHWAY DEFINITION TABLE**

June 2022

COLLISION, HIGHWAY, AND OPTIONAL CRITERIA (Following fields must be Present)

Logic Level: Valid values 1-9. Fields with equal logic level considered to be parenthesized.

Field Sequence: Valid Values 1-9. Sequences fields within logic level.

And/Or: Valid values 'AND' or 'OR'. Denotes logical connector to be applied to previous field or logic level.

Field Code: Must be 3-digit numeric. Check code definition tables for field codes.

Field name: Field name and length of the field values, (Operand).

Operator:

- EQ - Equal (Limited to one value)
- NE - Not Equal
- GT - Greater Than
- LT - Less Than
- GE - Greater than or Equal
- LE - Less than or Equal
- BT - Between (inclusive and must contain only two field values)
- LIKE - (operator term not in use)
- IN - Include (one or more values)
- NOT IN - Not Include

Field Values: Check code definition tables for desired values. Must conform to the field length indicated and multiple values must be separated by commas.

COLLISION CODE DEFINITIONS

COLLISION SUMMARY FIELDS

110 SEVERITY (1)

F - Fatal
I - Injury
(Suspected Serious
Injury+Suspected Minor
Injury+Possible Injury)
P - Property Damage Only

115 SEVERITY 5 (1)

1 - Fatal Injury
2 - Suspected Serious Injury
3 - Suspected Minor Injury
4 - Possible Injury
0 - Property Damage Only
(added to TSN in June 2022)

120 COLLISION TIME (4)

HHMM 24 Hour Clock

508 FILE TYPE (1)

H - Highway
I - Intersection
R - Ramp

510 HOUR OF DAY (2)

00 - 12Mid
01 - 1 A.M.
02 - 2 A.M.
03 - 3 A.M.
04 - 4 A.M.
05 - 5 A.M.
06 - 6 A.M.
07 - 7 A.M.
08 - 8 A.M.
09 - 9 A.M.
10 - 10 A.M.
11 - 11 A.M.
12 - 12 Noon
13 - 1 P.M.
14 - 2 P.M.
15 - 3 P.M.
16 - 4 P.M.
17 - 5 P.M.
18 - 6 P.M.
19 - 7 P.M.
20 - 8 P.M.
21 - 9 P.M.
22 - 10 P.M.
23 - 11 P.M.
25 - Unknown

514 SIDE OF HIGHWAY (1)

N - Northbound
S - Southbound
E - Eastbound
W - Westbound

515 INTERS/RAMP COLLISION LOC (1)

1 - Ramp Intersection (Exit)
2 - Ramp
3 - Ramp Entry
4 - Ramp Area, Intersection Area
5 - In Intersection
6 - Outside Inters - Nonstate Rte
- - Does Not Apply

517 COMMON COLLISION NO (9)

NCIC Number/ Officer's Badge No.

518 REPORTING LEVEL (1)

1 - Below Reporting Level
2 - Above Reporting Level
< - Not Stated or Undetermined

519 PRIMARY COLLISION FACTOR (1)

1 - Influence of Alcohol
2 - Following Too Close
3 - Failure to Yield
4 - Improper Turn
5 - Speeding
6 - Other Violations
B - Improper Driving
C - Other Than Driver
D - Unknown
E - Fell Asleep
< - Not Stated

520 DAY OF WEEK (1)

1 - Sunday
2 - Monday
3 - Tuesday
4 - Wednesday
5 - Thursday
6 - Friday
7 - Saturday

521 WEATHER (1)

A - Clear
B - Cloudy
C - Raining
D - Snowing
E - Fog
F - Other
G - Wind
< - Not Stated

522 LIGHTING (1)

A - Daylight
B - Dusk/Dawn
C - Dark - Street Light
D - Dark - No Street Light
E - Dark - Inoperative Street Light
F - Dark - Not Stated
< - Not Stated

523 ROAD SURFACE (1)

A - Dry
B - Wet
C - Snow, Icy
D - Slippery
< - Not Stated

524 ROADWAY CONDITION (1)

A - Holes, Ruts
B - Loose Material
C - Obstruction on Road
D - Construction - Repair Zone
E - Reduced Road Width
F - Flooded
G - Other
H - No Unusual Condition
< - Not Stated

525 RIGHT OF WAY CONTROL (1)

A - Control Functioning
B - Control Not Functioning
C - Controls Obscured
D - No Controls Present
< - Not Stated

526 TYPE OF COLLISION (1)

A - Head-On
B - Sideswipe
C - Rear End
D - Broadside
E - Hit Object
F - Overturn
G - Auto-Pedestrian
H - Other
< - Not Stated

527 NO. MOTOR VEH. INVOLVED (2)

01 to 99

COLLISION CODE DEFINITIONS

PARTY SUMMARY FIELDS

0 = Examine All Parties Involved

1-9 = Examine Only Specified Party No.

60# PARTY TYPE (1)

A - Passenger Car/Station Wagon
B - Passenger Car w/Trailer
C - Motorcycle
D - Pickup/Panel Truck
E - Pickup/Panel w/Trailer
F - Truck, Truck Tractor
G - Truck/Tractor w/Trailer
2 - Truck/Tractor w/2 Trailers
3 - Truck/Tractor w/3 Trailers
4 - Single Unit Tanker
5 - Truck/Tractor w/1 Tank Trailer
6 - Truck/Tractor w/2 Tank Trailer
H - School Bus
I - Other Bus
J - Emergency Vehicle
K - Highway Construction Equip. ***
L - Bicycle
M - Other Vehicle
N - Other Non-Vehicle
O - Spilled Load
P - Disengaged Tow
Q - Uninvolved Vehicle
R - Moped
T - Train
U - Pedestrian
V - Dismounted Pedestrian
W - Animal-Livestock
X - Animal-Deer
Z - Animal-Other
< - Not Stated

61# DIRECTION TRAVEL (1)

N - Northbound
S - Southbound
E - Eastbound
W - Westbound
< - Not Stated
- - Does Not Apply

62# VEH. HWY. INDICATOR (1)

1 - On State Route
2 - Not on State Route
3 - Intersecting State Route
< - Not Stated
- Does Not Apply

63# SPECIAL INFO (1)

A - Hazardous Materials
B - Cell Phone in use*
C - Cell Phone not in use*
D - Cell Phone none/unknown*
< - Not Stated
- Does Not Apply

64# PERSONS KILLED (2)

00 - 99

65# PERSONS INJURED (2)

00 - 99

66# PRIMARY OBJ STRUCK (2)

68# OTHER OBJ STRUCK (2)

01 - Side of Bridge Railing
02 - End of Bridge Railing
03 - Pier, Column, Abutment
04 - Bottom of Structure
05 - Bridge End Posts in Gore
06 - End of Guardrail
07 - Bridge Approach Guardrail
10 - Light or Signal Pole
11 - Utility Pole
12 - Pole (Type Not Stated)
13 - Traffic Sign/Sign Post
14 - Other Signs Not Traffic
15 - Guardrail
16 - Median Barrier
17 - Wall (exc.Soundwall)
18 - Dike or Curb
19 - Traffic Island
20 - Raised Bars
21 - Concrete Object (HDWL, D.I.)
22 - Guidepost, Culvert, PM
23 - Cut Slope or Embankment
24 - Over Embankment
25 - In Water
26 - Drainage Ditch
27 - Fence
28 - Trees
29 - Plants
30 - Sound Walls
40 - Natural Material on Road
41 - Temp Barricades, Cones, tc.
42 - Other Object On Road
43 - Other Object Off Road
44 - Overturned
45 - Crash Cushions-Sand
46 - Crash Cushion-Other
51 - Call Box
98 - Unknown Object Involved
99 - No Object Involved VI - Thru V9 - Vehicle 1 to 9
« - Not Stated
- - Does Not Apply

* Codes Eff. 04-01-01

*** Includes Equipment engaged in
Const/ Maint activities as of 02-22-2000

COLLISION CODE DEFINITIONS

PARTY SUMMARY FIELDS

0 = Examine All Parties Involved

1-9 = Examine Only Specified Party No.

67# PRIMARY LOC. OF COLL (1)

69# OTHER LOC. OF COLL (1)

- A - Beyond Median or Stripe – Left (NE-2LN)
- B - Beyond Shoulder Drivers Left
- C - Left Shoulder Area
- D - Left Lane
- E - Interior Lanes
- F - Right Lane
- G - Right Shoulder Area
- H - Beyond Shoulder Drivers Right
- I - Gore Area
- J - Other
- V - HOV Lane(s)
- W - HOV Buffer Area
- < - Not Stated
- Does Not Apply

74# 1st OTHER ASSOC FACTOR (1)

75# 2nd OTHER ASSOC FACTOR (1)

- 1 - Influence of Alcohol
- 2 - Following Too Close
- 3 - Failure To Yield
- 4 - Improper Turn
- 5 - Speeding
- 6 - Other Violations
- A - Cell Phone** (INATTN)
- B - Electronic Equip** (INATTN)
- C - Radio/CD/Headpin** (INATTN)
- D – Smoking** (INATTN)
- E - Vision Obscurement
- F - Inattention - Other
- G - Stop & Go Traffic
- H - Enter/Leave Ramp
- I - Previous Collision
- J - Unfamiliar with Road
- K - Defective Veh. Equipment
- L - Uninvolved Vehicle
- M - Other
- N - None Apparent
- P - Wind
- R - Ramp Collision
- S - Runaway Vehicle
- T – Eating** (INATTN)
- U - Children** (INATTN)
- V - Animals** (INATTN)
- W - Personal Hygiene** (INATTN)
- X – Reading** (INATTN)
- < - Not Stated
- Does Not Apply

76# MOVE PRECEDING COLL. (1)

- A - Stopped
- B - Proceeding Straight
- C - Ran Off Road
- D - Making Right Turn
- E - Making Left Turn
- F - Making U-Turn
- G - Backing
- H - Slowing, Stopping
- I - Pass Other Vehicle (2WY-2Ln)
- J - Change Lanes
- K - Parking
- L - Enter From Shoulder
- M - Other Unsafe Turn
- N - Cross Into Opposing Lane (Undiv. Only)
- O - Parked
- P - Merging
- Q - Traveling Wrong Way
- R - Other
- < - Not Stated
- Does Not Apply

PEDESTRIAN

- 2 - Xing Xwalk - Intersection
- 3 - Xing Xwalk - Not Intersection
- 4 - Xing - Not Xwalk
- 5 - Roadway - Include Shoulder
- 6 - Not in Roadway
- 7 - Approach/Leave School Bus

77# 1st SOBRIETY (1)

78# (DRUG/PHYSICAL) (1)

- A - Had Not Been Drinking (0%)
- B - HBD - Under Influence (>0.08%)
- C - HBD - Not Under Influence (0.01-.07%)
- D - HBD - Impairment Unknown
- E - Under Drug Influence
- F - Other Physical Impairment
- G - Impairment Unknown
- H - Not Applicable
- I - Driver Fatigue
- < - Not Stated
- Does Not Apply

** Inattention Codes Eff. 01-01-2001

HIGHWAY CODE DEFINITIONS

STANDARD FIELDS

209 HIGHWAY GROUP (1)

- R - Independent Alignment- Right
- L - Independent Alignment - Left
- D - Divided Highway
- U - Undivided Highway
- X - Unconstructed Highway

214 CITY CODE (4)

- Alpha - See Valid City Table

216 FEDERAL AID (1)

- 0 - None of the Following
- 2 - In Lieu of Interstate
- 3 - In Lieu of Primary

217 FUNCTIONAL CLASS COMPONENT (1)

- 0 - None
- 1 - Principal Arterial W/ C/L Prin Arterial
- 2 - Principal Arterial W/ C/L Minor Arterial
- 3 - Principal Arterial Non-Connecting Link
- 4 - Minor Arterial
- 5 - Major Collector 6- Minor Collector 7 – Local

218 FA ROUTE PREFIX (1)

- I - Interstate
- P - Primary
- 5 - FAS or FAU
- 6 - FAS or FAU - Not Final Alignment
- \$ - Non FA

219 FA ROUTE (3)

- 000 - Not Federal Route
- 001 - 999 - Valid FA Route

220 TOLL/FOREST (1)

- 0 - None
- 1 - Toll Road & Bridges
- 2 - Forest Highways

221 NATIONAL LANDS (1)

- 0 - None
- 1 - National Monuments
- 2 - National Recreation Area
- 3 - National Forests
- 4 - National Military Reservation
- 5 - National Indian Reservation
- 6 - Bureau Land Management

222 SCENIC / FREEWAY SYSTEMS (1)

- 0 - Non-Fwy, Non-Scenic, Non-Expwy
- 1 - Scenic (Non-Fwy, Non-Expwy)
- 2 - Fwy & Exp System (Non-Scenic)
- 3 - Fwy & Exp System (Scenic)

223 POPULATION CODE (1)

- B - Urban
- R - Rural
- U - Urbanized

224 INSIDE/OUTSIDE CITY (1)

- I - Inside City
- O - Outside City

To match Rate Group criteria as shown in the annual Collision Booklet, use the following:

For Suburban:

- 11 AN 223 EQ R
- 12 AN 224 EQ I
- 21 OR 223 EQ B,U
- 22 AN 224 EQ O

For Rural:

- 11 AN 223 EQ R
- 12 AN 224 EQ O

For Urban:

- 11 AN 223 EQ B,U
- 12 AN 224 EQ I

HIGHWAY FIELDS

150 TOTAL NUMBER LANES (2)
00 to 99

225 NON-ADD MILEAGE (1)
A - Normal
N - Non Add

227 TERRAIN (1)
F - Flat
R - Rolling
M - Mountainous

228 DESIGN SPEED (2)
<30
30
35
40
45
50
55
60
65
70

ADT DATA

233 ADT (AHEAD)(6)
999999

ACCESS DATA

242 ACCESS CONTROL (1)
C - Conventional
E - Expressway
F - Freeway
S - One-Way City Street

MEDIAN DATA

263 MEDIAN TYPE (1)

UNDIVIDED

A - Not Separated or Striped
B - Striped
C - Reversible Peak Hour Lane(s)

DIVIDED

E - Reversible Peak Hour Lane(s)
F - Two-Way Left Turn Lane
G - Continuous Left Turn Lane
H - Paved Median
J - Unpaved Median
K - Separate Grades
L - Separate Grades w/Retaining Wall
M - Sawtooth - Unpaved
N - Sawtooth - Paved
P - Ditch
Q - Separate Structure
R - Railroad
S - Bus Lanes
T - Paved Area Occasional Traffic Lane
U - Railroad & Bus Lanes
V - Contains Reversible Pk Hr Ln(s)
Z - Other

262 CURB & LANDSCAPE (1)

1 - Curbed Median
2 - Curbed Median with Trees
3 - Curbed Median with Shrubs
4 - Raised Traffic Bars
5 - Median with Trees
6 - Median with Shrubs
7 - No Curbs or Shrubs/No Median

264 MEDIAN BARRIER (1)

A - Cable Barrier
B - Cable Barrier w/ Glare Screen
C - Metal Beam Barrier
D - Metal Beam Barrier w/ Glare Screen
E - Concrete Barrier
F - Concrete Barrier w/ Glare Screen
G - Bridge Barrier Railing
H - Chain Link Fence
J - Guardrail in Median Both Roadway
K - Guardrail in Median Left Roadway
L - Guardrail in Median Right Roadway
M - Two-Way, One Lane Road
N - Thrie Beam Barrier
P - Thrie Beam Barrier w/ Glare Screen
Q - Conc. Barrier, Both Ways Inside Both Shoulders
R - Cone. Barrier, Left Rdwy Median Shoulder Area
S - Cone. Barrier, Right Rdwy Median Shoulder Area
X - External Barriers on Median Type = C or E
Y - Other Not Included Above
Z - No Barriers

265 MEDIAN WIDTH (2)

00 Feet, Undivided 01 to 99 Feet, Divided

266 MEDIAN VARIANCE (1)

V - Variable
Z - No Variance
P - Over 100' Median & No Var.

LEFT- RIGHT ROADBED

252 272 SURFACE TYPE (1)

PCC

B - Bridge Deck
C - Concrete

AC

H - Base & Surface > 7" Thick
M - Base & Surface < 7" Thick
O - Oiled Earth - Gravel
P - Bridge Deck

UNPAVED

E - Earth
F - Undetermined
G - Bridge Deck (All Not Codes B or P)

253 273 NUMBER OF LANES (2)

00 to 99

254 274 SPECIAL FEATURES (1)

A - One Lane Road w/Turnouts for Passing
B - Lane Transitions
C - Passing or Truck Climbing Lane
D - Bus Lane (for buses only not in Median)
E - Auxiliary Lane (inc in No. Lanes Field)
G - Tunnel
H - Toll Plazas & Approaches
J - "Bug" or Border Patrol Stations
N - Median Lane is HOV Lane
P - Median Lanes are HOV Lanes
Q - Reversible Peak Hour Lane(s)
Z - No Special Features

255 275 OUTSIDE TOTAL SHOULDER (2)

256 276 OUTSIDE TREATED SHOULDER (2)
00 to 99 Feet

258 278 INSIDE TOTAL SHOULDER (2)

259 279 INSIDE TREATED SHOULDER (2)
00 to 99 Feet

257 277 TRAVELED WAY WIDTH (3)
000 to 999 Feet

INTERSECTION FIELDS

412 INTERSECTION TYPE (1)

F - Four-Legged
M - Multi-Legged
S - Offset
T - Tee
Y - WYE
Z - Other
R - Roundabout*
(*added to TSN in April 2019)

417 CONTROL TYPE (1)

A - No Control
B - Stop Signs on Cross Street Only
C - Stop Signs on Mainline Only
D - Four-Way Stop Signs
E - Four-Way Flasher (Red on Cross Street)
F - Four-Way Flasher (Red on Mainline)
G - Four-Way flasher (Red on All)
H - Yield Signs (On Cross Street Only)
I - Yield Signs (On Main Line Only)
J - Signals Pretimed - 2 phase
K - Signals Pretimed - Multi-Phase
L - Signals Semi-Traffic Actuated - 2 Phase
M - Signals Semi-Traffic Actuated - Multi Phase
N - Signals Full-Traffic Actuated - 2 Phase
P - Signals Full-Traffic Actuated - Multi-Phase
Z - Other
R - Yield on All Approaches (Roundabout Only)*
(*added to TSN in April 2019)

422 LIGHTING (1)

N - No
Y - Yes

MAIN LINE

432 SIGNAL MAST ARM (1)

N - No
Y - Yes

433 LEFT TURN CHANNELIZATION (1)

C - Curbed Median Left Turn Channelization
N - No Left Turn Channelization
P - Painted Left Turn Channelization
R - Raised Bars - Left Turn Channelization

434 RIGHT TURN CHANNELIZATION

N - No Right Turn Channelization
Y - Channelization Provided For Right Turns

435 TRAFFIC FLOW (1)

N - Two-Way Traffic - No Left Turns Permitted
P - Two-Way Traffic - Left Turns Permitted
R - Two-way-Traffic - Left Turns Restricted During Peak Hours
W - One-Way Traffic
Z - Other

436 NUMBER OF LANES (1)

O to 9

INTERSECTING STREET (ROUTE)

452 SIGNAL MASRT ARM (1)

N - No
Y - Yes

453 LEFT TURN CHANNELIZATION (1)

Same as Intersection Item

454 RIGHT TURN CHANNELIZATION (1)

Same as Intersection Item

455 TRAFFIC FLOW (1)

Same as Intersection Item

456 NUMBER OF LANES (1)

O to 9

RAMP FIELDS

301 ON/OFF INDICATOR (1)

O - On
F - Off
Z - Other

316 RAMP TYPE (1)

A - Frontage Road
B - Collector Road
C - Direct or Semi-Direct Connector (Left)
D - Diamond Type Ramp
E - Slip Ramp
F - Direct or Semi Direct Connector (Right)
G - Loop-w/Left Turn
H - Buttonhook Ramp
J - Scissors Ramp
K - Split Ramp
L - Loop-w/o Left Turn
M - Two-Way Ramp Segment
R - Rest Area, Vista Point, Truck Scale
Z - Other
P - Dummy-Paired
V - Dummy-Volume Only

359 AREA 4 (1)

N - No
Y - Yes