NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual Structure and Mappings

Generated on 12-FEB-20

Mapping Info

State Structure Name	Guideline Name	Guideline Version	Version Comment
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	MMUCC GUIDELINES VERSION - 5	5	2019 MMUCC 5 Mapping

Total Percent Mappable for All Elements

Data Structure Name	System	Percent(%)
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Crash	75.58 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Vehicle	53.42 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Person	57.13 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Roadway	56.88 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Fatal Section	0 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Large Vehicles & Hazardous Materials Section	18.44 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Non-Motorist Section	40.83 %
NC Crash Database - DMV 349 Data Element Dictionary - 9.2015 & 2018 Crash Manual	Dynamic Data Elements	0 %

State Structure	Standard Elements/ Attributes That Map	Comments
[SS] Crash		
[E] C1.Crash Case Identifier		
[A] 01.Crash Case Identifier	[S]Crash=>[E]C1.Crash Identifier=>[A]01.State-Specific Identifier	
[E] C2.Local Report Number		
[A] 01.Local Report Number		
[E] C3.Crash Date		
[S] 01.Month		
[A] 01.January	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]01.January	
[A] 02.February	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]02.February	
[A] 03.March	[S]Crash=>[E]C3.Crash Date and	

State Structure	Standard Elements/ Attributes That Map	Comments
	Time=>[S]1.2.Crash Date and Time=>[A]03.March	
[A] 04.April	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]04.April	
[A] 05.May	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]05.May	
[A] 06.June	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]06.June	
[A] 07.July	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]07.July	
[A] 08.August	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]08.August	
[A] 09.September	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]09.September	
[A] 10.October	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]10.October	
[A] 11.November	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]11.November	
[A] 12.December	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.2.Crash Date and Time=>[A]12.December	
[S] 02.Day		
[A] 01.Day of Month	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.3.Crash Date and Time=>[A]Day (DD)	
[S] 03.Year		
[A] 01.Year	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.1.Crash Date and Time=>[A]Year (YYYY)	
[E] C4.Crash Time		
[S] 01.Hour		
[A] 01.Hour	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.4.Crash Date and Time=>[A]Valid Military Time (HHMM) - (Code Midnight as "0000")	
[S] 02.Minute		
[A] 01.Minute	[S]Crash=>[E]C3.Crash Date and Time=>[S]1.4.Crash Date and Time=>[A]Valid Military Time (HHMM) - (Code Midnight as "0000")	
[E] C5.Crash County		
[A] 01.Crash County	[S]Crash=>[E]C4.Crash	

State Structure	Standard Elements/ Attributes That Map	Comments
	County=>[A]County Name	
[E] C6.Crash City/Place		
[A] 01.Crash City/Place	[S]Crash=>[E]C5.Crash City/Place (Political Jurisdiction)=>[A]City/Place Name	
[A] 02.Other	[S]Crash=>[E]C5.Crash City/Place (Political Jurisdiction)=>[A]997.Other	
[E] C7.Locality		
[A] 01.Rural (30% Developed)		
[A] 02.Mixed (30% to 70% Developed)		
[A] 03.Urban (>70% Developed)		
[E] C8.Relation to Roadway (FHE)		
[A] 01.On Roadway (surface) Off Roadway		
[A] 02.Shoulder		
[A] 03.Median	[S]Crash=>[E]C8.Location of First Harmful Event Relative to the Trafficway=>[A]03.Median	
[A] 04.Roadside	[S]Crash=>[E]C8.Location of First Harmful Event Relative to the Trafficway=>[A]09.Roadside	
[A] 05.Outside-Trafficway	[S]Crash=>[E]C8.Location of First Harmful Event Relative to the Trafficway=>[A]08.Outside Road/Right-of-Way	
[A] 06.Unknown		
[E] C9.Crash Roadway Location		
[C] 01.In or Near		
[A] 01.In		
[A] 02.Near		
[C] 02.Distance From Nearest Municipality		
[A] 01.Distance From Nearest Municipality		
[C] 03.Direction From Nearest Municipality		
[A] 01.Direction From Nearest Municipality		
[C] 04.On Road		
[A] I.Interstate Routes	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A]01.Public Property	
[A] NC.NC Numbered Routes	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A]01.Public Property	
[A] PP.Private Road, Property, or Driveway	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A]02.Private Property	
[A] RR.Railroad Crossing Number		
[A] SR.State Secondary Route	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A]01.Public Property	
[A] US.US Numbered Routes	[S]Crash=>[E]C2.Crash	

State Structure	Standard Elements/ Attributes That Map	Comments
	Classification=>[S]1.Ownership=>[A] 01.Public Property	
[A] PVA.Public Vehicular Area	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A] 01.Public Property	
[A] Local.City Street Name	[S]Crash=>[E]C2.Crash Classification=>[S]1.Ownership=>[A] 01.Public Property	
[C] 05.Ramp or Service Road Check Box		
[A] 01.Yes, Check Box Checked		
[A] 02.No, Check Box Not Checked		
[C] 06.Distance From Nearest Road		
[A] 01.Distance From Nearest Road		
[C] 07.Direction From Nearest Road		
[A] 01.Direction From Nearest Road		
[C] 08.At or From Road		
[A] I.Interstate Routes		
[A] NC.NC Numbered Routes		
[A] PP.Private Road, Property, or Driveway		
[A] RR.Railroad Crossing Number		
[A] SR.State Secondary Route		
[A] US.US Numbered Routes		
[A] PVA.Public Vehicular Area		
[A] Local.City Street Name		
[C] 09.Direction Toward Road/County/State		
[A] 01.Direction Toward Road/County/State		
[C] 10.GPS Coordinates		
[A] 01.Latitude	[S]Crash=>[E]C6.Crash Location=>[A]01.Latitude and Longitude (degrees.minutes.seconds + compass direction)	
[A] 02.Longitutde	[S]Crash=>[E]C6.Crash Location=>[A]01.Latitude and Longitude (degrees.minutes.seconds + compass direction)	
[A] 03.Altitude		
[C] 12.Link Node + Offset System (not recommended) (Dummy)		
[A] 01.Link Node # (Dummy)	[S]Crash=>[E]C6.Crash Location=>[A]03.Link Node + Offset System (not recommended)	
[A] 02.Offset (Dummy)	[S]Crash=>[E]C6.Crash Location=>[A]03.Link Node + Offset System (not recommended)	
[C] 11 .Linear Referencing System (LRS) (Dummy)		
[A] 01.LRS Value 1 (Dummy)	[S]Crash=>[E]C6.Crash Location=>[A]02.Linear Referencing System (LRS)	
[A] 02.LRS Value 2 (Dummy)	[S]Crash=>[E]C6.Crash	

State Structure	Standard Elements/ Attributes That Map	Comments
	Location=>[A]02.Linear Referencing System (LRS)	
[E] C10.Predominant Development Type		
[A] 01.Farms, Woods, Pastures		
[A] 02.Residential		
[A] 03.Commercial		
[A] 04.Institutional		
[A] 05.Industrial		
[E] C11.First Harmful Event		
[A] 00.Unknown		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right		
[A] 02.Ran Off Road Left		
[A] 03.Ran Off Road Straight		
[A] 04.Jackknife	[S]Crash=>[E]C7.First Harmful Event=>[C]1.Non-Collision Harmful Events=>[A]05.Jackknife	
[A] 05.Overturn/Rollover	[S]Crash=>[E]C7.First Harmful Event=>[C]1.Non-Collision Harmful Events=>[A]07.Overturn/Rollover	
[A] 13.Other Non-Collision		
[A] 14.Explosion/Fire (D)	[S]Crash=>[E]C7.First Harmful Event=>[C]1.Non-Collision Harmful Events=>[A]03.Fire/Explosion	
[A] 15.Falling or Jumping from the Motor Vehicle (D)	[S]Crash=>[E]C7.First Harmful Event=>[C]1.Non-Collision Harmful Events=>[A]02.Fell/Jumped From Motor Vehicle	Mapping Comment of 15.Falling or Jumping from the Motor Vehicle (D): The SCDB contains the attribute "Other Non-Collision". The LE manual instructs officers to write a description in the narrative to include specific MMUCC attributes. These attributes can map to the MMUCC attributes since specific instructions were provided: Explosion/Fire; Falling or Jumping from the Motor Vehicle
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed	

State Structure	Standard Elements/ Attributes That Map	Comments
	Object=>[A]17.Pedestrian	
[A] 15.Pedalcyclist	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]16.Pedalcycle	
[A] 16.RR Train, Engine	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]18.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]09.Animal (live)	
[A] 18.Movable Object		
[A] 19.Fixed Object		
[A] 33.Tree	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]40.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]41.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]41.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)		
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]38.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]38.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]38.Traffic Sign Support	
[A] 40.Commercial Sign		
[A] 41.Guardrail End on Shoulder	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]31.Guardrail End Terminal	
[A] 42.Guardrail Face on Shoulder	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]32.Guardrail Face	
[A] 43.Guardrail End in Median	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]31.Guardrail End Terminal	
[A] 44.Guardrail Face in Median	[S]Crash=>[E]C7.First Harmful	

State Structure	Standard Elements/ Attributes That Map	Comments
	Event=>[C]3.Collision With Fixed Object=>[A]32.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]23.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]23.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]21.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]22.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]22.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]22.Bridge Pier or Support	
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]26.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]26.Culvert	
[A] 58.Ditch	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]28.Ditch	
[A] 59.Embankment	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]29.Embankment	
[A] 60.Mailbox	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]34.Mailbox	
[A] 61.Fence or Fence Post	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]30.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Crash=>[E]C7.First Harmful Event=>[C]3.Collision With Fixed Object=>[A]33.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		

State Structure	Standard Elements/ Attributes That Map	Comments
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]15.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop		
[A] 22.Rear End, Turn		
[A] 23.Left Turn, Same Roadway		
[A] 24.Left Turn, Different Roadways		
[A] 25.Right Turn, Same Roadway		
[A] 26.Right Turn, Different Roadways		
[A] 27.Head On		
[A] 28.Sideswipe, Same Direction		
[A] 29.Sideswipe, Opposite Direction		
[A] 30.Angle		
[A] 31.Backing Up		
[A] 32.Other Collision with Vehicle		
[A] 64.Motor Vehicle in Transport (D)	[S]Crash=>[E]C7.First Harmful Event=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]12.Motor Vehicle in Transport	Mapping Comment of 64.Motor Vehicle in Transport (D): A collision with a "Motor Vehicle in Transport" can be indicated by the selection of any one of the attributes that describe a "Collision of Two or More Motor Vehicles".
[E] C12.Most Harmful Event		
[A] 00.Unknown		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right		
[A] 02.Ran Off Road Left		
[A] 03.Ran Off Road Straight		
[A] 04.Jackknife		
[A] 05.Overturn/Rollover		
[A] 13.Other Non-Collision		
[A] 14.Explosion/Fire (D)		
[A] 15.Falling or Jumping from the Motor Vehicle (D)		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian		
[A] 15.Pedalcyclist		
[A] 16.RR Train, Engine		
[A] 17.Animal		
[A] 18.Movable Object		
[A] 19.Fixed Object		
[A] 33.Tree		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 34.Utility Pole (With or Without Light)		
[A] 35.Luminaire Pole (Non-Breakaway)		
[A] 36.Luminaire Pole (Breakaway)		
[A] 37.Official Highway Sign (Non-Breakaway)		
[A] 38.Official Highway Sign (Breakaway)		
[A] 39.Overhead Sign Support		
[A] 40.Commercial Sign		
[A] 41.Guardrail End on Shoulder		
[A] 42.Guardrail Face on Shoulder		
[A] 43.Guardrail End in Median		
[A] 44.Guardrail Face in Median		
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End		
[A] 50.Bridge Rail Face		
[A] 51.Overhead Part of Underpass		
[A] 52.Pier on Shoulder of Underpass		
[A] 53.Pier in Median of Underpass		
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder		
[A] 57.Catch Basin or Culvert in Median		
[A] 58.Ditch		
[A] 59.Embankment		
[A] 60.Mailbox		
[A] 61.Fence or Fence Post		
[A] 62.Construction Barrier		
[A] 63.Crash Cushion		
[A] 64.Other Fixed Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle		
[A] 21.Rear End, Slow or Stop		
[A] 22.Rear End, Turn		
[A] 23.Left Turn, Same Roadway		
[A] 24.Left Turn, Different Roadways		
[A] 25.Right Turn, Same Roadway		
[A] 26.Right Turn, Different Roadways		
[A] 27.Head On		
[A] 28.Sideswipe, Same Direction		
[A] 29.Sideswipe, Opposite Direction		
[A] 30.Angle		
[A] 31.Backing Up		
[A] 32.Other Collision with Vehicle		
[A] 64.Motor Vehicle in Transport (D)		
[E] C13.Crash Narrative		
[A] 01.Crash Narrative		
[E] C14.Crash Diagram		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Crash Diagram		
[E] C15.Additional Property Damage - Type		
[A] 01.Property Damage Type		
[E] C16.Additional Property Damage - Owner Information		
[A] 01.Property Damage Owner Information		
[E] C17.Additional Property Damage - Estimated Damage		
[A] 00.Actual Dollar Estimate 0000000		
[A] 98.Damage Exceeds 9999998		
[A] 99.Not Stated		
[E] C18.Weather Condition		
[S] 01.First Weather Condition		
[A] 01.Clear	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]03.Clear	
[A] 02.Cloudy	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]04.Cloudy	
[A] 03.Rain	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]07.Rain	
[A] 04.Snow	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]10.Snow	
[A] 05.Fog, Smog, Smoke	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]05.Fog, Smog, Smoke	
[A] 06.Sleet, Hail (Freezing Rain or Drizzle)		
[A] 07.Severe Crosswinds	[S]Crash=>[E]C11.Weather Conditions=>[S]1.1.Selection 1=>[A]08.Severe Crosswinds	
[A] 08.Blowing, Sand, Dirt, Snow		
[A] 09.Other		
[S] 02.Second Weather Condition		
[A] 01.Clear	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection 2=>[A]03.Clear	
[A] 02.Cloudy	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection 2=>[A]04.Cloudy	
[A] 03.Rain	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection 2=>[A]07.Rain	
[A] 04.Snow	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection 2=>[A]10.Snow	
[A] 05.Fog, Smog, Smoke	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2=>[A]05.Fog, Smog, Smoke	
[A] 06.Sleet, Hail (Freezing Rain or Drizzle)		
[A] 07.Severe Crosswinds	[S]Crash=>[E]C11.Weather Conditions=>[S]1.2.Selection 2=>[A]08.Severe Crosswinds	
[A] 08.Blowing, Sand, Dirt, Snow		
[A] 09.Other		
[S] 03.Weather Condition(s) Contributed to the Crash		
[A] 01.Yes	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]18.Weather Conditions	
[A] 02.No		
[A] 03.Unknown		
[A] 01b.Yes (D)	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]18.Weather Conditions	
[E] C19.Ambient Light		
[A] 01.Daylight	[S]Crash=>[E]C12.Light Condition=>[A]01.Daylight	
[A] 02.Dusk	[S]Crash=>[E]C12.Light Condition=>[A]02.Dawn/Dusk	
[A] 03.Dawn	[S]Crash=>[E]C12.Light Condition=>[A]02.Dawn/Dusk	
[A] 04.Dark - Lighted Roadway	[S]Crash=>[E]C12.Light Condition=>[A]03.Dark – Lighted	
[A] 05.Dark - Roadway Not Lighted	[S]Crash=>[E]C12.Light Condition=>[A]04.Dark – Not Lighted	
[A] 06.Dark - Unknown Roadway Lighting	[S]Crash=>[E]C12.Light Condition=>[A]05.Dark – Unknown Lighting	
[A] 07.Other	[S]Crash=>[E]C12.Light Condition=>[A]98.Other	
[A] 08.Unknown	[S]Crash=>[E]C12.Light Condition=>[A]99.Unknown	
[E] C20.Road Surface Condition		
[A] 01.Dry	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]01.Dry	
[A] 02.Wet	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]09.Wet	
[A] 03.Water (Standing, Moving)	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]08.Water (standing, moving)	
[A] 04.Ice	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]02.Ice/Frost	
[A] 05.Snow	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]07.Snow	
[A] 06.Slush	[S]Crash=>[E]C13.Roadway Surface	

State Structure	Standard Elements/ Attributes That Map	Comments
	Condition=>[A]06.Slush	
[A] 07.Sand, Mud, Dirt, Gravel		
[A] 08.Fuel Oil	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]04.Oil	
[A] 09.Other		
[A] 10.Unknown	[S]Crash=>[E]C13.Roadway Surface Condition=>[A]99.Unknown	Mapping Comment of 10.Unknown: The State can map to "Unknown" because the State has the attribute "Other".
[E] C21.Contributing Circumstances, Roadway		
[S] 01.First Contributing Circumstance		
[A] 00.None (No Unusual Conditions)	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]00.None	
[A] 01.Road Surface Condition	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]11.Road Surface Condition (wet, icy, snow, slush, etc.)	
[A] 02.Debris	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]02.Debris	
[A] 03.Rut, Holes, Bumps	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]12.Ruts, Holes, Bumps	
[A] 04.Work Zone (Construction/Maintenance/Utility)	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]19.Work Zone (construction/maintenance/utility)	
[A] 05.Worn, Travel-Polished Surface	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]20.Worn, Travel-Polished Surface	
[A] 06.Obstruction in Roadway	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]06.Obstruction in Roadway	
[A] 07.Traffic Control Device Inoperative, Not Visible or Missing	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]15.Traffic Control Device	
[A] 08.Shoulders Low, Soft, or High	[S]Crash=>[E]C14.Contributing Circumstances – Roadway	

State Structure	Standard Elements/ Attributes That Map	Comments
	Environment=>[S]1.1.Selection 1=>[A]13.Shoulders (none, low, soft, high)	
[A] 09.No Shoulders	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]13.Shoulders (none, low, soft, high)	
[A] 10.Non-Highway Work	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]04.Non-Highway Work	
[A] 11.Other		
[A] 12.Unknown	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.1.Selection 1=>[A]99.Unknown	
[S] 02.Second Contributing Circumstance		
[A] 00.None (No Unusual Conditions)	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]00.None	
[A] 01.Road Surface Condition	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]11.Road Surface Condition (wet, icy, snow, slush, etc.)	
[A] 02.Debris	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]02.Debris	
[A] 03.Rut, Holes, Bumps	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]12.Ruts, Holes, Bumps	
[A] 04.Work Zone (Construction/Maintenance/Utility)	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]19.Work Zone (construction/maintenance/utility)	
[A] 05.Worn, Travel-Polished Surface	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]20.Worn, Travel-Polished Surface	
[A] 06.Obstruction in Roadway	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]06.Obstruction in Roadway	
[A] 07.Traffic Control Device Inoperative, Not	[S]Crash=>[E]C14.Contributing	

State Structure	Standard Elements/ Attributes That Map	Comments
Visible or Missing	Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]15.Traffic Control Device	
[A] 08.Shoulders Low, Soft, or High	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]13.Shoulders (none, low, soft, high)	
[A] 09.No Shoulders	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]13.Shoulders (none, low, soft, high)	
[A] 10.Non-Highway Work	[S]Crash=>[E]C14.Contributing Circumstances – Roadway Environment=>[S]1.2.Selection 2=>[A]04.Non-Highway Work	
[A] 11.Other		
[A] 12.Unknown		
[E] C22.Road Feature		
[A] 00.No Special Feature		
[C] 01.Intersection of Roadways		
[A] 07.Four-Way Intersection		
[A] 08.T-Intersection		
[A] 09.Y-Intersection		
[A] 10.Traffic Circle/Roundabout	[S]Crash=>[E]C16.Type of Intersection=>[S]2.Overall Intersection Geometry=>[A]02.Roundabout/Traffic Circle	
[A] 11.Five-Point, or More		
[A] 12.Related to Intersection	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]05.Intersection or Related	
[A] 13.Non-Intersection Median Crossing		
[A] 14.End or Beginning of Divided Highway		
[A] 01.Bridge		
[C] 02.Interchange		
[A] 15.Off-Ramp Entry	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	
[A] 16.Off-Ramp Proper	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	
[A] 17.Off Ramp Terminal on Crossroad	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 18.Merge Lane Between On and Off Ramp		
[A] 19.On-Ramp Entry	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	
[A] 20.On-Ramp Proper	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	
[A] 21.On-Ramp Terminal on Crossroad	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]04.Entrance/Exit Ramp or Related	
[A] 22.Railroad Crossing	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]07.Railway Grade Crossing	
[A] 23.Tunnel		
[A] 24.Shared Use Paths or Trails	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]08.Shared-Use Path or Trail	
[A] 25.Other		
[A] 02.Bridge Approach		
[A] 03.Underpass		
[A] 04.Driveway Public	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]03.Driveway Access or Related	
[A] 05.Driveway, Private	[S]Crash=>[E]C15.Relation to Junction=>[S]2.Specific Location=>[A]03.Driveway Access or Related	
[A] 06.Alley Intersection		
[E] C23.Road Surface Type		
[A] 01.Concrete		
[A] 02.Grooved Concrete		
[A] 03.Smooth Asphalt		
[A] 04.Coarse Asphalt		
[A] 05.Gravel		
[A] 06.Sand		
[A] 07.Soil		
[A] 08.Other		
[E] C24.Traffic Control Operating		
[A] 01.Yes		
[A] 02.No		
[A] 03.Unknown		
[E] C25.Horizontal and Vertical Alignment (Road Character)		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Straight, Level		
[A] 02.Straight, Hillcrest		
[A] 03.Straight, Grade		
[A] 04.Straight, Bottom (Sag)		
[A] 05.Curve, Level		
[A] 06.Curve, Hillcrest		
[A] 07.Curve, Grade		
[A] 08.Curve, Bottom (Sag)		
[A] 09.Other		
[E] C26.Road Classification		
[A] 01.Interstate		
[A] 02.US Route		
[A] 03.NC Route		
[A] 04.State Secondary Route		
[A] 05.Local Street		
[A] 06.Public Vehicular Area		
[A] 07.Private Road, Property, or Driveway		
[A] 08.Other		
[E] C27.Number of Lanes		
[A] 01.Number of Thru Lanes		
[E] C28.Road Configuration		
[A] 01.One-Way, Not Divided		
[A] 02.Two-Way, Not Divided		
[A] 03.Two-Way, Divided, Unprotected Median		
[A] 04.Two-Way, Divided, Positive Median Barrier		
[A] 05.Unknown		
[E] C29.Access Control		
[A] 01.No Access Control - Permits Private Access (Driveway, etc.)	[S]Roadway=>[E]R9.Access Control=>[A]01.No Access Control	
[A] 02.Full Access Control - Provides Access Only at Interchanges (Interstate, etc.)	[S]Roadway=>[E]R9.Access Control=>[A]03.Full Access Control	
[A] 03.Partial Access Control - Provides no Private Access	[S]Roadway=>[E]R9.Access Control=>[A]02.Partial Access Control	
[E] C30.RR Crossing ID		
[A] 01.RR Crossing ID	[S]Roadway=>[E]R10.Railway Crossing ID=>[A]State specific number assigned by a State in cooperation with the American Asso	
[E] C31.School Bus-Related		
[A] 01.Yes, School Bus Directly Involved (Contact Vehicle)	[S]Crash=>[E]C17.School Bus-Related=>[A]02.Yes, School Bus Directly Involved	
[A] 02.Yes, School Bus Indirectly Involved (Non-Contact Vehicle)	[S]Crash=>[E]C17.School Bus-Related=>[A]03.Yes, School Bus Indirectly Involved	
[A] 03.No	[S]Crash=>[E]C17.School Bus-Related=>[A]01.No	
[A] 04.Unknown		

State Structure	Standard Elements/ Attributes That Map	Comments
[E] C32.Work Zone-Related		
[S] 01.Did Crash Occur In or Near		
[A] 01.Construction Work Area	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]1.Was the crash in a construction, maintenance, or utility work zone or was it re=>[A]02.Yes	
[A] 02.Maintenance Work Area	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]1.Was the crash in a construction, maintenance, or utility work zone or was it re=>[A]02.Yes	
[A] 03.Utility Work Area	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]1.Was the crash in a construction, maintenance, or utility work zone or was it re=>[A]02.Yes	
[A] 04.Intermittent/Moving Work - e.g., Patching Pothole	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]3.Type of Work Zone=>[A]04.Intermittent or Moving Work	
[A] 05.No	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]1.Was the crash in a construction, maintenance, or utility work zone or was it re=>[A]01.No	
[A] 98.Not Applicable/Not Within or Related to a Work Zone (D)	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]3.Type of Work Zone=>[A]98.Not Applicable/Not Within or Related to a Work Zone	Mapping Comment of 98.Not Applicable/Not Within or Related to a Work Zone (D): The State crash database does not include the attribute "Not Applicable/Not Within or Related to a Work Zone"; however, this attribute can be easily derived. Therefore, mapping could be completed, and the State received credit for

State Structure	Standard Elements/ Attributes That Map	Comments
		this attribute.
[S] 02.Work Activity at the Time of the Crash		
[A] 01.Ongoing	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]4.Workers Present=>[A]02.Yes	
[A] 02.No Apparent Activity	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]4.Workers Present=>[A]01.No	
[A] 98.Not Applicable/Not Within or Related to a Work Zone (D)	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]4.Workers Present=>[A]98.Not Applicable/Not Within or Related to a Work Zone	Mapping Comment of 98.Not Applicable/Not Within or Related to a Work Zone (D): The State crash database does not include the attribute "Not Applicable/Not Within or Related to a Work Zone"; however, this attribute can be easily derived. Therefore, mapping could be completed, and the State received credit for this attribute.
[S] 03.Work Area Marked with Warning Signs, Cones, etc.		
[A] 01.Yes		
[A] 02.No		
[S] 04.Location of Crash		
[A] 01.Before Work Area (After First Warning Sign and Before Lane Shift/Closure)	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]2.Location of the Crash=>[A]02.Advance Warning Area	
[A] 02.In Work Area Approach Taper (Where Lane Closed or Shifted)	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]2.Location of the Crash=>[A]03.Transition Area	
[A] 03.Adjacent to Actual Work	[S]Crash=>[E]C18.Work Zone-Related (Construction/Maintenance/Utility)=>[S]2.Location of the Crash=>[A]04.Activity Area	
[A] 98.Not Applicable/Not Within or Related to a	[S]Crash=>[E]C18.Work	Mapping Comment

State Structure	Standard Elements/ Attributes That Map	Comments
Work Zone (D)	Zone-Related (Construction/Maintenance/Utility)=>[S]2.Location of the Crash=>[A]98.Not Applicable/Not Within or Related to a Work Zone	of 98.Not Applicable/Not Within or Related to a Work Zone (D): The State crash database does not include the attribute "Not Applicable/Not Within or Related to a Work Zone"; however, this attribute can be easily derived. Therefore, mapping could be completed, and the State received credit for this attribute.
[E] C33.Source of Information		
[A] 01.Municipal Police	[S]Crash=>[E]C10.Source of Information=>[S]1.Source of Information=>[A]01.Law Enforcement Agency	
[A] 02.Sheriff	[S]Crash=>[E]C10.Source of Information=>[S]1.Source of Information=>[A]01.Law Enforcement Agency	
[A] 03.Rural or County Police	[S]Crash=>[E]C10.Source of Information=>[S]1.Source of Information=>[A]01.Law Enforcement Agency	
[A] 04.Highway Patrol	[S]Crash=>[E]C10.Source of Information=>[S]1.Source of Information=>[A]01.Law Enforcement Agency	
[A] 05.Other Traffic Investigating Agency	[S]Crash=>[E]C10.Source of Information=>[S]1.Source of Information=>[A]01.Law Enforcement Agency	
[E] C34.Officer Name		
[A] 01.Officer Name		
[E] C35.Officer Number		
[A] 01.Officer Number		
[E] C36.Patrol Area		
[A] 01.Patrol Area		
[E] C37.Date and Time Reported to LE Agency		
[A] 01.Date Reported to LE Agency		
[A] 02.Time Reported to LE Agency		
[E] C38.Crash Severity (D)		
[A] 01.Property Damage Only (No Injury) (D)	[S]Crash=>[E]C19.Crash	

State Structure	Standard Elements/ Attributes That Map	Comments
	Severity=>[A]05.(O) Property Damage-Only	
[A] 02.Non-Fatal Injury (D)		
[A] 03.Fatal Injury (D)	[S]Crash=>[E]C19.Crash Severity=>[A]01.(K) Fatal Injury**	
[A] 04.Unknown (D)		
[E] C39.Number of Motor Vehicles (D)		
[A] 01.Number of Motor Vehicles (D)	[S]Crash=>[E]C20.Number of Motor Vehicles Involved=>[A]x.Number of motor vehicles involved	
[E] C40.Number of Occupants in Crash (D)		
[A] 01.Number of Occupants in Crash (D)	[S]Crash=>[E]C21.Number of Motorists=>[A]x.Number of Motorists	
[E] C41.Number of Non-Motorists (D)		
[A] 01.Number of Non-Motorists (D)	[S]Crash=>[E]C22.Number of Non-Motorists=>[A]x.Number of Non-Motorists	
[E] C42.Total Non-Fatal Injuries (D)		
[A] 01.Total Non-Fatal Injuries (D)	[S]Crash=>[E]C23.Number of Non-Fatally Injured Persons=>[A]x.Number of Non-Fatally Injured Persons	
[E] C43.Total Fatal Injuries (D)		
[A] 01.Total Fatal Injuries (D)	[S]Crash=>[E]C24.Number of Fatalities=>[A]x.Number of Fatalities	
[E] C44.Alcohol/Drug Involvement (D)		
[A] 00.Neither Alcohol Nor Other Drugs (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]01.No	
[A] 01.Yes Alcohol, Impairment Suspected (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]02.Yes	
[A] 02.Yes Alcohol, No Impairment Detected (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]02.Yes	
[A] 03.Yes Other Drugs, Impairment Suspected (D)		
[A] 04.Yes Other Drugs, No Impairment Detected (D)		
[A] 05.Yes Alcohol and Other Drugs, Impairment Suspected (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]02.Yes	
[A] 06.Yes Alcohol and Other Drugs, No Impairment Detected (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]02.Yes	
[A] 07.Unknown (D)	[S]Crash=>[E]C25.Alcohol Involvement=>[A]99.Unknown	
[E] C45.Day of Week (D)		
[A] 01.Monday (D)	[S]Crash=>[E]C27.Day of Week=>[A]02.Monday	
[A] 02.Tuesday (D)	[S]Crash=>[E]C27.Day of Week=>[A]03.Tuesday	
[A] 03.Wednesday (D)	[S]Crash=>[E]C27.Day of Week=>[A]04.Wednesday	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 04.Thursday (D)	[S]Crash=>[E]C27.Day of Week=>[A]05.Thursday	
[A] 05.Friday (D)	[S]Crash=>[E]C27.Day of Week=>[A]06.Friday	
[A] 06.Saturday (D)	[S]Crash=>[E]C27.Day of Week=>[A]07.Saturday	
[A] 07.Sunday (D)	[S]Crash=>[E]C27.Day of Week=>[A]01.Sunday	
[E] C46.Traffic Control Device Type		
[A] 00.No Control Present	[S]Crash=>[E]C16.Type of Intersection=>[S]3.Overall Traffic Control Device=>[A]05.No Controls	
[A] 01.Stop Sign		
[A] 02.Yield Sign	[S]Crash=>[E]C16.Type of Intersection=>[S]3.Overall Traffic Control Device=>[A]04.Yield	
[A] 03.Stop and Go Signal		
[A] 04.Flashing Signal with Stop Sign		
[A] 05.Flashing Signal without Stop Sign		
[A] 06.RR Gate and Flasher		
[A] 07.RR Flasher		
[A] 08.RR Crossbucks Only		
[A] 09.Human Control		
[A] 10.Warning Sign		
[A] 11.School Zone Signs		
[A] 12.Flashing Stop and Go Signal		
[A] 13.Double Yellow Line, No Passing Zone		
[A] 14.Other		
[E] C47.LE Agency NCIC Code (D)		
[A] 01.9 Digit Code (D)	[S]Crash=>[E]C10.Source of Information=>[S]2.Law Enforcement Agency Identifier=>[A]NCIC Originating Agency Identifier (OAI)	
[E] C48.Crash Severity (Aligned with Injury Type)		
[A] 01.Killed	[S]Crash=>[E]C19.Crash Severity=>[A]01.(K) Fatal Injury**	
[A] 02.A Type Injury	[S]Crash=>[E]C19.Crash Severity=>[A]02.(A) Suspected Serious Injury	Mapping Comment of 02.A Type Injury: North Carolina is compliant with the Suspected Serious Injury requirement because it collects, stores, and reports serious injury data based on the MMUCC definition.
[A] 03.B Type Injury	[S]Crash=>[E]C19.Crash Severity=>[A]03.(B) Suspected Minor	

State Structure	Standard Elements/ Attributes That Map	Comments
	Injury	
[A] 04.C Type Injury	[S]Crash=>[E]C19.Crash Severity=>[A]04.(C) Possible Injury	
[A] 05.No Injury	[S]Crash=>[E]C19.Crash Severity=>[A]05.(O) Property Damage-Only	
[A] 06.Unknown	[S]Crash=>[E]C19.Crash Severity=>[A]99.Unknown	
[E] C49.Manner of Collision		
[A] 20.Parked Motor Vehicle (Not Applicable)		
[A] 21.Rear End, Slow or Stop		
[A] 22.Rear End, Turn		
[A] 23.Left Turn, Same Roadway		
[A] 24.Left Turn, Different Roadways		
[A] 25.Right Turn, Same Roadway		
[A] 26.Right Turn, Different Roadways		
[A] 27.Head On	[S]Crash=>[E]C9.Manner of Crash/Collision Impact=>[A]02.Front to Front	
[A] 28.Sideswipe, Same Direction	[S]Crash=>[E]C9.Manner of Crash/Collision Impact=>[A]07.Sideswipe, Same Direction	
[A] 29.Sideswipe, Opposite Direction	[S]Crash=>[E]C9.Manner of Crash/Collision Impact=>[A]06.Sideswipe, Opposite Direction	
[A] 30.Angle	[S]Crash=>[E]C9.Manner of Crash/Collision Impact=>[A]01.Angle	
[A] 31.Backing Up		
[A] 32.Other Collision with Vehicle		
[E] C44b.Alcohol/Drug Involvement (D)		
[A] 00.Neither Alcohol Nor Other Drugs (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]01.No	
[A] 01.Yes Alcohol, Impairment Suspected (D)		
[A] 02.Yes Alcohol, No Impairment Detected (D)		
[A] 03.Yes Other Drugs, Impairment Suspected (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]02.Yes	
[A] 04.Yes Other Drugs, No Impairment Detected (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]02.Yes	
[A] 05.Yes Alcohol and Other Drugs, Impairment Suspected (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]02.Yes	
[A] 06.Yes Alcohol and Other Drugs, No Impairment Detected (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]02.Yes	
[A] 07.Unknown (D)	[S]Crash=>[E]C26.Drug Involvement=>[A]99.Unknown	
[SS] Vehicle		
[E] V1.Vehicle Unit Number Unique to the Crash		
[S] 01.Type		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Motor Vehicle in Transport	[S]Vehicle=>[E]V2.Motor Vehicle Unit Type and Number=>[S]1.Type=>[A]01.Motor Vehicle in Transport	
[A] 02.Parked Motor Vehicle	[S]Vehicle=>[E]V2.Motor Vehicle Unit Type and Number=>[S]1.Type=>[A]02.Parked Motor Vehicle	
[A] 03.Working Vehicle/Equipment	[S]Vehicle=>[E]V2.Motor Vehicle Unit Type and Number=>[S]1.Type=>[A]03.Working Vehicle/Equipment	
[S] 02.Number		
[A] 02.Sequential Number (Alphanumeric and Numeric Characters)	[S]Vehicle=>[E]V2.Motor Vehicle Unit Type and Number=>[S]2.Number=>[A]x.Sequential Number	
[E] V2.Vehicle Registration State and Year		
[S] 01.State		
[A] 01.State 2 Position Abbreviation	[S]Vehicle=>[E]V3.Motor Vehicle Registration State and Year=>[S]1.Identifier=>[A]xyz.State Identifier	
[A] 02.State Unknown		
[A] 03.Blank (No Plate Available)		
[S] 02.Year		
[A] 01.Year of Plate Issued	[S]Vehicle=>[E]V3.Motor Vehicle Registration State and Year=>[S]2.Motor Vehicle Registration=>[A]Year of Motor Vehicle Registration	
[E] V3.Vehicle License Plate Number		
[A] 01.Vehicle Plate Number	[S]Vehicle=>[E]V4.Motor Vehicle License Plate Number=>[A]xyz.Alphanumeric Identifier	
[E] V4.Vehicle Identification Number (VIN)		
[A] 01.Vehicle Identification Number (VIN)	[S]Vehicle=>[E]V1.Vehicle Identification Number (VIN)=>[A]xyz.Manufacturer-assigned number (permanently affixed to the motor vehicle)	
[E] V5.Vehicle Make		
[A] 01.Vehicle Make	[S]Vehicle=>[E]V5.Motor Vehicle Make=>[A]Name	
[E] V6.Commercial Vehicle Indicator		
[A] 01.Yes, Check Box Checked		
[A] 02.No, Check Box Not Checked		
[E] V7.Carrier Name		
[S] 01.Carrier Name		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Carrier Name	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]4.Name=>[A]Motor Carrier Name	
[S] 02.Carrier Name Source		
[A] 01.Carrier Number Source		
[E] V8.Carrier Street Address		
[A] 01.Carrier Street Address	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]5.Motor Carrier Address=>[A]Motor Carrier Address and Country	
[E] V9.Carrier Identification Number		
[S] 01.Carrier Identification Number		
[A] 01.USDOT Number	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]3.Identification Number=>[A]US DOT Number – up to 7 digits, right justified	
[A] 02.ICC Number		
[S] 02.Issuing Authority		
[A] 01.USDOT	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]1.Identification Type=>[A]01.US DOT Number	
[A] 02.ICC/MC		
[A] 03.International Fuel Tax Agreement Number (IFTA)		
[A] 04.Mexico	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]2.Country/State Code=>[A]Non-US Country Code (e.g. Mexico or Canada)	
[A] 05.Canada	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]2.Country/State Code=>[A]Non-US Country Code (e.g. Mexico or Canada)	
[A] 06.US State Code	[S]Large Vehicles & Hazardous Materials Section=>[E]LV7.Motor Carrier Identification=>[S]2.Country/State Code=>[A]US State Code	
[S] 03.Carrier Number Source		
[A] 01.Carrier Number Source		

State Structure	Standard Elements/ Attributes That Map	Comments
[E] V10.Vehicle Style (Type)		
[A] 01.Passenger Car	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]10.Passenger Car	
[A] 02.Pickup	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]13.Pickup	
[A] 03.Light Truck (Mini-Van, Panel)		
[A] 04.Sport Utility	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]12.(Sport) Utility Vehicle	
[A] 05.Van		
[A] 06.Commercial Bus		
[A] 07.School Bus	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]24.School Bus**	
[A] 08.Activity Bus		
[A] 09.Other Bus		
[A] 10.Single Unit Truck (2 Axle, 6-Tire)	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle Configuration=>[A]04.Single-Unit Truck (2-axle and GVWR > 10,000 lbs.)	
[A] 11.Single Unit Truck (3-or-More Axles)	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle Configuration=>[A]05.Single-Unit Truck (3 or more axles)	
[A] 12.Truck/Trailer	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle Configuration=>[A]06.Truck Pulling Trailer(s)	
[A] 13.Truck Tractor (Bobtail)	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle Configuration=>[A]07.Truck Tractor (Bobtail)	
[A] 14.Tractor/Semi-Trailer	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle Configuration=>[A]08.Truck Tractor/Semi-Trailer	
[A] 15.Unknown Heavy Truck		
[A] 16.Taxicab		
[A] 17.Tractor/Doubles	[S]Large Vehicles & Hazardous Materials Section=>[E]LV8.Vehicle Configuration=>[S]1.Vehicle	

State Structure	Standard Elements/ Attributes That Map	Comments
	Configuration=>[A]09.Truck Tractor/Double	
[A] 18.Farm Equipment	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]16.Farm Equipment (tractor, combine harvester, etc.)	
[A] 19.Farm Tractor	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]16.Farm Equipment (tractor, combine harvester, etc.)	
[A] 20.Motorcycle		
[A] 21.Moped	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]05.Moped or motorized bicycle	
[A] 22.Motor/Scooter or Motor Bike or Motor-Driven Bicycle	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]05.Moped or motorized bicycle	
[A] 23.Pedalcycle (bicycle, tricycle, unicycle, electric assisted bicycle)		
[A] 24.Pedestrian		
[A] 25.Motor Home/Recreational Vehicle	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]19.Motor Home	
[A] 26.Other		
[A] 27.All-Terrain Vehicle (ATV)	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]01.All-Terrain Vehicle/All-Terrain Cycle (ATV/ATC)	
[A] 28.Firetruck		
[A] 29.EMS Vehicle, Ambulance, Rescue Squad		
[A] 30.Military		
[A] 31.Police		
[A] 32.Unknown		
[A] 33.Autocycle	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]09.Autocycle	
[A] 34.Single-Unit Truck** (D)	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]17.Single-Unit Truck**	Mapping Comment of 34.Single-Unit Truck** (D): Derived MMUCC attributes "Single-Unit Truck**" and "Truck Tractor**" in the State crash database.

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 35.Truck Tractor** (D)	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]1.Body Type Category=>[A]18.Truck Tractor**	Mapping Comment of 35.Truck Tractor** (D): Derived MMUCC attributes "Single-Unit Truck**" and "Truck Tractor**" in the State crash database.
[E] V11.Cargo Body Type		
[A] 01.Bus (Seats for 16 or More People, Including Driver)	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]01.Bus	
[A] 02.Bus (Seats for Less Than 16 People, Including Driver)	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]01.Bus	
[A] 03.Van/Enclosed Box	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]12.Van/Enclosed Box	
[A] 04.Grain/Chips/Gravel Truck	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]08.Grain/Chips/Gravel	
[A] 05.Pole Truck	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]11.Pole-Trailer	
[A] 06.Cargo Tank	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]03.Cargo Tank	
[A] 07.Flatbed	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]06.Flatbed	
[A] 08.Dump	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]05.Dump	
[A] 09.Concrete Mixer	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]04.Concrete Mixer	
[A] 10.Auto Transport	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]02.Auto Transporter	
[A] 11.Garbage/Refuse	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]07.Garbage/Refuse	
[A] 12.Log Truck	[S]Large Vehicles & Hazardous Materials Section=>[E]LV9.Cargo Body Type=>[A]10.Log	
[A] 13.Other		
[A] 14.Intermodal Cargo Container	[S]Large Vehicles & Hazardous	

State Structure	Standard Elements/ Attributes That Map	Comments
	Materials Section=>[E]LV9.Cargo Body Type=>[A]09.Intermodal Container Chassis	
[E] V12.Hazardous Materials Involvement (Cargo Only)		
[S] 01.Was This Vehicle Carrying Hazardous Materials?		
[A] 01.Yes		
[A] 02.No		
[S] 02.Did This Vehicle Have a Hazardous Materials Placard?		
[A] 01.Yes		
[A] 02.No		
[S] 03.Hazardous Materials Placard Numbers		
[A] 01.4-Digit Placard Number	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]1.Hazardous Materials ID=>[A]xxx.4-digit Hazardous Materials ID number or name taken from the middle of the diam	
[A] 02.1-Digit Placard Number	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]2.Hazardous Materials Class=>[A]x.1-digit Hazardous Materials Class number from the bottom of diamond	
[A] 2a.No Placard for 1-Digit Class	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]2.Hazardous Materials Class=>[A]00.No HM Placard Displayed	
[A] 01a.No Placard for 4-Digit ID	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]1.Hazardous Materials ID=>[A]000.No HM Placard Displayed	
[S] 04.Hazardous Materials, Cargo Released From the Cargo Compartment?		
[A] 01.Yes - Hazardous Materials Released	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]3.Release of hazardous materials from a cargo compartment (e.g. trailer), cargo c=>[A]02.Yes	
[A] 02.No - Hazardous Materials Not Released	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous	

State Structure	Standard Elements/ Attributes That Map	Comments
	Materials (Cargo Only)=>[S]3.Release of hazardous materials from a cargo compartment (e.g. trailer), cargo c=>[A]01.No	
[A] 03.Not Applicable	[S]Large Vehicles & Hazardous Materials Section=>[E]V10.Hazardous Materials (Cargo Only)=>[S]3.Release of hazardous materials from a cargo compartment (e.g. trailer), cargo c=>[A]97.Not Applicable	
[E] V13.Weight Rating of Power Unit (GVWR/GCWR)		
[A] 01.<10,000 pounds		
[A] 02.10,001-26,000		
[A] 03.>26,000		
[E] V14.Trailer Type		
[A] 00.No Trailer		
[C] 01.Non-Semi-Trailers		
[A] 01.Boat		
[A] 02.Camper		
[A] 03.Utility		
[A] 04.House Trailer (Mobile Home)		
[A] 06.Towed Vehicle		
[A] 07.Other Non-Semi		
[C] 02.Semi-Trailers		
[A] 08.Tanker		
[A] 09.Enclosed Van		
[A] 10.Flatbed or Platform		
[A] 11.Other Semi-Trailer		
[A] 12.Double Trailer		
[E] V15.Overwidth Trailer Permit Number		
[A] 01.Overwidth Permit Number		
[E] V16.Length of Trailer 1		
[A] 01.Length of Trailer 1 in Feet		
[A] 99.If Double Trailer and Length is Not Stated		
[E] V17.Width of Trailer 1		
[A] 01.Width of Trailer 1 in Inches		
[A] 999.Not Stated		
[E] V18.Length of Trailer 2		
[A] 01.Length of Trailer 2 in Feet		
[A] 99.If Double Trailer and Length is Not Stated		
[E] V19.Width of Trailer 2		
[A] 01.Width of Trailer 2 in Inches		
[A] 999.Not Stated		
[E] V20.Number of Axles - Trailer 1		
[A] 9.Not Stated		
[A] 01.Number of Axles - Trailer 1		
[E] V21.Number of Axles - Trailer 2		
[A] 9.Not Stated		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Number of Axles - Trailer 2		
[E] V22.Vehicle Defects (Possible Contributing)		
[S] 01.Selection 1		
[A] 00.None Detected	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]00.None	
[A] 01.Brakes	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]01.Brakes	
[A] 02.Headlights		
[A] 03.Rear Lights		
[A] 04.Steering	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]04.Steering	
[A] 05.Tires	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]07.Tires	
[A] 06.Other Defects		
[A] 07.Unknown	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]99.Unknown	Mapping Comment of 07.Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" because they both contain the attribute "Other". Mapping Comment of 07.Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" because they both contain the attribute "Other".
[S] 02.Selection 2		
[A] 00.None Detected	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]00.None	
[A] 01.Brakes	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]01.Brakes	
[A] 02.Headlights		
[A] 03.Rear Lights		
[A] 04.Steering	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]04.Steering	
[A] 05.Tires	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor	

State Structure	Standard Elements/ Attributes That Map	Comments
	Vehicle=>[A]07.Tires	
[A] 06.Other Defects		
[A] 07.Unknown	[S]Vehicle=>[E]V24.Contributing Circumstances, Motor Vehicle=>[A]99.Unknown	Mapping Comment of 07.Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" because they both contain the attribute "Other". Mapping Comment of 07.Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" because they both contain the attribute "Other".
[E] V23.Vehicle Authorized Speed Limit		
[A] 01.Vehicle Authorized Speed Limit	[S]Vehicle=>[E]V12.Motor Vehicle Posted/Statutory Speed Limit=>[A]xx.Posted/Statutory Value (miles per hour)	
[A] 02.Not Applicable	[S]Vehicle=>[E]V12.Motor Vehicle Posted/Statutory Speed Limit=>[A]97.Not Applicable	
[E] V24.Estimate of Original Vehicle Speed		
[A] 01.Estimate of Original Vehicle Speed		
[A] 02.Not Applicable		
[A] 999.Not Stated		
[E] V25.Estimate Speed at Impact		
[A] 01.Estimate of Vehicle Speed at Impact		
[A] 02.Not Applicable		
[A] 98.Speed is at Least 98 mph		
[A] 999.Not Stated		
[E] V26.Tire Impressions Before Impact (Length)		
[A] 01.Length in Feet of Tire Impressions		
[A] 02.Not Applicable		
[A] 999.Not Stated		
[E] V27.Distance Traveled After Imp[act		
[A] 01.Distance Traveled After Impact		
[A] 02.Not Applicable		
[A] 999.Not Stated		
[E] V28.Direction of Travel Before Crash		
[S] 01.Direction (Designated Direction of Road)		
[A] 01.North	[S]Vehicle=>[E]V13.Direction of Travel Before	

State Structure	Standard Elements/ Attributes That Map	Comments
	Crash=>[A]01.Northbound	
[A] 02.North East	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]01.Northbound	
[A] 03.North West	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]01.Northbound	
[A] 04.South	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]06.Southbound	
[A] 05.South East	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]06.Southbound	
[A] 06.South West	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]06.Southbound	
[A] 07.East	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]03.Eastbound	
[A] 08.West	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]09.Westbound	
[A] 09.Not on Roadway	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]00.Not on Roadway	
[A] 10.Unknown	[S]Vehicle=>[E]V13.Direction of Travel Before Crash=>[A]99.Unknown	
[S] 02.Reference to Roadway		
[A] 01.Vehicle on "On Road"		
[A] 02.Vehicle on "From/Reference Road"		
[A] 03.Vehicle on Neither of the Above		
[E] V30.Vehicle Maneuver/Actions (Prior to Crash)		
[A] 01.Stopped in Travel Lane	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]11.Stopped in Traffic	
[A] 02.Parked Out of Travel Lanes	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]09.Parked	
[A] 03.Parked in Travel Lanes	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]11.Stopped in Traffic	
[A] 04.Going Straight Ahead	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]06.Movements Essentially Straight Ahead	
[A] 05.Changing Lanes or Merging	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]02.Changing Lanes	
[A] 06.Passing	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]08.Overtaking/ Passing	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 07.Making Right Turn	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]13.Turning Right	
[A] 08.Making Left Turn	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]12.Turning Left	
[A] 09.Making U Turn	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]05.Making U-Turn	
[A] 10.Backing	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]01.Backing	
[A] 11.Slowing or Stopping	[S]Vehicle=>[E]V18.Motor Vehicle Maneuver/Action=>[A]10.Slowing	
[A] 12.Starting in Roadway		
[A] 13.Parking		
[A] 14.Leaving Parked Position		
[A] 15.Avoiding Object in Road		
[A] 16.Other		
[E] V31.Point of Impact		
[A] 6.Rear (State Codes 14, 15, 16, 34, 35, 36, 29)	[S]Vehicle=>[E]V19.Vehicle Damage=>[S]1.Initial Point of Contact=>[A]06.(Clock Position) 6	
[A] 00.Pedestrians and Non-Contact Vehicle	[S]Vehicle=>[E]V19.Vehicle Damage=>[S]1.Initial Point of Contact=>[A]00.Non-Collision	Mapping Comment of 00.Pedestrians and Non-Contact Vehicle: MMUCC recommends allowing coding up to 13 areas (12-points, plus "Top" or "Undercarriage"). The State has more locations, which is permitted as long as they can be matched to the MMUCC attributes.The SCDB only has four points of contact/damage for motorcyclists. MMUCC uses the 12-point clock diagram for all vehicle types. Because of the inconsistency (not mapping to points for all vehicles), the State cannot map to

State Structure	Standard Elements/ Attributes That Map	Comments
		the MMUCC attributes (except, 12,6 & Undercarriage).
[A] 12.Front (State Codes 1,2,3,27)	[S]Vehicle=>[E]V19.Vehicle Damage=>[S]1.Initial Point of Contact=>[A]12.(Clock Position) 12	
[A] 14.Undercarriage (State Codes 22, 23, 24)	[S]Vehicle=>[E]V19.Vehicle Damage=>[S]1.Initial Point of Contact=>[A]14.Undercarriage	
[A] 1-26.Vehicle (Passenger Cars/Small Trucks)		
[A] 1-40.Vehicle (Tractor-Trailers)		
[A] 1-26b.Vehicle (Passenger Cars/Small Trucks)		
[A] 1-40b.Vehicle (Tractor-Trailers)		
[A] 27-30.Motorcycles, Bicycles, Mopeds, and All Terrain Vehicles (ATV)		
[A] 27-30b.Motorcycles, Bicycles, Mopeds, and All Terrain Vehicles (ATV)		
[E] V32.Sequence of Events (Vehicle)		
[A] 00.Unknown		
[S] 01.Selection 1		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]07.Ran Off Roadway Right	
[A] 02.Ran Off Road Left	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]06.Ran Off Roadway Left	
[A] 03.Ran Off Road Straight Ahead	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]03.End Departure (T-intersection, dead-end, etc.)	
[A] 04.Jackknife	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]2.Non-Collision Harmful Events=>[A]15.Jackknife	
[A] 05.Overturn/Rollover	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]2.Non-Collision Harmful Events=>[A]17.Overturn/Rollover	
[A] 06.Crossed Centerline/Median		
[A] 07.Downhill Runaway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]04.Downhill Runaway	
[A] 08.Cargo/Equipment Loss or Shift	[S]Vehicle=>[E]V20.Sequence of	

State Structure	Standard Elements/ Attributes That Map	Comments
	Events=>[S]1.1.(Selection 1)=>[C]2.Non-Collision Harmful Events=>[A]11.Cargo/Equipment Loss or Shift	
[A] 09.Fire/Explosion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]2.Non-Collision Harmful Events=>[A]13.Fire/Explosion	
[A] 10.Immersion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]2.Non-Collision Harmful Events=>[A]14.Immersion, Full or Partial	
[A] 11.Equipment Failure (Blown Tire, Brake Failure, etc.)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]05.Equipment Failure (blown tire, brake failure, etc.)	
[A] 12.Separation of Units	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]1.Non-Harmful Events=>[A]09.Separation of Units	
[A] 15.Other Non-Collision		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]25.Pedestrian	
[A] 15.Pedalcyclist	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]24.Pedalcycle	
[A] 16.Railway Vehicle (e.g., Train, Engine)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]26.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]19.Animal (live)	
[A] 18.Moveable Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person,	

State Structure	Standard Elements/ Attributes That Map	Comments
	Motor Vehicle, or Non-Fixed Object=>[A]23.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 22.Rear End, Turn	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 23.Left Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 24.Left Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 25.Right Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 26.Right Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 27.Head On	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 28.Sideswipe, Same Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 29.Sideswipe, Opposite Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 30.Angle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 31.Backing Up	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 32.Other Collision with Vehicle		
[A] 65.Motor Vehicle in Transport (D)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[C] 04.Collision with Fixed Object		
[A] 33.Tree	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]49.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Vehicle=>[E]V20.Sequence of	

State Structure	Standard Elements/ Attributes That Map	Comments
	Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 40.Commercial Sign		
[A] 41.Guardrail End-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 42.Guardrail Face-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 43.Guardrail End-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 44.Guardrail Face-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]30.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed	

State Structure	Standard Elements/ Attributes That Map	Comments
	Object=>[A]31.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 58.Ditch	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]37.Ditch	
[A] 59.Embankment	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]38.Embankment	
[A] 60.Mailbox	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]43.Mailbox	
[A] 61.Fence or Fence Post	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]39.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.1.(Selection 1)=>[C]4.Collision With Fixed Object=>[A]42.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		
[S] 02.Selection 2		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]07.Ran Off Roadway Right	
[A] 02.Ran Off Road Left	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]06.Ran Off Roadway Left	
[A] 03.Ran Off Road Straight Ahead	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]03.End Departure (T-intersection, dead-end, etc.)	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 04.Jackknife	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]2.Non-Collision Harmful Events=>[A]15.Jackknife	
[A] 05.Overturn/Rollover	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]2.Non-Collision Harmful Events=>[A]17.Overturn/Rollover	
[A] 06.Crossed Centerline/Median		
[A] 07.Downhill Runaway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]04.Downhill Runaway	
[A] 08.Cargo/Equipment Loss or Shift	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]2.Non-Collision Harmful Events=>[A]11.Cargo/Equipment Loss or Shift	
[A] 09.Fire/Explosion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]2.Non-Collision Harmful Events=>[A]13.Fire/Explosion	
[A] 10.Immersion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]2.Non-Collision Harmful Events=>[A]14.Immersion, Full or Partial	
[A] 11.Equipment Failure (Blown Tire, Brake Failure, etc.)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]05.Equipment Failure (blown tire, brake failure, etc.)	
[A] 12.Separation of Units	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]1.Non-Harmful Events=>[A]09.Separation of Units	
[A] 15.Other Non-Collision		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]25.Pedestrian	
[A] 15.Pedalcyclist	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]24.Pedalcycle	
[A] 16.Railway Vehicle (e.g., Train, Engine)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]26.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]19.Animal (live)	
[A] 18.Moveable Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]23.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 22.Rear End, Turn	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 23.Left Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 24.Left Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 25.Right Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 26.Right Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed	

State Structure	Standard Elements/ Attributes That Map	Comments
	Object=>[A]20.Motor Vehicle in Transport	
[A] 27.Head On	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 28.Sideswipe, Same Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 29.Sideswipe, Opposite Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 30.Angle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 31.Backing Up	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 32.Other Collision with Vehicle		
[A] 65.Motor Vehicle in Transport (D)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[C] 04.Collision with Fixed Object		
[A] 33.Tree	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]49.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of	

State Structure	Standard Elements/ Attributes That Map	Comments
	Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 40.Commercial Sign		
[A] 41.Guardrail End-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 42.Guardrail Face-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 43.Guardrail End-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 44.Guardrail Face-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]30.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 58.Ditch	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]37.Ditch	
[A] 59.Embankment	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]38.Embankment	
[A] 60.Mailbox	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]43.Mailbox	
[A] 61.Fence or Fence Post	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]39.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.2.(Selection 2)=>[C]4.Collision With Fixed Object=>[A]42.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		
[S] 03.Selection 3		
[C] 01.Non-Collision		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 01.Ran Off Road Right	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]07.Ran Off Roadway Right	
[A] 02.Ran Off Road Left	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]06.Ran Off Roadway Left	
[A] 03.Ran Off Road Straight Ahead	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]03.End Departure (T-intersection, dead-end, etc.)	
[A] 04.Jackknife	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]2.Non-Collision Harmful Events=>[A]15.Jackknife	
[A] 05.Overturn/Rollover	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]2.Non-Collision Harmful Events=>[A]17.Overturn/Rollover	
[A] 06.Crossed Centerline/Median		
[A] 07.Downhill Runaway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]04.Downhill Runaway	
[A] 08.Cargo/Equipment Loss or Shift	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]2.Non-Collision Harmful Events=>[A]11.Cargo/Equipment Loss or Shift	
[A] 09.Fire/Explosion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]2.Non-Collision Harmful Events=>[A]13.Fire/Explosion	
[A] 10.Immersion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]2.Non-Collision Harmful Events=>[A]14.Immersion, Full or Partial	
[A] 11.Equipment Failure (Blown Tire, Brake Failure, etc.)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]05.Equipment Failure (blown tire, brake failure, etc.)	
[A] 12.Separation of Units	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]1.Non-Harmful Events=>[A]09.Separation of Units	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 15.Other Non-Collision		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]25.Pedestrian	
[A] 15.Pedalcyclist	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]24.Pedalcycle	
[A] 16.Railway Vehicle (e.g., Train, Engine)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]26.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]19.Animal (live)	
[A] 18.Moveable Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]23.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 22.Rear End, Turn	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 23.Left Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 24.Left Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 25.Right Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 26.Right Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 27.Head On	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 28.Sideswipe, Same Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 29.Sideswipe, Opposite Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 30.Angle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 31.Backing Up	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 32.Other Collision with Vehicle		
[A] 65.Motor Vehicle in Transport (D)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]3.Collision With Person,	

State Structure	Standard Elements/ Attributes That Map	Comments
	Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[C] 04.Collision with Fixed Object		
[A] 33.Tree	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]49.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 40.Commercial Sign		
[A] 41.Guardrail End-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 42.Guardrail Face-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 43.Guardrail End-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 44.Guardrail Face-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]30.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 58.Ditch	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]37.Ditch	
[A] 59.Embankment	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]38.Embankment	
[A] 60.Mailbox	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed	

State Structure	Standard Elements/ Attributes That Map	Comments
	Object=>[A]43.Mailbox	
[A] 61.Fence or Fence Post	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]39.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.3.(Selection 3)=>[C]4.Collision With Fixed Object=>[A]42.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		
[S] 04.Selection 4		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]07.Ran Off Roadway Right	
[A] 02.Ran Off Road Left	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]06.Ran Off Roadway Left	
[A] 03.Ran Off Road Straight Ahead	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]03.End Departure (T-intersection, dead-end, etc.)	
[A] 04.Jackknife	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]2.Non-Collision Harmful Events=>[A]15.Jackknife	
[A] 05.Overturn/Rollover	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]2.Non-Collision Harmful Events=>[A]17.Overturn/Rollover	
[A] 06.Crossed Centerline/Median		
[A] 07.Downhill Runaway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]04.Downhill Runaway	
[A] 08.Cargo/Equipment Loss or Shift	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]2.Non-Collision Harmful Events=>[A]11.Cargo/Equipment Loss or Shift	
[A] 09.Fire/Explosion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]2.Non-Collision Harmful Events=>[A]13.Fire/Explosion	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 10.Immersion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]2.Non-Collision Harmful Events=>[A]14.Immersion, Full or Partial	
[A] 11.Equipment Failure (Blown Tire, Brake Failure, etc.)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]05.Equipment Failure (blown tire, brake failure, etc.)	
[A] 12.Separation of Units	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]1.Non-Harmful Events=>[A]09.Separation of Units	
[A] 15.Other Non-Collision		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]25.Pedestrian	
[A] 15.Pedalcyclist	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]24.Pedalcycle	
[A] 16.Railway Vehicle (e.g., Train, Engine)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]26.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]19.Animal (live)	
[A] 18.Moveable Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]23.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 22.Rear End, Turn	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 23.Left Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 24.Left Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 25.Right Turn, Same Roadway	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 26.Right Turn, Different Roadways	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 27.Head On	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 28.Sideswipe, Same Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 29.Sideswipe, Opposite Direction	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 30.Angle	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 31.Backing Up	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[A] 32.Other Collision with Vehicle		
[A] 65.Motor Vehicle in Transport (D)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]3.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]20.Motor Vehicle in Transport	
[C] 04.Collision with Fixed Object		
[A] 33.Tree	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]49.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]50.Utility Pole/Light Support	
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]47.Traffic Sign Support	
[A] 40.Commercial Sign		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 41.Guardrail End-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 42.Guardrail Face-On Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 43.Guardrail End-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]40.Guardrail End Terminal	
[A] 44.Guardrail Face-In Median	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]41.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]32.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]30.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]31.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Vehicle=>[E]V20.Sequence of	

State Structure	Standard Elements/ Attributes That Map	Comments
	Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]35.Culvert	
[A] 58.Ditch	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]37.Ditch	
[A] 59.Embankment	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]38.Embankment	
[A] 60.Mailbox	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]43.Mailbox	
[A] 61.Fence or Fence Post	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]39.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Vehicle=>[E]V20.Sequence of Events=>[S]1.4.(Selection 4)=>[C]4.Collision With Fixed Object=>[A]42.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		
[E] V33.Most Harmful Event (Vehicle)		
[A] 00.Unknown		
[S] 01.Selection 1		
[C] 01.Non-Collision		
[A] 01.Ran Off Road Right		
[A] 02.Ran Off Road Left		
[A] 03.Ran Off Road Straight Ahead		
[A] 04.Jackknife	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]1.Non-Collision Harmful Events=>[A]05.Jackknife	
[A] 05.Overturn/Rollover	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]1.Non-Collision Harmful Events=>[A]07.Overturn/Rollover	
[A] 06.Crossed Centerline/Median		
[A] 07.Downhill Runaway		
[A] 08.Cargo/Equipment Loss or Shift	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]1.Non-Collision Harmful Events=>[A]01.Cargo/Equipment Loss or Shift	
[A] 09.Fire/Explosion	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor	

State Structure	Standard Elements/ Attributes That Map	Comments
	Vehicle=>[C]1.Non-Collision Harmful Events=>[A]03.Fire/Explosion	
[A] 10.Immersion	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]1.Non-Collision Harmful Events=>[A]04.Immersion, Full or Partial	
[A] 11.Equipment Failure (Blown Tire, Brake Failure, etc.)		
[A] 12.Separation of Units		
[A] 15.Other Non-Collision		
[C] 02.Collision of Motor Vehicle With		
[A] 14.Pedestrian	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]15.Pedestrian	
[A] 15.Pedalcyclist	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]14.Pedalcycle	
[A] 16.Railway Vehicle (e.g., Train, Engine)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]16.Railway Vehicle (train, engine)	
[A] 17.Animal	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]09.Animal (live)	
[A] 18.Moveable Object		
[C] 03.Collision of Two or More Motor Vehicles		
[A] 20.Parked Motor Vehicle	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]13.Parked Motor Vehicle	
[A] 21.Rear End, Slow or Stop	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 22.Rear End, Turn	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed	

State Structure	Standard Elements/ Attributes That Map	Comments
	Object=>[A]10.Motor Vehicle in Transport	
[A] 23.Left Turn, Same Roadway	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 24.Left Turn, Different Roadways	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 25.Right Turn, Same Roadway	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 26.Right Turn, Different Roadways	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 27.Head On	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 28.Sideswipe, Same Direction	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 29.Sideswipe, Opposite Direction	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 30.Angle	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 31.Backing Up	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[A] 32.Other Collision with Vehicle		
[A] 65.Motor Vehicle in Transport (D)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]2.Collision With Person, Motor Vehicle, or Non-Fixed Object=>[A]10.Motor Vehicle in Transport	
[C] 04.Collision with Fixed Object		
[A] 33.Tree	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]39.Tree (standing)	
[A] 34.Utility Pole (With or Without Light)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]40.Utility Pole/Light Support	
[A] 35.Luminaire Pole (Non-Breakaway)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]40.Utility Pole/Light Support	
[A] 36.Luminaire Pole (Breakaway)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]40.Utility Pole/Light Support	
[A] 37.Official Highway Sign (Non-Breakaway)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]37.Traffic Sign Support	
[A] 38.Official Highway Sign (Breakaway)	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]37.Traffic Sign Support	
[A] 39.Overhead Sign Support	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]37.Traffic Sign Support	
[A] 40.Commercial Sign		
[A] 41.Guardrail End-On Shoulder	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]30.Guardrail End	

State Structure	Standard Elements/ Attributes That Map	Comments
	Terminal	
[A] 42.Guardrail Face-On Shoulder	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]31.Guardrail Face	
[A] 43.Guardrail End-In Median	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]30.Guardrail End Terminal	
[A] 44.Guardrail Face-In Median	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]31.Guardrail Face	
[A] 45.Shoulder Barrier End (Non-Guardrail)		
[A] 46.Shoulder Barrier Face (Non-Guardrail)		
[A] 47.Median Barrier End (Non-Guardrail)		
[A] 48.Median Barrier Face (Non-Guardrail)		
[A] 49.Bridge Rail End	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]22.Bridge Rail	
[A] 50.Bridge Rail Face	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]22.Bridge Rail	
[A] 51.Overhead Part of Underpass	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]20.Bridge Overhead Structure	
[A] 52.Pier on Shoulder of Underpass	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]21.Bridge Pier or Support	
[A] 53.Pier in Median of Underpass	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]21.Bridge Pier or Support	
[A] 54.Abutment (Supporting Wall) of Underpass		
[A] 55.Traffic Island Curb or Median		
[A] 56.Catch Basin or Culvert on Shoulder	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]25.Culvert	
[A] 57.Catch Basin or Culvert in Median	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]25.Culvert	
[A] 58.Ditch	[S]Vehicle=>[E]V21.Most Harmful	

State Structure	Standard Elements/ Attributes That Map	Comments
	Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]27.Ditch	
[A] 59.Embankment	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]28.Embankment	
[A] 60.Mailbox	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]33.Mailbox	
[A] 61.Fence or Fence Post	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]29.Fence	
[A] 62.Construction Barrier		
[A] 63.Crash Cushion	[S]Vehicle=>[E]V21.Most Harmful Event for this Motor Vehicle=>[C]3.Collision With Fixed Object=>[A]32.Impact Attenuator/Crash Cushion	
[A] 64.Other Fixed Object		
[E] V34.Distance & Direction from Road to Object Struck		
[A] 00.None		
[A] 01.In Road		
[A] 02.Right of Road, 0-10 FT		
[A] 03.Right of Road, 11-30 FT		
[A] 04.Right of Road, Over 30 FT		
[A] 05.Left of Road, 0-10 FT		
[A] 06.Left of Road, 11-30 FT		
[A] 07.Left of Road, Over 30 FT		
[A] 08.Straight-Ahead, 0-10 FT		
[A] 09.Straight-Ahead, 11-30 FT		
[A] 10.Straight-Ahead, Over 30 FT		
[E] V35.Post Crash Fire		
[A] 00.Not Stated		
[A] 01.Yes		
[A] 02.No		
[E] V36.Underride/Override		
[A] 01.Underride		
[A] 02.Override		
[A] 03.Neither Underride or Override		
[A] 04.Unknown		
[E] V37.Damaged Area of Vehicle/Extent of Deformity (TAD)		
[S] 01.Damaged Areas Selection 1		
[A] 01.Front Center		
[A] 02.Front Distributed		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 03.Front Left Corner		
[A] 04.Front Right Corner		
[A] 05.Rear Center		
[A] 06.Rear Distributed		
[A] 07.Rear Left Corner		
[A] 08.Rear Right Corner		
[A] 09.Left Side (Door)		
[A] 10.Right Side (Door)		
[A] 11.Left Side Front Quarter		
[A] 12.Right Side Front Quarter		
[A] 13.Left Side Rear Quarter		
[A] 14.Right Side Rear Quarter		
[A] 15.Left Side Distributed		
[A] 16.Right Side Distributed		
[A] 17.Left Side & Top (Rollover)		
[A] 18.Right Side & Top (Rollover)		
[A] 19.Top		
[A] 20.Underneath		
[S] 02.Damaged Areas Selection 2		
[A] 01.Front Center		
[A] 02.Front Distributed		
[A] 03.Front Left Corner		
[A] 04.Front Right Corner		
[A] 05.Rear Center		
[A] 06.Rear Distributed		
[A] 07.Rear Left Corner		
[A] 08.Rear Right Corner		
[A] 09.Left Side (Door)		
[A] 10.Right Side (Door)		
[A] 11.Left Side Front Quarter		
[A] 12.Right Side Front Quarter		
[A] 13.Left Side Rear Quarter		
[A] 14.Right Side Rear Quarter		
[A] 15.Left Side Distributed		
[A] 16.Right Side Distributed		
[A] 17.Left Side & Top (Rollover)		
[A] 18.Right Side & Top (Rollover)		
[A] 19.Top		
[A] 20.Underneath		
[S] 03.Damaged Areas Selection 3		
[A] 01.Front Center		
[A] 02.Front Distributed		
[A] 03.Front Left Corner		
[A] 04.Front Right Corner		
[A] 05.Rear Center		
[A] 06.Rear Distributed		
[A] 07.Rear Left Corner		
[A] 08.Rear Right Corner		
[A] 09.Left Side (Door)		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 10.Right Side (Door)		
[A] 11.Left Side Front Quarter		
[A] 12.Right Side Front Quarter		
[A] 13.Left Side Rear Quarter		
[A] 14.Right Side Rear Quarter		
[A] 15.Left Side Distributed		
[A] 16.Right Side Distributed		
[A] 17.Left Side & Top (Rollover)		
[A] 18.Right Side & Top (Rollover)		
[A] 19.Top		
[A] 20.Underneath		
[S] 04.Extent of Deformity		
[A] 01.0-7 Scale with 7 Being Most Severe		
[E] V38.Estimated Amount of Vehicle Damage		
[A] 01.Dollar Amount		
[A] 98.Damage Exceeds 9999998		
[A] 99.Not Stated		
[E] V39.Vehicle Drivable		
[A] 01.Yes		
[A] 02.No	[S]Vehicle=>[E]V19.Vehicle Damage=>[S]3.Resulting Extent of Damage=>[A]03.Disabling Damage	Mapping Comment of 02.No: The SCDB attribute "No" from the element "Vehicle Drivable" can be used to map only to the MMUCC attribute "Disabling Damage".
[A] 03.Unknown		
[E] V40.Vehicle Towed By		
[A] 01.Towed By		
[E] V41.Insurance Company Name		
[A] 01.Insurance Company Name		
[E] V42.Insurance Policy Number		
[A] 01.Insurance Policy Number		
[E] V43.Vehicle Model Year (D)		
[A] 01.Vehicle Model Year (D)	[S]Vehicle=>[E]V6.Motor Vehicle Model Year=>[A]Model Year	
[E] V44.Vehicle Model (D)		
[A] 01.Vehicle Model (D)	[S]Vehicle=>[E]V7.Motor Vehicle Model=>[A]Code for Model	
[E] V45.Vehicle Body Type (D)		
[C] 01.Passenger Vehicles		
[A] 2D.Sedan, 2-Door		
[A] 2F.Formal Hardtop, 2-Door		
[A] 2H.(81-03) Hatchback, 2-Door		
[A] 2L.Liftback, 3-Door		
[A] 2P.Pillard Hardtop, 2-Door		
[A] 2T.Hardtop, 2-Door		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 2W.Wagon, 2-Door		
[A] 3D.Runabout, 3-Door		
[A] 4D.Sedan, 4-Door		
[A] 4H.(81-03) Hatchback, 4-Door		
[A] 4L.Liftback, 5-Door		
[A] 4P.Pillard Hardtop, 4-Door		
[A] 4T.Hardtop, 4-Door		
[A] 4W.Wagon, 4-Door		
[A] 5D.Sedan, 5-Door		
[A] AM.Ambulance		
[A] CB.Cab & Chassis (Luv)		
[A] CP.Coupe		
[A] CV.Convertible		
[A] HB.Hatchback		
[A] HR.Hearse		
[A] HT.Hardtop		
[A] LB.Liftback		
[A] LM.Limousine		
[A] NB.Notchback		
[A] PK.Pickup		
[A] PN.Panel		
[A] RO.Roadster		
[A] SB.Sport Hatchback		
[A] SC.Sport Coupe		
[A] SO.Sedan		
[A] SV.Sport Van		
[A] SW.Station Wagon		
[A] UT.Utility		
[A] WW.Wide Wheel Wagon		
[C] 02.Trucks		
[A] AC.AutoCarrier		
[A] AR.Armored Truck		
[A] BU.Bus		
[A] CS.Chassis and Cab		
[A] CU.Custom Pickup		
[A] CV.Convertible (Jeep Commando, Suzuki, Samurai, Dodge Dakota)		
[A] CW.Crew Pickup		
[A] CY.Cargo Cutaway		
[A] DP.Dump		
[A] EC.Extended Cargo Van		
[A] ES.Extended Sport Van		
[A] EV.Extended Van		
[A] EW.Extended Window Van		
[A] FB.Flatbed or Platform		
[A] FC.Forward Control		
[A] FE.Farm Equipment		
[A] FT.Fire Truck		
[A] GG.Garbage or Refuse		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] GL.Gliders		
[A] GN.Grain		
[A] HO.Hopper		
[A] IC.Incomplete Chassis		
[A] IE.Incomplete Extended Van		
[A] LG.Logger		
[A] LL.Suburban and Carry All		
[A] MH.Motorized Home		
[A] MP.Multi-Purpose		
[A] MV.Maxi Van		
[A] MY.Motorized Cutaway		
[A] OS.Tractor Truck (Diesel)		
[A] PC.Club Cab Pickup		
[A] PK.Pickup		
[A] PM.Pickup with Camper Mounted on Bed		
[A] PN.Panel		
[A] PO.Parcel Delivery		
[A] PS.Super Cab Pickup		
[A] RD.Roadster (Jeep, Jeep Commando)		
[A] FTR.Farm Tractor		
[C] 03.Motorcycles		
[A] T.Dirt		
[A] AT.All Terrain		
[A] EN.Enduro		
[A] MK.Mini-Bike		
[A] MN.Mini Moto Cross		
[A] MP.Moped		
[A] MR.Mini Road/Trail		
[A] MS.Motor Scooter		
[A] MX.Moto Cross		
[A] MY.Mini Cycle		
[A] RC.Racer		
[A] RS.Road/Street		
[A] RT.Road/Trail		
[A] TL.Trail/Dirt		
[A] TR.Trail		
[E] V46.Total Trailers Attached to Truck (D)		
[A] 01.Total Number of Trailers Attached to Large Truck (D)	[S]Vehicle=>[E]V8.Motor Vehicle Body Type Category=>[S]2.Number of Trailing Units=>[A]Number of trailers	
[E] V47.Total Number of Occupants (D)		
[A] 01.Total Number of Occupants (D)	[S]Vehicle=>[E]V9.Total Occupants in Motor Vehicle=>[A]x.Total number of injured and uninjured occupants including the driver	Mapping Comment of 01.Total Number of Occupants (D): The State crash database can derive the attribute from the Occupant's/Non-Mo torists Vehicle Unit

State Structure	Standard Elements/ Attributes That Map	Comments
		Number Unique to Crash.
[E] V48.Emergency Vehicle Use		
[A] 01.Fire Truck		
[A] 02.EMS Vehicle, Ambulance, Rescue Squad, etc.		
[A] 03.Military		
[A] 04.Police		
[E] V49.Hit & Run		
[A] 01.Yes (Check Box Checked)	[S]Vehicle=>[E]V22.Hit and Run=>[A]02.Yes, Driver or Car and Driver Left Scene	
[A] 02.No (Check Box Not Checked)	[S]Vehicle=>[E]V22.Hit and Run=>[A]01.No, Did Not Leave Scene	
[SS] Person		
[E] P1.Person Type		
[A] 01.Driver	[S]Person=>[E]P4.Person Type=>[S]1.Person Type=>[C]1.Motorist=>[A]01.Driver	
[A] 02.Passenger	[S]Person=>[E]P4.Person Type=>[S]1.Person Type=>[C]1.Motorist=>[A]02.Passenger	
[A] 03.Pedestrian	[S]Person=>[E]P4.Person Type=>[S]1.Person Type=>[C]2.Non-Motorist=>[A]06.Pedestrian**	
[A] 04.Pedacyclist (Bicycle, Tricycle, Unicycle, Pedalcycle)		
[A] 05.Roller Skater, Roller Blader		
[A] 06.Other		
[A] 07.Unknown		
[E] P2.Person Name		
[A] 01.Person Name	[S]Person=>[E]P1.Name of Person Involved=>[A]Name	
[A] 02.Hit and Run if Hit and Run and No Driver Present	[S]Person=>[E]P1.Name of Person Involved=>[A]Name	
[A] 03.Owner's Name (if Parked Vehicle and No Driver)	[S]Person=>[E]P1.Name of Person Involved=>[A]Name	
[E] P3.Address		
[S] 01.Street Address		
[A] 01.Street Address		
[S] 02.City of Residence		
[A] 01.City of Residence		
[S] 03.State of Residence		
[A] 01.State of Residence		
[A] 02.Other Country		
[S] 04.Residence Zip Code		
[A] 01.Zip Code		

State Structure	Standard Elements/ Attributes That Map	Comments
[E] P4.Home/Work Phone Numbers		
[A] 01.Phone Numbers		
[E] P5.Date of Birth/Approximate Age		
[A] 01.Year	[S]Person=>[E]P2.Date of Birth=>[S]1.Date of Birth=>[A]Year (YYYY)	
[A] 02.Month	[S]Person=>[E]P2.Date of Birth=>[S]1.Date of Birth=>[A]Month (MM)	
[A] 03.Day	[S]Person=>[E]P2.Date of Birth=>[S]1.Date of Birth=>[A]Day (DD)	
[A] 04.Unknown	[S]Person=>[E]P2.Date of Birth=>[S]1.Date of Birth=>[A]99.Unknown	
[A] 05.Approximate Age		
[A] 06.Age (D)	[S]Person=>[E]P2.Date of Birth=>[S]2.Age=>[A]AAA.Age	
[E] P6.Gender		
[A] 01.Male	[S]Person=>[E]P3.Sex=>[A]02.Male	
[A] 02.Female	[S]Person=>[E]P3.Sex=>[A]01.Female	
[A] 03.Unknown	[S]Person=>[E]P3.Sex=>[A]99.Unknown	
[E] P7.Ethnicity		
[A] 01.White		
[A] 02.Black		
[A] 03.Native American		
[A] 04.Hispanic		
[A] 05.Asian		
[A] 06.Other		
[A] 07.Unknown		
[E] P8.Injury Status		
[A] 01.Killed	[S]Person=>[E]P5.Injury Status=>[A]01.(K) Fatal Injury**	
[A] 02.Suspected Serious Injury (A)	[S]Person=>[E]P5.Injury Status=>[A]02.(A) Suspected Serious Injury	Mapping Comment of 02.Suspected Serious Injury (A): North Carolina is compliant with the Suspected Serious Injury requirement because it collects, stores, and reports serious injury data based on the MMUCC definition.
[A] 03.Suspected Minor Injury (B)	[S]Person=>[E]P5.Injury Status=>[A]03.(B) Suspected Minor	

State Structure	Standard Elements/ Attributes That Map	Comments
	Injury	
[A] 04.Possible Injury (C)	[S]Person=>[E]P5.Injury Status=>[A]04.(C) Possible Injury	
[A] 05.No Injury	[S]Person=>[E]P5.Injury Status=>[A]05.(O) No Apparent Injury	
[A] 06.Unknown		
[E] P9.Occupant's/Non-Motorist Vehicle Unit Number Unique to Crash		
[A] 01.Vehicle Occupant Unit Number	[S]Person=>[E]P6.Occupant's Motor Vehicle Unit Number=>[A]Number to indicate in which motor vehicle the occupant was located	
[A] 02.Unit Number that Struck Non-Motorist	[S]Non-Motorist Section=>[E]NM1.Unit Number of Motor Vehicle Striking Non-Motorist=>[A]Unit number of MV that was the first MV to strike the non-motorist	
[E] P10.Seating Position		
[S] 01.Row (Selection 1)		
[A] 01a.Front-Left (Driver/Motorcycle Driver)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]01.Front	
[A] 02a.Front-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]01.Front	
[A] 03a.Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]01.Front	
[A] 04a.Second Seat-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]02.Second	
[A] 05a.Second Seat-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]02.Second	
[A] 06a.Second Seat-Right	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]02.Second	
[A] 07a.Third Row-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]03.Third	
[A] 08a.Third Row-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]03.Third	
[A] 09a.Third Row-Right	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]1.Row=>[A]03.Third	
[S] 02.Row (Selection 2)		
[A] 01a.Front-Left (Driver/Motorcycle Driver)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2)=>[C]1.Row=>[A]01.Front	
[A] 02a.Front-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]01.Front	
[A] 03a.Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]01.Front	
[A] 04a.Second Seat-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]02.Second	
[A] 05a.Second Seat-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]02.Second	
[A] 06a.Second Seat-Right	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]02.Second	
[A] 07a.Third Row-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]03.Third	
[A] 08a.Third Row-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]03.Third	
[A] 09a.Third Row-Right	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]1.Row=>[A]03.Third	
[S] 03.Seat (Selection 1)		
[A] 01a.Front-Left (Driver/Motorcycle Driver)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 02a.Front-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]08.Middle	
[A] 03a.Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]09.Right	
[A] 04a.Second Seat-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 05a.Second Seat-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]08.Middle	
[A] 06a.Second Seat-Right	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]09.Right	
[A] 07a.Third Row-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	1)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 08a.Third Row-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]08.Middle	
[A] 09a.Third Row-Right	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]2.Seat=>[A]09.Right	
[S] 04.Seat (Selection 2)		
[A] 01a.Front-Left (Driver/Motorcycle Driver)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 02a.Front-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]08.Middle	
[A] 03a.Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]09.Right	
[A] 04a.Second Seat-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 05a.Second Seat-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]08.Middle	
[A] 06a.Second Seat-Right	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]09.Right	
[A] 07a.Third Row-Left (Motorcycle Passenger)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles	
[A] 08a.Third Row-Middle	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]08.Middle	
[A] 09a.Third Row-Right	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]2.Seat=>[A]09.Right	
[S] 05.Other Location and Other/Unknown (Selection 1)		
[A] 10.Sleeper Section of Cab (Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]3.Other Location=>[A]13.Sleeper Section of Cab (truck)	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 11.Passenger in Other Enclosed Passenger Area (Refer to Supplemental Multi-Occupant Form)		
[A] 12.Passenger in Unenclosed Area (Pickup)	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]3.Other Location=>[A]15.Unenclosed Cargo Area	
[A] 13.Trailing Unit	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]3.Other Location=>[A]14.Trailing Unit	
[A] 14.Riding on Vehicle Exterior	[S]Person=>[E]P7.Seating Position=>[S]1.1.(Selection 1)=>[C]3.Other Location=>[A]12.Riding on Motor Vehicle Exterior (non-trailing unit)	
[A] 15.Unknown		
[S] 06.Other Location and Other/Unknown (Selection 2)		
[A] 10.Sleeper Section of Cab (Truck)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]3.Other Location=>[A]13.Sleeper Section of Cab (truck)	
[A] 11.Passenger in Other Enclosed Passenger Area (Refer to Supplemental Multi-Occupant Form)		
[A] 12.Passenger in Unenclosed Area (Pickup)	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]3.Other Location=>[A]15.Unenclosed Cargo Area	
[A] 13.Trailing Unit	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]3.Other Location=>[A]14.Trailing Unit	
[A] 14.Riding on Vehicle Exterior	[S]Person=>[E]P7.Seating Position=>[S]1.2.(Selection 2)=>[C]3.Other Location=>[A]12.Riding on Motor Vehicle Exterior (non-trailing unit)	
[A] 15.Unknown		
[E] P11.Occupant Protection System Use		
[A] 00.None Used	[S]Person=>[E]P8.Restraint Systems/Motorcycle Helmet Use=>[S]1.Restraint Systems=>[C]1.Restraint Systems=>[A]06.None Used – Motor Vehicle Occupant	
[C] 01.Non-Motorist Only		
[A] 06.Protective Pads		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 07.Reflective Clothing		
[A] 08.Lighting		
[A] 09.Other		
[A] 10.Unable to Determine		
[A] 01.Lap Belt Only	[S]Person=>[E]P8.Restraint Systems/Motorcycle Helmet Use=>[S]1.Restraint Systems=>[C]1.Restraint Systems=>[A]05.Lap Belt Only Used	
[A] 02.Shoulder and Lap Belt	[S]Person=>[E]P8.Restraint Systems/Motorcycle Helmet Use=>[S]1.Restraint Systems=>[C]1.Restraint Systems=>[A]08.Shoulder and Lap Belt Used	
[A] 03.Shoulder Belt Only	[S]Person=>[E]P8.Restraint Systems/Motorcycle Helmet Use=>[S]1.Restraint Systems=>[C]1.Restraint Systems=>[A]09.Shoulder Belt Only Used	
[A] 04.Child Restraint		
[A] 05.Helmet (Motorcyclist and Non-Motorist)		
[E] P12.Air Bag Deployed		
[S] 01.Deployment		
[A] 00.No Air Bags	[S]Person=>[E]P9.Air Bag Deployed=>[A]97.Not Applicable	
[A] 01.Not Deployed	[S]Person=>[E]P9.Air Bag Deployed=>[A]00.Not Deployed	
[A] 02.Deployed - Front	[S]Person=>[E]P9.Air Bag Deployed=>[S]1.1.(Selection 1)=>[A]02.Front	
[A] 03.Deployed - Side	[S]Person=>[E]P9.Air Bag Deployed=>[S]1.1.(Selection 1)=>[A]03.Side	
[A] 04.Deployed - Both Front/Side		
[A] 05.Deployment Unknown		
[S] 02.Switch Status		
[A] 01.No ON-OFF Switch		
[A] 02.Switch in ON Position		
[A] 03.Switch in OFF Position		
[A] 04.Unknown if ON-OFF Switch Present		
[A] 05.Unknown Position in Vehicle		
[E] P13.Ejection		
[A] 01.Not Ejected	[S]Person=>[E]P10.Ejection=>[A]00. Not Ejected	
[A] 02.Totally Ejected	[S]Person=>[E]P10.Ejection=>[A]02. Ejected, Totally	
[A] 03.Partially Ejected	[S]Person=>[E]P10.Ejection=>[A]01.	

State Structure	Standard Elements/ Attributes That Map	Comments
	Ejected, Partially	
[A] 04.Unknown	[S]Person=>[E]P10.Ejection=>[A]99. Unknown	
[A] 05.Not Applicable (D)	[S]Person=>[E]P10.Ejection=>[A]97. Not Applicable	
[E] P14.Trapped		
[A] 01.Yes		
[A] 02.No		
[A] 03.Unknown		
[E] P15.Driver License State/Province		
[A] 01.Not Licensed	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]00.Not Licensed	
[A] 02.State Code	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]05.State	
[A] 03.Indian Nation	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]02.India n Nation	
[A] 04.U.S. Government	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]06.U.S. Government	
[A] 05.Canadian Province	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]01.Cana da	
[A] 06.Mexican State	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]04.Mexi co	
[A] 07.International License (Other Than Mexico, Canada)	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]1.Type=>[A]03.Inter national License (other than Mexico or Canada)	
[A] 08.Unknown		
[A] 09.Name of Jurisdiction	[S]Person=>[E]P11.Driver License Jurisdiction=>[S]2.Name of Jurisdiction (ANSI Code)=>[A]Name of Jurisdiction (ANSI Code)	
[E] P16.Driver License Number		
[A] 01.Driver License Number	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]1.License Number=>[A]License Number	
[E] P17.Commercial Driver License (CDL) Flag		
[A] 01.Yes, Check Box Checked	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]3.Commercial Driver License (CDL)=>[A]02.Yes	
[A] 02.No, Check Box Not Checked	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]3.Commercial Driver License (CDL)=>[A]01.No	

State Structure	Standard Elements/ Attributes That Map	Comments
[E] P18.Contributing Circumstances - Driver		
[S] 01.Selection 1		
[A] 00.No Contributing Circumstances Indicated	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]00.No Contributing Action	
[A] 01.Disregarded Yield Sign	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]04.Failed to Yield Right-of-Way	
[A] 02.Disregarded Stop Sign	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]14.Ran Stop Sign	
[A] 03.Disregarded Other Traffic Signs	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]02.Disregarded Other Traffic Sign	
[A] 04.Disregarded Traffic Signals	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]13.Ran Red Light	
[A] 05.Disregarded Road Markings	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]01.Disregarded Other Road Markings	
[A] 06.Exceeded Authorized Speed Limit		
[A] 07.Exceeded Safe Speed for Conditions		
[A] 08.Failure to Reduce Speed		
[A] 09.Improper Turn	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]08.Improper Turn	
[A] 10.Right Turn on Red		
[A] 11.Crossed Centerline/Going Wrong Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]16.Wrong Side or Wrong Way	
[A] 12.Improper Lane Change	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]03.Failed to Keep in Proper Lane	
[A] 13.Use of Improper Lane	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]03.Failed to Keep in Proper Lane	
[A] 14.Overcorrected/Oversteered	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]11.Over-Correcting/Over-Steering	
[A] 15.Passed Stopped School Bus	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]07.Improper Passing	
[A] 16.Passed on Hill	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	1)=>[A]07.Improper Passing	
[A] 17.Passed on Curve	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]07.Improper Passing	
[A] 18.Other Improper Passing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]07.Improper Passing	
[A] 19.Failed to Yield Right of Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]04.Failed to Yield Right-of-Way	
[A] 20.Inattention		
[A] 21.Improper Backing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]06.Improper Backing	
[A] 22.Improper Parking		
[A] 23.Driver Distracted		
[A] 24.Improper or No Signal		
[A] 25.Followed Too Closely	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]05.Followed Too Closely	
[A] 26.Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner		
[A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.1.(Selection 1)=>[A]15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo	
[A] 28.Visibility Obstructed		
[A] 29.Operated Defective Equipment		
[A] 30.Alcohol Use		
[A] 31.Drug Use		
[A] 32.Other		
[A] 33.Unable to Determine		
[A] 34.Unknown	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[A]99.Unknown	
[A] 35.Driver Distracted by Electronic Communication Device (Cell Phone, Texting, etc.)		
[A] 36.Driver Distracted by Other Electronic Device (Navigation Device, DVD Player, etc.)		
[A] 37.Driver Distracted by Other Inside the Vehicle		
[A] 38.Driver Distracted by External Distraction (Outside the Vehicle)		
[S] 02.Selection 2		
[A] 00.No Contributing Circumstances Indicated	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]00.No Contributing Action	
[A] 01.Disregarded Yield Sign	[S]Person=>[E]P14.Driver Actions at	

State Structure	Standard Elements/ Attributes That Map	Comments
	Time of Crash=>[S]1.2.(Selection 2)=>[A]04.Failed to Yield Right-of-Way	
[A] 02.Disregarded Stop Sign	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]14.Ran Stop Sign	
[A] 03.Disregarded Other Traffic Signs	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]02.Disregarded Other Traffic Sign	
[A] 04.Disregarded Traffic Signals	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]13.Ran Red Light	
[A] 05.Disregarded Road Markings	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]01.Disregarded Other Road Markings	
[A] 06.Exceeded Authorized Speed Limit		
[A] 07.Exceeded Safe Speed for Conditions		
[A] 08.Failure to Reduce Speed		
[A] 09.Improper Turn	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]08.Improper Turn	
[A] 10.Right Turn on Red		
[A] 11.Crossed Centerline/Going Wrong Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]16.Wrong Side or Wrong Way	
[A] 12.Improper Lane Change	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]03.Failed to Keep in Proper Lane	
[A] 13.Use of Improper Lane	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]03.Failed to Keep in Proper Lane	
[A] 14.Overcorrected/Oversteered	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]11.Over-Correcting/Over-Steering	
[A] 15.Passed Stopped School Bus	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]07.Improper Passing	
[A] 16.Passed on Hill	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]07.Improper Passing	
[A] 17.Passed on Curve	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]07.Improper Passing	
[A] 18.Other Improper Passing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2)=>[A]07.Improper Passing	
[A] 19.Failed to Yield Right of Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]04.Failed to Yield Right-of-Way	
[A] 20.Inattention		
[A] 21.Improper Backing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]06.Improper Backing	
[A] 22.Improper Parking		
[A] 23.Driver Distracted		
[A] 24.Improper or No Signal		
[A] 25.Followed Too Closely	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]05.Followed Too Closely	
[A] 26.Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner		
[A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.2.(Selection 2)=>[A]15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo	
[A] 28.Visibility Obstructed		
[A] 29.Operated Defective Equipment		
[A] 30.Alcohol Use		
[A] 31.Drug Use		
[A] 32.Other		
[A] 33.Unable to Determine		
[A] 34.Unknown	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[A]99.Unknown	
[A] 35.Driver Distracted by Electronic Communication Device (Cell Phone, Texting, etc.)		
[A] 36.Driver Distracted by Other Electronic Device (Navigation Device, DVD Player, etc.)		
[A] 37.Driver Distracted by Other Inside the Vehicle		
[A] 38.Driver Distracted by External Distraction (Outside the Vehicle)		
[S] 03.Selection 3		
[A] 00.No Contributing Circumstances Indicated	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]00.No Contributing Action	
[A] 01.Disregarded Yield Sign	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]04.Failed to Yield Right-of-Way	
[A] 02.Disregarded Stop Sign	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]14.Ran Stop Sign	

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 03.Disregarded Other Traffic Signs	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]02.Disregarded Other Traffic Sign	
[A] 04.Disregarded Traffic Signals	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]13.Ran Red Light	
[A] 05.Disregarded Road Markings	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]01.Disregarded Other Road Markings	
[A] 06.Exceeded Authorized Speed Limit		
[A] 07.Exceeded Safe Speed for Conditions		
[A] 08.Failure to Reduce Speed		
[A] 09.Improper Turn	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]08.Improper Turn	
[A] 10.Right Turn on Red		
[A] 11.Crossed Centerline/Going Wrong Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]16.Wrong Side or Wrong Way	
[A] 12.Improper Lane Change	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]03.Failed to Keep in Proper Lane	
[A] 13.Use of Improper Lane	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]03.Failed to Keep in Proper Lane	
[A] 14.Overcorrected/Oversteered	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]11.Over-Correcting/Over-Steering	
[A] 15.Passed Stopped School Bus	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]07.Improper Passing	
[A] 16.Passed on Hill	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]07.Improper Passing	
[A] 17.Passed on Curve	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]07.Improper Passing	
[A] 18.Other Improper Passing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]07.Improper Passing	
[A] 19.Failed to Yield Right of Way	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]04.Failed to Yield Right-of-Way	
[A] 20.Inattention		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 21.Improper Backing	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]06.Improper Backing	
[A] 22.Improper Parking		
[A] 23.Driver Distracted		
[A] 24.Improper or No Signal		
[A] 25.Followed Too Closely	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]05.Followed Too Closely	
[A] 26.Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner		
[A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[S]1.3.(Selection 3)=>[A]15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo	
[A] 28.Visibility Obstructed		
[A] 29.Operated Defective Equipment		
[A] 30.Alcohol Use		
[A] 31.Drug Use		
[A] 32.Other		
[A] 33.Unable to Determine		
[A] 34.Unknown	[S]Person=>[E]P14.Driver Actions at Time of Crash=>[A]99.Unknown	
[A] 35.Driver Distracted by Electronic Communication Device (Cell Phone, Texting, etc.)		
[A] 36.Driver Distracted by Other Electronic Device (Navigation Device, DVD Player, etc.)		
[A] 37.Driver Distracted by Other Inside the Vehicle		
[A] 38.Driver Distracted by External Distraction (Outside the Vehicle)		
[E] P19.Traffic Violations		
[S] 01.Name of Person		
[A] 01.Violator Name		
[S] 02.Charge(s)		
[A] 01.Violation Charge	[S]Person=>[E]P15.Violation Codes=>[S]1.1.(Selection 1)=>[A]State Violation Code 1	
[A] 02.Violation Charge 2	[S]Person=>[E]P15.Violation Codes=>[S]1.2.(Selection 2)=>[A]State Violation Code 2	
[E] P20.Alcohol/Drug Suspected		
[A] 00.No	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug

State Structure	Standard Elements/ Attributes That Map	Comments
		suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State may have a data element combining both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple attributes from the SCDB Element "Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 01.Yes - Alcohol, Impairment Suspected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]02.Yes	
[A] 02.Yes - Alcohol, No Impairment Detected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]02.Yes	
[A] 03.Yes - Other Drugs, Impairment Suspected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State

State Structure	Standard Elements/ Attributes That Map	Comments
		may have a data element combining both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple attributes from the SCDB Element "Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 04.Yes - Other Drugs, No Impairment Detected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State may have a data element combining both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple

State Structure	Standard Elements/ Attributes That Map	Comments
		attributes from the SCDB Element "Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 05.Yes - Alcohol and Other Drugs, Impairment Suspected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]02.Yes	
[A] 06.Yes - Alcohol and Other Drugs, No Impairment Detected	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]02.Yes	
[A] 07.Unknown	[S]Person=>[E]P20.Law Enforcement Suspects Alcohol Use=>[A]99.Unknown	
[E] P21.Test for Alcohol/Other Drugs		
[A] 00.No Test	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]00.Test Not Given	Mapping Comment of 00.No Test: For Subfield 1, many States may count "P21. Alcohol Test" and "P23. Drug Test" as one element, which cannot be mapped to either MMUCC element unless it is possible to unambiguously indicate whether the test was performed for alcohol use or drug use. Although the State combines alcohol and other drug test status, the list of State attributes allow to distinguish between alcohol or drug test being given.
[A] 01.Alcohol Test	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]01.Test Given	
[A] 02.Test for Drugs Other Than Alcohol	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]00.Test Not Given	Mapping Comment of 00.No Test: For Subfield 1, many States may count "P21. Alcohol Test" and "P23. Drug Test" as one element, which

State Structure	Standard Elements/ Attributes That Map	Comments
		cannot be mapped to either MMUCC element unless it is possible to unambiguously indicate whether the test was performed for alcohol use or drug use. Although the State combines alcohol and other drug test status, the list of State attributes allow to distinguish between alcohol or drug test being given.
[A] 03.Test for Alcohol and Other Drugs	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]01.Test Given	
[A] 04.Test Refused	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]02.Test Refused	
[A] 05.Unknown	[S]Person=>[E]P21.Alcohol Test=>[S]1.Test Status=>[A]99.Unknown if Tested	
[E] P22.Test Results		
[A] 00.No Test	[S]Person=>[E]P21.Alcohol Test=>[S]3.BAC Test Result=>[A]97.Not Applicable (Test Not Given)	
[A] 01.No Alcohol or Other Drugs		
[A] 02.Alcohol (Percent BAC or BrAC)	[S]Person=>[E]P21.Alcohol Test=>[S]3.BAC Test Result=>[A]Value	
[A] 03.Other Drugs Reported		
[A] 04.Contaminated Sample/Unusable		
[A] 05.Pending		
[A] 06.Unknown		
[E] P23.Driver/Non-Motorist Condition		
[A] 01.Apparently Normal	[S]Person=>[E]P19.Condition at Time of the Crash=>[S]1.1.(Selection 1)=>[A]00.Apparently Normal	
[A] 02.Illness		
[A] 03.Fatigue		
[A] 04.Fell Asleep, Fainted, Loss of Consciousness		
[A] 05.Impairment Due to Medications/Drugs/Alcohol	[S]Person=>[E]P19.Condition at Time of the Crash=>[S]1.1.(Selection 1)=>[A]05.Under the Influence of	

State Structure	Standard Elements/ Attributes That Map	Comments
	Medications/Drugs/Alcohol	
[A] 06.Medical Condition		
[A] 07.Other Physical Impairment		
[A] 08.Restriction Not Complied With		
[A] 09.Other		
[A] 10.Unknown	[S]Person=>[E]P19.Condition at Time of the Crash=>[S]1.1.(Selection 1)=>[A]99.Unknown	Mapping Comment of 10.Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" per rule 12.
[E] P24.Vision Obstruction (Driver/Non-Motorist)		
[A] 00.None		
[A] 01.Vehicle Window(s) Obscured		
[A] 02.Trees, Crops, Brush, etc.		
[A] 03.Building(s)		
[A] 04.Embankment		
[A] 05.Sign(s)		
[A] 06.Hillcrest		
[A] 07.Parked Vehicle(s)		
[A] 08.Vehicle(s) in Traffic/Moving		
[A] 09.Blinded, Headlights		
[A] 10.Blinded, Sunlight		
[A] 11.Blinded, Other Lights		
[A] 12.Other		
[A] 13.Unknown		
[E] P25.Non-Motorist Number		
[A] 01.Sequential Non-Motorist Number		
[E] P26.Non-Motorist Action Prior to Crash		
[A] 01.Entering or Crossing Specified Location	[S]Non-Motorist Section=>[E]NM2.Non-Motorist Action/Circumstance Prior to Crash=>[S]1.Action/Circumstance=>[A]02.Crossing Roadway	
[A] 02.Walking, Riding, Running/Jogging with Traffic	[S]Non-Motorist Section=>[E]NM2.Non-Motorist Action/Circumstance Prior to Crash=>[S]1.Action/Circumstance=>[A]06.Walking/Cycling Along Roadway with Traffic (In or Adjacent to Travel Lane)	
[A] 03.Walking, Riding, Running/Jogging Against Traffic	[S]Non-Motorist Section=>[E]NM2.Non-Motorist Action/Circumstance Prior to Crash=>[S]1.Action/Circumstance=>[A]05.Walking/Cycling Along Roadway Against Traffic (In or	

State Structure	Standard Elements/ Attributes That Map	Comments
	Adjacent to Travel Lane)	
[A] 04.Working		
[A] 05.Pushing Vehicle		
[A] 06.Approaching or Leaving Vehicle	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(S election 1)=>[A]03.Entering/Exiting Parked/Standing Vehicle	
[A] 07.Playing		
[A] 08.Standing		
[A] 09.Other		
[E] P27.Non-Motorist Action at Time of Crash		
[A] 01.Entering or Crossing Specified Location		
[A] 02.Walking, Riding, Running/Jogging with Traffic		
[A] 03.Walking, Riding, Running/Jogging Against Traffic		
[A] 04.Working		
[A] 05.Pushing Vehicle		
[A] 06.Approaching or Leaving Vehicle	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(S election 2)=>[A]03.Entering/Exiting Parked/Standing Vehicle	
[A] 07.Playing		
[A] 08.Standing		
[A] 09.Other		
[E] P28.Non-Motorist Condition at Time of Crash		
[A] 01.Apparently Normal		
[A] 02.Illness		
[A] 03.Fatigue		
[A] 04.Fell Asleep, Fainted, Loss of Consciousness		
[A] 05.Impairment Due to Medications/Drugs/Alcohol		
[A] 06.Medical Condition		
[A] 07.Other Physical Impairment		
[A] 08.Restriction Not Complied With		
[A] 09.Other		
[A] 10.Unknown		
[E] P29.Non-Motorist Contributing Circumstances		
[S] 01.Selection 1		
[A] 00.None	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(S election 1)=>[A]00.None (No	

State Structure	Standard Elements/ Attributes That Map	Comments
	Improper Action)	
[A] 01.Coming From Behind Parked Vehicle		
[A] 02.Darting	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]01.Dart/Dash	
[A] 03.Lying and/or Illegally in the Roadway	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]09.In Roadway Improperly (Standing, Lying, Working, Playing)	
[A] 04.Failure to Yield Right of Way	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]05.Failure to Yield Right-Of-Way	
[A] 05.Not Visible (Dark Clothing, etc.)	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]10.Not Visible (Dark Clothing, No Lighting, etc.)	
[A] 06.Inattentive (Talking, Eating, etc.)	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]08.Inattentive (Talking, Eating, etc.)	
[A] 07.Failure to Obey Traffic Signs, Signals	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]04.Failure to Obey Traffic Signs, Signals, or Officer	
[A] 08.Wrong Side of Road	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]11.Wrong-Way Riding or Walking	
[A] 09.Other		
[A] 10.Unknown	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.1.(Selection 1)=>[A]99.Unknown	

State Structure	Standard Elements/ Attributes That Map	Comments
[S] 02.Selection 2		
[A] 00.None		
[A] 01.Coming From Behind Parked Vehicle		
[A] 02.Darting	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]01.Dart/Dash	
[A] 03.Lying and/or Illegally in the Roadway	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]09.In Roadway Improperly (Standing, Lying, Working, Playing)	
[A] 04.Failure to Yield Right of Way	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]05.Failure to Yield Right-Of-Way	
[A] 05.Not Visible (Dark Clothing, etc.)	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]10.Not Visible (Dark Clothing, No Lighting, etc.)	
[A] 06.Inattentive (Talking, Eating, etc.)	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]08.Inattentive (Talking, Eating, etc.)	
[A] 07.Failure to Obey Traffic Signs, Signals	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]04.Failure to Obey Traffic Signs, Signals, or Officer	
[A] 08.Wrong Side of Road	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(Selection 2)=>[A]11.Wrong-Way Riding or Walking	
[A] 09.Other		
[A] 10.Unknown	[S]Non-Motorist Section=>[E]NM3.Non-Motorist Contributing Action(s)/Circumstance(s)=>[S]1.2.(S	

State Structure	Standard Elements/ Attributes That Map	Comments
	election 2)=>[A]99.Unknown	
[E] P30.Non-Motorist Location at Time of Crash		
[A] 01.Marked Crosswalk at Intersection	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]01.Intersection – Marked Crosswalk	
[A] 02.At Intersection but no Crosswalk	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]02.Intersection – Unmarked Crosswalk	
[A] 03.Non-Intersection Crosswalk	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]05.Midblock – Marked Crosswalk	
[A] 04.Driveway Access Crosswalk		
[A] 05.In Roadway		
[A] 06.Not in Roadway		
[A] 07.Median (But not on Shoulder)	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]04.Median/Crossing Island	
[A] 08.Island	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]04.Median/Crossing Island	
[A] 09.Shoulder	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]06.Shoulder/Roadside	
[A] 10.Sidewalk	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Other Facility=>[A]17.Sidewalk	
[A] 11.Within 10 Feet of Roadway (Not on Shoulder, Median, Sidewalk, Island)	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]06.Shoulder/Roadside	
[A] 12.Beyond 10 Feet of Roadway (Within	[S]Non-Motorist	

State Structure	Standard Elements/ Attributes That Map	Comments
Trafficway)	Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Roadway Facility=>[A]06.Shoulder/Roadside	
[A] 13.Outside Trafficway	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Other Facility=>[A]15.Non-Trafficway Area	
[A] 14.Shared-Use Path or Trails	[S]Non-Motorist Section=>[E]NM4.Non-Motorist Location at Time of Crash=>[C]Other Facility=>[A]16.Shared-Use Path or Trail	
[E] P31.Non-Motorist Safety Equipment		
[A] 00.None Used	[S]Non-Motorist Section=>[E]NM5.Non-Motorist Safety Equipment=>[S]1.1.(Selection 1)=>[A]00.None	
[C] 01.Non-Motorist Only		
[A] 06.Protective Pads	[S]Non-Motorist Section=>[E]NM5.Non-Motorist Safety Equipment=>[S]1.1.(Selection 1)=>[A]02.Protective Pads Used (elbows, knees, shins, etc.)	
[A] 07.Reflective Clothing		
[A] 08.Lighting	[S]Non-Motorist Section=>[E]NM5.Non-Motorist Safety Equipment=>[S]1.1.(Selection 1)=>[A]04.Lighting	
[A] 09.Other		
[A] 10.Unable to Determine	[S]Non-Motorist Section=>[E]NM5.Non-Motorist Safety Equipment=>[S]1.1.(Selection 1)=>[A]99.Unknown	
[A] 01.Lap Belt Only		
[A] 02.Shoulder and Lap Belt		
[A] 03.Shoulder Belt Only		
[A] 04.Child Restraint		
[A] 05.Helmet (Motorcyclist and Non-Motorist)		
[E] P32.Unit Number of Motor Vehicle Striking Non-Motorist		
[A] 01.Unit Number that Struck Non-Motorist		
[E] P33.EMS Responding to Crash		
[A] 01.Name or Unit Number of EMS	[S]Person=>[E]P24.Transported to First Medical Facility By=>[S]2.EMS Response Agency Identifier=>[A]ID for EMS agency that responds	
[E] P34.Injured Taken by EMS to		
[A] 01.Destination of Injured Person	[S]Person=>[E]P24.Transported to First Medical Facility	

State Structure	Standard Elements/ Attributes That Map	Comments
	By=>[S]4.Medical Facility Receiving Patient=>[A]Name or Number of Medical Facility Receiving Patient	
[E] P35.Driver License Class (L)		
[A] 01.Class A	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]2.Class=>[A]01.Class A	
[A] 02.Class B	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]2.Class=>[A]02.Class B	
[A] 03.Class C	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]2.Class=>[A]03.Class C	
[A] 04.Class M	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]2.Class=>[A]04.Class M	
[A] 05.Regular C	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]2.Class=>[A]05.Regular Driver License Class	
[E] P36.Driver License Status - CDL (L)		
[A] 01.Eligible		
[A] 02.Licensed		
[A] 03.Not Eligible		
[A] 04.Reported Deceased		
[E] P37.Commercial Motor Vehicle Endorsements (L)		
[A] 01.T-Double/Triple Trailer	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=> [A]05.T - Double/Triple Trailers	
[A] 02.P-Passenger Vehicle	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=> [A]03.P - Passenger	
[A] 03.N-Tank Vehicle	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=> [A]02.N - Tank Vehicle	
[A] 04.H-Hazardous Materials	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=> [A]01.H - Hazardous Materials	
[A] 05.X-Combined Tank/Hazmat	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=>	

State Structure	Standard Elements/ Attributes That Map	Comments
	[A]06.X - Combination of Tank Vehicle and Hazardous Materials	
[A] 06.Other		
[A] 07.S-School	[S]Person=>[E]P12.Driver License Number, Class, CDL and Endorsements=>[S]4.Endorsements=> [A]04.S - School	
[E] P38.Driver License Status - Non-CDL (L)		
[A] 01.Eligible		
[A] 02.Licensed		
[A] 03.Not Eligible		
[A] 04.Reported Deceased		
[E] P39.Driver License Restrictions (L)		
[S] 01.Selection 1		
[A] L.No Air Brakes	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]15.Motor Vehicles Without Air Brakes	
[A] S.School Bus		
[A] 00.None	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]00.None	
[A] 01.Corrective Lenses	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]03.Corrective Lenses	
[A] 02.45 MPH/No Interstate		
[A] 03.Daylight Driving Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]10.Limited to Daylight Only	
[A] 04.NC Intrastate Only-CDL	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]02.CDL Intrastate Only	
[A] 05.Wrecker Only		
[A] 06.Mobile Home Transport Only		
[A] 07.Outside Mirrors	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]16.Outside Mirror	
[A] 08.No Tractor Trailer	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]07.Except Tractor-Trailer	
[A] 09.Other as Shown		
[A] 10.Accompanied by Class Driver		
[A] 11.Fleet Vehicles Only	[S]Person=>[E]P16.Driver License	

State Structure	Standard Elements/ Attributes That Map	Comments
	Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]11.Limited to Employment	
[A] 12.Drive 6 AM - 8 PM		
[A] 13.Auto Transmission		
[A] 14.Passenger Class B & C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]05.Except Class A Bus	
[A] 15.Passenger Class C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]06.Except Class A and Class B Bus	
[A] 16.Graduated License Level 1 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]09.Learner's Permit Restrictions	
[A] 17.Graduated License Level 2 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]08.Intermediate License Restrictions	
[A] 18.No Passenger		
[A] 19.Blood/Alcohol Concentration .04		
[A] 20.BAC .04/Ignition Interlock	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]01.Alcohol Interlock Device	
[A] 21.Blood/Alcohol Concentration .00		
[A] 22.BAC .00/Ignition Interlock	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]01.Alcohol Interlock Device	
[A] 23.Ignition Interlock Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.1.Driver License Restrictions (Selection 1)=>[A]01.Alcohol Interlock Device	
[S] 02.Selection 2		
[A] L.No Air Brakes	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]15.Motor Vehicles Without Air Brakes	
[A] S.School Bus		
[A] 00.None		
[A] 01.Corrective Lenses	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection	

State Structure	Standard Elements/ Attributes That Map	Comments
	2)=>[A]03.Corrective Lenses	
[A] 02.45 MPH/No Interstate		
[A] 03.Daylight Driving Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]10.Limited to Daylight Only	
[A] 04.NC Intrastate Only-CDL	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]02.CDL Intrastate Only	
[A] 05.Wrecker Only		
[A] 06.Mobile Home Transport Only		
[A] 07.Outside Mirrors	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]16.Outside Mirror	
[A] 08.No Tractor Trailer	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]07.Except Tractor-Trailer	
[A] 09.Other as Shown		
[A] 10.Accompanied by Class Driver		
[A] 11.Fleet Vehicles Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]11.Limited to Employment	
[A] 12.Drive 6 AM - 8 PM		
[A] 13.Auto Transmission		
[A] 14.Passenger Class B & C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]05.Except Class A Bus	
[A] 15.Passenger Class C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]06.Except Class A and Class B Bus	
[A] 16.Graduated License Level 1 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]09.Learner's Permit Restrictions	
[A] 17.Graduated License Level 2 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]08.Intermediate License Restrictions	
[A] 18.No Passenger		
[A] 19.Blood/Alcohol Concentration .04		
[A] 20.BAC .04/Ignition Interlock	[S]Person=>[E]P16.Driver License	

State Structure	Standard Elements/ Attributes That Map	Comments
	Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]01.Alcohol Interlock Device	
[A] 21.Blood/Alcohol Concentration .00		
[A] 22.BAC .00/Ignition Interlock	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]01.Alcohol Interlock Device	
[A] 23.Ignition Interlock Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.2.Driver License Restrictions (Selection 2)=>[A]01.Alcohol Interlock Device	
[S] 03.Selection 3		
[A] L.No Air Brakes	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]15.Motor Vehicles Without Air Brakes	
[A] S.School Bus		
[A] 00.None		
[A] 01.Corrective Lenses	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]03.Corrective Lenses	
[A] 02.45 MPH/No Interstate		
[A] 03.Daylight Driving Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]10.Limited to Daylight Only	
[A] 04.NC Intrastate Only-CDL	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]02.CDL Intrastate Only	
[A] 05.Wrecker Only		
[A] 06.Mobile Home Transport Only		
[A] 07.Outside Mirrors	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]16.Outside Mirror	
[A] 08.No Tractor Trailer	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]07.Except Tractor-Trailer	
[A] 09.Other as Shown		
[A] 10.Accompanied by Class Driver		
[A] 11.Fleet Vehicles Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]11.Limited to Employment	
[A] 12.Drive 6 AM - 8 PM		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 13.Auto Transmission		
[A] 14.Passenger Class B & C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]05.Except Class A Bus	
[A] 15.Passenger Class C Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]06.Except Class A and Class B Bus	
[A] 16.Graduated License Level 1 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]09.Learner's Permit Restrictions	
[A] 17.Graduated License Level 2 Restriction	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]08.Intermediate License Restrictions	
[A] 18.No Passenger		
[A] 19.Blood/Alcohol Concentration .04		
[A] 20.BAC .04/Ignition Interlock	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]01.Alcohol Interlock Device	
[A] 21.Blood/Alcohol Concentration .00		
[A] 22.BAC .00/Ignition Interlock	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]01.Alcohol Interlock Device	
[A] 23.Ignition Interlock Only	[S]Person=>[E]P16.Driver License Restrictions=>[S]1.3.Driver License Restrictions (Selection 3)=>[A]01.Alcohol Interlock Device	
[E] P40.Injury Area (L)		
[A] 01.Head/Brain	[S]Person=>[E]P25.Injury Area=>[A]01.Head	
[A] 02.Face	[S]Person=>[E]P25.Injury Area=>[A]02.Face	
[A] 03.Neck	[S]Person=>[E]P25.Injury Area=>[A]03.Neck	
[A] 04.Spine	[S]Person=>[E]P25.Injury Area=>[A]06.Spine	
[A] 05.Back		
[A] 06.Chest	[S]Person=>[E]P25.Injury Area=>[A]05.Thorax (chest)	
[A] 07.Upper Extremities	[S]Person=>[E]P25.Injury Area=>[A]04.Upper Extremity	
[A] 08.Abdomen	[S]Person=>[E]P25.Injury	

State Structure	Standard Elements/ Attributes That Map	Comments
	Area=>[A]07.Abdomen and Pelvis	
[A] 09.Lower Extremities	[S]Person=>[E]P25.Injury Area=>[A]08.Lower Extremity	
[A] 10.Other		
[A] 11.Injured, Area Unknown	[S]Person=>[E]P25.Injury Area=>[A]09.Unspecified	
[E] P41.Injury Description (L)		
[A] 01.Visible Bleeding	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 02.Visible Broken Bone	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 03.Visible Burn	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 04.Complaint of Pain	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 05.Apparently Unconscious	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 06.Other Visible or Expressed Injury	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 07.Injury Type Not Otherwise Specified and Not Visible	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[A] 08.Unknown	[S]Person=>[E]P26.Injury Diagnosis=>[A]Description of the injury...	
[E] P20b.Alcohol/Drug Suspected		
[A] 00.No	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State may have a data element combining

State Structure	Standard Elements/ Attributes That Map	Comments
		both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple attributes from the SCDB Element "Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 01.Yes - Alcohol, Impairment Suspected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State may have a data element combining both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple attributes from the SCDB Element

State Structure	Standard Elements/ Attributes That Map	Comments
		"Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 02.Yes - Alcohol, No Impairment Detected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]01.No	Mapping Comment of 00.No: The SCDB does not create a clear distinction or separate elements for alcohol and drug suspicion, type of test, or results. States cannot map to P20 unless the reporting officer may unambiguously indicate whether alcohol use is involved. For example, the State may have a data element combining both alcohol and drug use together, such as "Alcohol/Drug Use Suspected," which cannot be mapped to this MMUCC element unless it is possible to indicate whether alcohol or drug use or both is involved. Multiple attributes from the SCDB Element "Alcohol/Drug Involvement" can be mapped to derive the MMUCC attributes.
[A] 03.Yes - Other Drugs, Impairment Suspected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]02.Yes	
[A] 04.Yes - Other Drugs, No Impairment Detected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]02.Yes	
[A] 05.Yes - Alcohol and Other Drugs, Impairment Suspected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]02.Yes	
[A] 06.Yes - Alcohol and Other Drugs, No Impairment Detected	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]02.Yes	
[A] 07.Unknown	[S]Person=>[E]P22.Law Enforcement Suspects Drug Use=>[A]99.Unknown	

State Structure	Standard Elements/ Attributes That Map	Comments
[E] P21b.Test for Alcohol/Other Drugs		
[A] 00.No Test	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]00.Test Not Given	Mapping Comment of 00.No Test: For Subfield 1, many States may count "P21. Alcohol Test" and "P23. Drug Test" as one element, which cannot be mapped to either MMUCC element unless it is possible to unambiguously indicate whether the test was performed for alcohol use or drug use. Although the State combines alcohol and other drug test status, the list of State attributes allow to distinguish between alcohol or drug test being given.
[A] 01.Alcohol Test	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]00.Test Not Given	Mapping Comment of 00.No Test: For Subfield 1, many States may count "P21. Alcohol Test" and "P23. Drug Test" as one element, which cannot be mapped to either MMUCC element unless it is possible to unambiguously indicate whether the test was performed for alcohol use or drug use. Although the State combines alcohol and other drug test status, the list of State attributes allow to distinguish between alcohol or drug test being

State Structure	Standard Elements/ Attributes That Map	Comments
		given.
[A] 02.Test for Drugs Other Than Alcohol	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]01.Test Given	
[A] 03.Test for Alcohol and Other Drugs	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]01.Test Given	
[A] 04.Test Refused	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]02.Test Refused	
[A] 05.Unknown	[S]Person=>[E]P23.Drug Test=>[S]1.Test Status=>[A]99.Unknown if Tested	
[E] P22b.Test Results		
[A] 00.No Test		
[A] 01.No Alcohol or Other Drugs		
[A] 02.Alcohol (Percent BAC or BrAC)		
[A] 03.Other Drugs Reported		
[A] 04.Contaminated Sample/Unusable		
[A] 05.Pending		
[A] 06.Unknown		
[SS] Roadway		
[E] RL1.Bridge/Structure Identification (L)		
[A] 01.Unique Structure Code	[S]Roadway=>[E]R1.Bridge/Structure Identification Number=>[A]Number	
[E] RL2.Grade (L)		
[S] 01.Direction of Slope		
[A] 01.Up	[S]Roadway=>[E]R3.Grade=>[S]1.Direction of Slope=>[A]Up (+) or Down (-)	
[A] 02.Down	[S]Roadway=>[E]R3.Grade=>[S]1.Direction of Slope=>[A]Up (+) or Down (-)	
[S] 02.Percent of Slope		
[A] 01.Percent of Slope	[S]Roadway=>[E]R3.Grade=>[S]2.Percent of Slope=>[A]Nearest Percent of Slope	
[E] RL3.Part of National Highway System (L)		
[A] 01.Yes	[S]Roadway=>[E]R4.Part of National Highway System=>[A]02.Yes	
[A] 02.No	[S]Roadway=>[E]R4.Part of National Highway System=>[A]01.No	
[A] 03.Unknown	[S]Roadway=>[E]R4.Part of National Highway System=>[A]99.Unknown	
[E] RL4.Annual Average Daily Traffic (L)		
[S] 01.Calendar Year		
[A] 01.Calendar Year	[S]Roadway=>[E]R6.Annual Average Daily Traffic=>[S]1.AADT (Year)=>[A]AADT (Year) Value	

State Structure	Standard Elements/ Attributes That Map	Comments
[S] 02.Vehicles Per Day (AADT)		
[A] 01.Vehicles Per Day (AADT)	[S]Roadway=>[E]R6.Annual Average Daily Traffic=>[S]2.AADT=>[A]AADT Value	
[E] RL5.Shoulder Type/Width (L)		
[S] 01.Shoulder Type		
[A] 01.Shoulder Type		
[S] 02.Shoulder Width		
[A] 01.Shoulder Width - Left	[S]Roadway=>[E]R7.Widths of Lane(s) and Shoulder(s)=>[S]2.Left Shoulder Width=>[A]Width in feet	
[A] 02.Shoulder Width - Right	[S]Roadway=>[E]R7.Widths of Lane(s) and Shoulder(s)=>[S]3.Right Shoulder Width=>[A]Width in feet	
[E] RL6.Lane Width (L)		
[A] 01.Lane Width in Feet	[S]Roadway=>[E]R7.Widths of Lane(s) and Shoulder(s)=>[S]1.Lane Width=>[A]Width in feet	
[E] RL7.Median Type/Width (L)		
[S] 01.Median Type		
[A] 01.Median Type		
[S] 02.Median Width		
[A] 01.Less Than Four Feet		
[A] 02.Four Feet or Greater		
[A] 03.Unknown		
[E] RL8.Roadway Lighting (L)		
[A] 01.No Lighting	[S]Roadway=>[E]R11.Roadway Lighting=>[A]03.No Lighting	
[A] 02.Spot Illumination		
[A] 03.Continuous Lighting		
[E] RL9.Pavement Markings, Longitudinal (L)		
[S] 01.Function and Color		
[A] 01.Centerline, Skip-Dash, Yellow		
[A] 02.Centerline, Solid, Yellow		
[A] 03.Centerline, Solid Double, Yellow		
[A] 04.No Passing Barrier, Right or Left, Yellow		
[A] 05.Lane Line, Skip-Dash, White		
[A] 06.Lane Line, Solid, White		
[A] 07.Edge Line, Left, Yellow		
[A] 08.Edge Line, Right, White		
[A] 09.Left Turn Lane Lines, Combination of Solid and Skip-Dash, Yellow		
[A] 10.Turn Arrow Symbols, Right, Through, Left, or Combination of Two		
[A] 11.Unknown		
[S] 02.Material		
[A] 01.Paint		
[A] 02.Thermoplastic		

State Structure	Standard Elements/ Attributes That Map	Comments
[A] 03.Raised Markers		
[A] 04.Permanent Inlay		
[A] 05.Tape		
[A] 06.Other		
[A] 07.Unknown		
[E] RL10.Bikeway (L)		
[A] 01.No Bikeway	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]1.Facility=>[A]00.None	
[A] 02.Bicycle Route (Signed)	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]2.Signed Bicycle Route=>[A]02.Yes	
[A] 03.Bicycle Lane (Striped) - Right Only	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]1.Facility=>[A]01.Marked Bicycle Lane	
[A] 04.Bicycle Lane (Striped) - Both Sides	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]1.Facility=>[A]01.Marked Bicycle Lane	
[A] 05.Bicycle Lane (Striped) - Left Only	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]1.Facility=>[A]01.Marked Bicycle Lane	
[A] 06.Separate Bicycle Path/Trail	[S]Roadway=>[E]R13.Presence/Type of Bicycle Facility=>[S]1.Facility=>[A]02.Separate Bicycle Path/Trail	
[A] 07.Unknown		
[E] RL11.Delineator Presence (L)		
[A] 01.None		
[A] 02.Delineators, Right		
[A] 03.Delineators, Left		
[A] 04.Delineators, Both Sides		
[A] 05.Unknown		
[E] RL12.Clearzone Distance (L)		
[A] 01.Clearzone Distance		
[E] RL13.Sideslope (L)		
[A] 01.Sideslope Ratio or Percentage		
[E] RL18.Mainline Number of Lanes at Intersection (L)		
[A] 01.One Lane	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]01.One Lane	
[A] 02.Two Lanes	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]02.Two Lanes	
[A] 03.Three Lanes	[S]Roadway=>[E]R14.Mainline Number of Lanes at	

State Structure	Standard Elements/ Attributes That Map	Comments
	Intersection=>[A]03.Three Lanes	
[A] 04.Four to Six Lanes	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]04.Four to Six Lanes	
[A] 05.Seven or More Lanes	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]05.Seven or More Lanes	
[A] 06.Unknown	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]99.Unknown	
[A] 07.Not an Intersection (D)	[S]Roadway=>[E]R14.Mainline Number of Lanes at Intersection=>[A]00.Not an Intersection or Interchange	
[E] RL19.Side-Road Number of Lanes at Intersection (L)		
[A] 01.One Lane	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]01.One Lane	
[A] 02.Two Lanes	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]02.Two Lanes	
[A] 03.Three Lanes	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]03.Three Lanes	
[A] 04.Four to Six Lanes	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]04.Four to Six Lanes	
[A] 05.Seven or More Lanes	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]05.Seven or More Lanes	
[A] 06.Unknown	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]99.Unknown	
[A] 07.Not an Intersection (D)	[S]Roadway=>[E]R15.Cross-Street Number of Lanes at Intersection=>[A]00.Not an Intersection or Interchange	