

# North Carolina Mapping Scores

Generated on 23-JAN-20

## Mapping Info

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

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[S] Crash			
[E] C1.Crash Identifier	100		
[A] 01.State-Specific Identifier		[S] Crash => [E] C1.Crash Case Identifier => [A] 01.Crash Case Identifier	
[E] C2.Crash Classification	28.57		
[S] I.Ownership			
[A] 01.Public Property		[S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] I. Interstate Routes [S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] Local.City Street Name [S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] NC. NC Numbered Routes [S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] PVA.Public Vehicular Area	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] SR. State Secondary Route [S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] US. US Numbered Routes	
[A] 02.Private Property		[S] Crash => [E] C9.Crash Roadway Location => [C] 04.On Road => [A] PP. Private Road, Property, or Driveway	
[S] 2.Characteristics			No Mapping Comment: The MMUCC attributes describe where the first unstabalized situation occurred. The state crash database element "Relation to Roadway" describes where the first harmful event took place. Therefore, mapping could not completed, and the state did not receive credit for this subfield.
[A] 01.Trafficway, On Road			
[A] 02.Trafficway, Not on Road			
[A] 03.Non-Trafficway			
[S] 3.Secondary Crash?			No Mapping Comment: The state crash database does not contain the MMUCC subfield/attributes; therefore, mapping could not completed, and the state did not receive credit.
[A] 01.No			
[A] 02.Yes			
<b>[E] C3.Crash Date and Time</b>	<b>88.24</b>		
[S] 1.1.Crash Date and Time			
[A] Year (YYYY)		[S] Crash => [E] C3.Crash Date => [S] 03.Year => [A] 01.Year	
[S] 1.2.Crash Date and Time			
[A] 01.January		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 01.January	
[A] 02.February		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 02.February	
[A] 03.March		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 03.March	
[A] 04.April		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 04.April	
[A] 05.May		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 05.May	
[A] 06.June		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 06.June	
[A] 07.July		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 07.July	
[A] 08.August		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 08.August	
[A] 09.September		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 09.September	
[A] 10.October		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 10.October	
[A] 11.November		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 11.November	
[A] 12.December		[S] Crash => [E] C3.Crash Date => [S] 01.Month => [A] 12.December	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[S] 1.3.Crash Date and Time			
[A] Day (DD)		[S] Crash => [E] C3.Crash Date => [S] 02.Day => [A] 01.Day of Month	
[S] 1.4.Crash Date and Time			
[A] Valid Military Time (HHMM) - (Code Midnight as "0000")		[S] Crash => [E] C4.Crash Time => [S] 01.Hour => [A] 01.Hour [S] Crash => [E] C4.Crash Time => [S] 02.Minute => [A] 01.Minute	
[S] 2.0.Time of Roadway Clearance			No Mapping Comment: The state crash database does not contain the MMUCC subfield/attributes for "Time of Roadway Clearance"; therefore, mapping could not be completed, and the state did not receive credit.
[A] 99.Unknown			
[A] Valid Military Time (HHMM) - (Code Midnight as "0000")			
<b>[E] C4.Crash County</b>	<b>100</b>		
[A] County Name		[S] Crash => [E] C5.Crash County => [A] 01.Crash County	
<b>[E] C5.Crash City/Place (Political Jurisdiction)</b>	<b>66.67</b>		
[A] 997.Other		[S] Crash => [E] C6.Crash City/Place => [A] 02.Other	
[A] 999.Unknown			No Mapping Comment: The state crash database does not include the attribute "Unknown"; therefore, mapping could not be completed, and the state did not receive credit.
[A] City/Place Name		[S] Crash => [E] C6.Crash City/Place => [A] 01.Crash City/Place	
<b>[E] C6.Crash Location</b>	<b>100</b>		
[A] 01.Latitude and Longitude (degrees.minutes.seconds + compass direction)		[S] Crash => [E] C9.Crash Roadway Location => [C] 10.GPS Coordinates => [A] 01.Latitude [S] Crash => [E] C9.Crash Roadway Location => [C] 10.GPS Coordinates => [A] 02.Longitude	
[A] 02.Linear Referencing System (LRS)		[S] Crash => [E] C9.Crash Roadway Location => [C] 11 .Linear Referencing System (LRS) (Dummy) => [A] 01.LRS Value 1 (Dummy) [S] Crash => [E] C9.Crash Roadway Location => [C] 11 .Linear Referencing System (LRS) (Dummy) => [A] 02.LRS Value 2 (Dummy)	
[A] 03.Link Node + Offset System (not recommended)		[S] Crash => [E] C9.Crash Roadway Location => [C] 12.Link Node + Offset System (not recommended) (Dummy) => [A] 01.Link Node # (Dummy) [S] Crash => [E] C9.Crash Roadway Location => [C] 12.Link Node + Offset System (not recommended) (Dummy) => [A] 02.Offset (Dummy)	
<b>[E] C7.First Harmful Event</b>	<b>57.14</b>		
[C] 1.Non-Collision Harmful Events			
[A] 01.Cargo/Equipment Loss or Shift			No Mapping Comment: The State crash database does not contain this

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Fell/Jumped From Motor Vehicle		[S] Crash => [E] C11.First Harmful Event => [C] 01.Non-Collision => [A] 15.Falling or Jumping from the Motor Vehicle (D)	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
[A] 03.Fire/Explosion		[S] Crash => [E] C11.First Harmful Event => [C] 01.Non-Collision => [A] 14.Explosion/Fire (D)	
[A] 04.Immersion, Full or Partial			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Jackknife		[S] Crash => [E] C11.First Harmful Event => [C] 01.Non-Collision => [A] 04.Jackknife	
[A] 06.Other Non-Collision			No Mapping Comment: The State crash database does contain the attribute "Other Non-Collision"; however, mapping could not be completed per MMUCC rule 11.
[A] 07.Overturn/Rollover		[S] Crash => [E] C11.First Harmful Event => [C] 01.Non-Collision => [A] 05.Overturn/Rollover	
[A] 08.Thrown or Falling Object			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[C] 2.Collision With Person, Motor Vehicle, or Non-Fixed Object			
[A] 09.Animal (live)		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 10.Construction Equipment (backhoe, bulldozer, etc.)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 11.Farm Equipment			No Mapping Comment:

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
(tractor, combine harvester, etc.)			The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 12.Motor Vehicle in Transport		[S] Crash => [E] C11.First Harmful Event => [C] 03.Collision of Two or More Motor Vehicles => [A] 64.Motor Vehicle in Transport (D)	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".
[A] 13.Other Non-Fixed Object			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 14.Other Non-motorist			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 15.Parked Motor Vehicle		[S] Crash => [E] C11.First Harmful Event => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	
[A] 16.Pedalcycle		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 17.Pedestrian		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 18.Railway Vehicle (train, engine)		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 16.RR Train, Engine	
[A] 19.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 20.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[C] 3.Collision With Fixed Object			
[A] 21.Bridge Overhead Structure		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Vehicle With => [A] 51.Overhead Part of Underpass	
[A] 22.Bridge Pier or Support		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 52.Pier on Shoulder of Underpass [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 53.Pier in Median of Underpass [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 54.Abutment (Supporting Wall) of Underpass	
[A] 23.Bridge Rail		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 49.Bridge Rail End [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 50.Bridge Rail Face	
[A] 24.Cable Barrier			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 25.Concrete Traffic Barrier			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 26.Culvert		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 56.Catch Basin or Culvert on Shoulder [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 57.Catch Basin or Culvert in Median	
[A] 27.Curb			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 28.Ditch		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 58.Ditch	
[A] 29.Embankment		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 59.Embankment	
[A] 30.Fence		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 61.Fence or Fence Post	
[A] 31.Guardrail End Terminal		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 41.Guardrail End on Shoulder [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Vehicle With => [A] 43.Guardrail End in Median	
[A] 32.Guardrail Face		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 42.Guardrail Face on Shoulder [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 44.Guardrail Face in Median	
[A] 33.Impact Attenuator/Crash Cushion		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 63.Crash Cushion	
[A] 34.Mailbox		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 60.Mailbox	
[A] 35.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does contain the attribute "Other Fixed Object"; however, mapping could not be completed per MMUCC rule 13.
[A] 36.Other Post, Pole, or Support			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 37.Other Traffic Barrier			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 38.Traffic Sign Support		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 37.Official Highway Sign (Non-Breakaway) [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 38.Official Highway Sign (Breakaway) [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 39.Overhead Sign Support	
[A] 39.Traffic Signal Support			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 40.Tree (standing)		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 33.Tree	
[A] 41.Utility Pole/Light Support		[S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor Vehicle With => [A] 34.Utility Pole (With or Without Light) [S] Crash => [E] C11.First Harmful Event => [C] 02.Collision of Motor	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Vehicle With => [A] 35.Luminaire Pole (Non-Breakaway)	
[A] 99.Unknown			No Mapping Comment: The State crash database does contain the attribute "Unknown"; however, mapping could not be completed per MMUCC rule 13.
<b>[E] C8.Location of First Harmful Event Relative to the Trafficway</b>	<b>27.27</b>		
[A] 01.Gore			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.In Parking Lane or Zone			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Median		[S] Crash => [E] C8.Relation to Roadway (FHE) => [A] 03.Median	
[A] 04.Off-Roadway, Location Unknown			No Mapping Comment: The SCDB attribute "On Roadway (Surface)/Off Roadway cannot map to any of the MMUCC attributes that specify "On Roadway" or "Off Roadway".
[A] 05.On Roadway			No Mapping Comment: The SCDB attribute "On Roadway (Surface)/Off Roadway cannot map to any of the MMUCC attributes that specify "On Roadway" or "Off Roadway".
[A] 06.On Shoulder, Left Side			No Mapping Comment: The SCDB attribute "Shoulder" cannot map to both of the more specific MMUCC attributes related to shoulder.
[A] 07.On Shoulder, Right Side			No Mapping Comment: The SCDB attribute "Shoulder" cannot map to both of the more specific MMUCC attributes related to shoulder.
[A] 08.Outside Road/Right-of-Way		[S] Crash => [E] C8.Relation to Roadway (FHE) => [A] 05.Outside-Trafficway	
[A] 09.Roadside		[S] Crash => [E] C8.Relation to Roadway (FHE) => [A] 04.Roadside	
[A] 10.Separator/Traffic Island			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			completed, and the State did not receive credit.
[A] 99.Unknown			No Mapping Comment: The State cannot map to "Unknown" because the State does not possess all the specific attributes for the MMUCC element.
<b>[E] C9.Manner of Crash/Collision Impact</b>	<b>40</b>		
[A] 00.Not a Collision Between Two Motor Vehicles			
[A] 01.Angle		[S] Crash => [E] C49.Manner of Collision => [A] 30.Angle	
[A] 02.Front to Front		[S] Crash => [E] C49.Manner of Collision => [A] 27.Head On	
[A] 03.Front to Rear			No Mapping Comment: The State crash database does contain the following attributes "Rear End, Slow or Stop", "Rear End, Turn", and "Backing Up"; however, these cannot map to MMUCC "Front to Rear", "Rear to Rear", or "Rear to Side" attributes because the State attribute definitions do match the MMUCC attribute definitions. The State attributes are either too specific or too broad.
[A] 04.Rear to Rear			No Mapping Comment: The State crash database does contain the following attributes "Rear End, Slow or Stop", "Rear End, Turn", and "Backing Up"; however, these cannot map to MMUCC "Front to Rear", "Rear to Rear", or "Rear to Side" attributes because the State attribute definitions do match the MMUCC attribute definitions. The State attributes are either too specific or too broad.
[A] 05.Rear to Side			No Mapping Comment: The State crash database does contain the following attributes "Rear End, Slow or Stop", "Rear End, Turn", and "Backing Up"; however, these cannot map to MMUCC "Front to Rear", "Rear to Rear", or "Rear to Side" attributes because the State attribute definitions do match the MMUCC attribute definitions. The State attributes are either too specific or too broad.
[A] 06.Sideswipe, Opposite		[S] Crash => [E] C49.Manner of	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Direction		Collision => [A] 29.Sideswipe, Opposite Direction	
[A] 07.Sideswipe, Same Direction		[S] Crash => [E] C49.Manner of Collision => [A] 28.Sideswipe, Same Direction	
[A] 98.Other			No Mapping Comment: The State crash database does include the attribute "Other Collision with Vehicle"; however, this attribute cannot map to MMUCC attribute "Other" due to MMUCC rule 13. Therefore, the State did not receive credit for this attribute.
[A] 99.Unknown			No Mapping Comment: The State crash database does not include the attribute "Unknown"; therefore, mapping could not be completed, and the State did not receive credit.
<b>[E] C10.Source of Information</b>	<b>50</b>		
[S] 1.Source of Information			
[A] 01.Law Enforcement Agency		[S] Crash => [E] C33.Source of Information => [A] 01.Municipal Police [S] Crash => [E] C33.Source of Information => [A] 02.Sheriff [S] Crash => [E] C33.Source of Information => [A] 03.Rural or County Police [S] Crash => [E] C33.Source of Information => [A] 04.Highway Patrol [S] Crash => [E] C33.Source of Information => [A] 05.Other Traffic Investigating Agency	
[A] 02.Civilian			No Mapping Comment: The State crash database does not include this attribute nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[S] 2.Law Enforcement Agency Identifier			
[A] 997.Not Applicable			No Mapping Comment: The State crash database does not include this attribute nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] NCIC Originating Agency Identifier (OAI)		[S] Crash => [E] C47.LE Agency NCIC Code (D) => [A] 01.9 Digit Code (D)	
<b>[E] C11.Weather Conditions</b>	<b>54.55</b>		
[A] 98.Other			No Mapping Comment: The State cannot map to "Other" because the State crash database does not possess all the specific attributes for the MMUCC element.
[A] 99.Unknown			No Mapping Comment: The State crash database

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[S] 1.1.Selection 1			
[A] 01.Blowing Sand, Soil, Dirt			No Mapping Comment: The State crash database attribute "Blowing, Sand, Dirt, Snow" cannot map to the MMUCC attributes "Blowing Sand, Soil, Dirt" and "Blowing Snow" because it is a combination of the two.
[A] 02.Blowing Snow			No Mapping Comment: The State crash database attribute "Blowing, Sand, Dirt, Snow" cannot map to the MMUCC attributes "Blowing Sand, Soil, Dirt" and "Blowing Snow" because it is a combination of the two.
[A] 03.Clear		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 01.Clear	
[A] 04.Cloudy		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 02.Cloudy	
[A] 05.Fog, Smog, Smoke		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 05.Fog, Smog, Smoke	
[A] 06.Freezing Rain or Freezing Drizzle			No Mapping Comment: The State crash database attribute "Sleet, Hail (Freezing Rain or Drizzle)" cannot map to the MMUCC attributes "Freezing Rain or Freezing Drizzle" and "Sleet or Hail" because it is a combination of the two.
[A] 07.Rain		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 03.Rain	
[A] 08.Severe Crosswinds		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 07.Severe Crosswinds	
[A] 09.Sleet or Hail			No Mapping Comment: The State crash database attribute "Sleet, Hail (Freezing Rain or Drizzle)" cannot map to the MMUCC attributes "Freezing Rain or Freezing Drizzle" and "Sleet or Hail" because it is a combination of the two.
[A] 10.Snow		[S] Crash => [E] C18.Weather Condition => [S] 01.First Weather Condition => [A] 04.Snow	
[S] 1.2.Selection 2			
[A] 01.Blowing Sand, Soil, Dirt			No Mapping Comment: The State crash database attribute "Blowing, Sand,

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			"Dirt, Snow" cannot map to the MMUCC attributes "Blowing Sand, Soil, Dirt" and "Blowing Snow" because it is a combination of the two.
[A] 02.Blowing Snow			No Mapping Comment: The State crash database attribute "Blowing, Sand, Dirt, Snow" cannot map to the MMUCC attributes "Blowing Sand, Soil, Dirt" and "Blowing Snow" because it is a combination of the two.
[A] 03.Clear		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 01.Clear	
[A] 04.Cloudy		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 02.Cloudy	
[A] 05.Fog, Smog, Smoke		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 05.Fog, Smog, Smoke	
[A] 06.Freezing Rain or Freezing Drizzle			No Mapping Comment: The State crash database attribute "Sleet, Hail (Freezing Rain or Drizzle)" cannot map to the MMUCC attributes "Freezing Rain or Freezing Drizzle" and "Sleet or Hail" because it is a combination of the two.
[A] 07.Rain		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 03.Rain	
[A] 08.Severe Crosswinds		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 07.Severe Crosswinds	
[A] 09.Sleet or Hail			No Mapping Comment: The State crash database attribute "Sleet, Hail (Freezing Rain or Drizzle)" cannot map to the MMUCC attributes "Freezing Rain or Freezing Drizzle" and "Sleet or Hail" because it is a combination of the two.
[A] 10.Snow		[S] Crash => [E] C18.Weather Condition => [S] 02.Second Weather Condition => [A] 04.Snow	
<b>[E] C12.Light Condition</b>	<b>100</b>		
[A] 01.Daylight		[S] Crash => [E] C19.Ambient Light => [A] 01.Daylight	
[A] 02.Dawn/Dusk		[S] Crash => [E] C19.Ambient Light => [A] 02.Dusk [S] Crash => [E] C19.Ambient Light => [A] 03.Dawn	
[A] 03.Dark – Lighted		[S] Crash => [E] C19.Ambient Light => [A] 04.Dark - Lighted Roadway	
[A] 04.Dark – Not Lighted		[S] Crash => [E] C19.Ambient Light => [A] 05.Dark - Roadway Not Lighted	
[A] 05.Dark – Unknown Lighting		[S] Crash => [E] C19.Ambient Light => [A] 06.Dark - Unknown Roadway	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Lighting	
[A] 98.Other		[S] Crash => [E] C19.Ambient Light => [A] 07.Other	
[A] 99.Unknown		[S] Crash => [E] C19.Ambient Light => [A] 08.Unknown	
<b>[E] C13.Roadway Surface Condition</b>	<b>72.73</b>		
[A] 01.Dry		[S] Crash => [E] C20.Road Surface Condition => [A] 01.Dry	
[A] 02.Ice/Frost		[S] Crash => [E] C20.Road Surface Condition => [A] 04.Ice	
[A] 03.Mud, Dirt, Gravel			No Mapping Comment: The State crash database attribute "Sand, Mud, Dirt, Gravel" cannot map to MMUCC attribute "Mud, Dirt, Gravel" because it's a combination of the MMUCC attributes "Mud, Dirt, Gravel" and "Sand".
[A] 04.Oil		[S] Crash => [E] C20.Road Surface Condition => [A] 08.Fuel Oil	
[A] 05.Sand			No Mapping Comment: The State crash database attribute "Sand, Mud, Dirt, Gravel" cannot map to MMUCC attribute "Sand" because it's a combination of the MMUCC attributes "Mud, Dirt, Gravel" and "Sand".
[A] 06.Slush		[S] Crash => [E] C20.Road Surface Condition => [A] 06.Slush	
[A] 07.Snow		[S] Crash => [E] C20.Road Surface Condition => [A] 05.Snow	
[A] 08.Water (standing, moving)		[S] Crash => [E] C20.Road Surface Condition => [A] 03.Water (Standing, Moving)	
[A] 09.Wet		[S] Crash => [E] C20.Road Surface Condition => [A] 02.Wet	
[A] 98.Other			No Mapping Comment: The State cannot map to "Other" because the State crash database does not possess all the specific attributes for the MMUCC element.
[A] 99.Unknown		[S] Crash => [E] C20.Road Surface Condition => [A] 10.Unknown	Mapping Comment of 10. Unknown: The State can map to "Unknown" because the State has the attribute "Other".
<b>[E] C14.Contributing Circumstances – Roadway Environment</b>	<b>52.27</b>		
[S] 1.1.Selection 1			
[A] 00.None		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 00.None (No Unusual Conditions)	
[A] 01.Animal(s)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Debris		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 02. Debris	
[A] 03.Glare			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Non-Highway Work		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 10. Non-Highway Work	
[A] 05.Obstructed Crosswalks			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 06.Obstruction in Roadway		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 06. Obstruction in Roadway	
[A] 07.Prior Crash			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.Prior Non-Recurring Incident			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 09.Regular Congestion			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 10.Related to a Bus Stop			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 11.Road Surface Condition (wet, icy, snow, slush, etc.)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 01. Road Surface Condition	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 12.Ruts, Holes, Bumps		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 03. Rut, Holes, Bumps	
[A] 13.Shoulders (none, low, soft, high)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 08. Shoulders Low, Soft, or High [S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 09.No Shoulders	
[A] 14.Toll Booth/Plaza Related			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 15.Traffic Control Device		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 07. Traffic Control Device Inoperative, Not Visible or Missing	
[A] 16.Traffic Incident			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 17.Visual Obstruction (s)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 18.Weather Conditions		[S] Crash => [E] C18.Weather Condition => [S] 03.Weather Condition(s) Contributed to the Crash => [A] 01.Yes	
[A] 19.Work Zone (construction/maintenance/utility)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 04. Work Zone (Construction/Maintenance/Utility)	
[A] 20.Worn, Travel-Polished Surface		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 05. Worn, Travel-Polished Surface	
[A] 98.Other			No Mapping Comment: The State crash database does contain the attribute "Other"; however, mapping could not be completed per MMUCC rule 11.
[A] 99.Unknown		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 01.First Contributing Circumstance => [A] 12. Unknown	
[S] 1.2.Selection 2			
[A] 00.None		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance =>	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 01.Animal(s)		[A] 00.None (No Unusual Conditions)	No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Debris		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 02.Debris	
[A] 03.Glare			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Non-Highway Work		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 10.Non-Highway Work	
[A] 05.Obstructed Crosswalks			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 06.Obstruction in Roadway		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 06.Obstruction in Roadway	
[A] 07.Prior Crash			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.Prior Non-Recurring Incident			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 09.Regular Congestion			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 10.Related to a Bus Stop			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			did not receive credit.
[A] 11.Road Surface Condition (wet, icy, snow, slush, etc.)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 01.Road Surface Condition	
[A] 12.Ruts, Holes, Bumps		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 03.Rut, Holes, Bumps	
[A] 13.Shoulders (none, low, soft, high)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 08.Shoulders Low, Soft, or High [S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 09.No Shoulders	
[A] 14.Toll Booth/Plaza Related			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 15.Traffic Control Device		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 07.Traffic Control Device Inoperative, Not Visible or Missing	
[A] 16.Traffic Incident			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 17.Visual Obstruction (s)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 18.Weather Conditions		[S] Crash => [E] C18.Weather Condition => [S] 03.Weather Condition(s) Contributed to the Crash => [A] 01b.Yes (D)	
[A] 19.Work Zone (construction/maintenance/utility)		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 04.Work Zone (Construction/Maintenance/Utility)	
[A] 20.Worn, Travel-Polished Surface		[S] Crash => [E] C21.Contributing Circumstances, Roadway => [S] 02. Second Contributing Circumstance => [A] 05.Worn, Travel-Polished Surface	
<b>[E] C15.Relation to Junction</b>	<b>33.33</b>		
[S] 1.Within Interchange Area?			No Mapping Comment: The State crash database does not have a similar element, subfield, or attributes to map to this MMUCC subfield nor can they be easily derived with the information

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			available; therefore, mapping could not be completed, and the State did not receive credit.
[A] 01.No			
[A] 02.Yes			
[A] 99.Unknown			
[S] 2.Specific Location			
[A] 00.Not an Interchange Area			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 01. Acceleration/Deceleration Lane			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Crossover-Related			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Driveway Access or Related		[S] Crash => [E] C22.Road Feature => [A] 04.Driveway Public [S] Crash => [E] C22.Road Feature => [A] 05.Driveway, Private	
[A] 04.Entrance/Exit Ramp or Related		[S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 15.Off-Ramp Entry [S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 16.Off-Ramp Proper [S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 17.Off Ramp Terminal on Crossroad [S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 19.On-Ramp Entry [S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 20.On-Ramp Proper [S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 21.On-Ramp Terminal on Crossroad	
[A] 05.Intersection or Related		[S] Crash => [E] C22.Road Feature => [C] 01.Intersection of Roadways => [A] 12.Related to Intersection	
[A] 06.Non-Junction			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 07.Railway Grade Crossing		[S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 22.Railroad Crossing	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 08.Shared-Use Path or Trail		[S] Crash => [E] C22.Road Feature => [C] 02.Interchange => [A] 24.Shared Use Paths or Trails	
[A] 09.Through Roadway			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 10.Other Location Not Listed Above Within an Interchange Area (median, shoulder an			No Mapping Comment: The State crash database does contain the attribute "Other"; however, mapping could not be completed to the MMUCC attribute "Other Location Not Listed Above Within an Interchange Area (median, shoulder, and roadside)" per MMUCC rule 11.
[A] 99.Unknown			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
<b>[E] C16.Type of Intersection</b>	<b>20</b>		
[S] 1.Number of Approaches			No Mapping Comment: The State crash database cluster "Intersection of Roadways" in the element "Road Feature" only specifies the type of intersection, not the geometry of intersections. The number of approaches and geometry should be recorded separately or linkage to roadway elements must be demonstrated to receive credit. Therefore, mapping could not be completed, and the State did not receive credit for attributes in subfields 1 and 2.
[A] 01.Not an Intersection			
[A] 02.(2) Two			
[A] 03.(3) Three			
[A] 04.(4) Four			
[A] 05.(5+) Five or more			
[S] 2.Overall Intersection Geometry			
[A] 01.Angled/Skewed			No Mapping Comment: The State crash database cluster "Intersection of Roadways" in the element "Road Feature" only specifies the type of intersection, not the geometry of intersections.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			The number of approaches and geometry should be recorded separately or linkage to roadway elements must be demonstrated to receive credit. Therefore, mapping could not be completed, and the State did not receive credit for attributes in subfields 1 and 2.
[A] 02.Roundabout/Traffic Circle		[S] Crash => [E] C22.Road Feature => [C] 01.Intersection of Roadways => [A] 10.Traffic Circle/Roundabout	
[A] 03.Perpendicular			No Mapping Comment: See comment for MMUCC attribute 01.
[A] 97.Not Applicable/Not an Intersection			No Mapping Comment: See comment for MMUCC attribute 01.
[S] 3.Overall Traffic Control Device			
[A] 01.Signalized			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Stop – All Way			No Mapping Comment: The State crash database attribute "Stop Sign" could not be mapped to the separate MMUCC attributes "Stop – All Way" or "Stop – Partial".
[A] 03.Stop – Partial			No Mapping Comment: The State crash database attribute "Stop Sign" could not be mapped to the separate MMUCC attributes "Stop – All Way" or "Stop – Partial".
[A] 04.Yield		[S] Crash => [E] C46.Traffic Control Device Type => [A] 02.Yield Sign	
[A] 05.No Controls		[S] Crash => [E] C46.Traffic Control Device Type => [A] 00.No Control Present	
[A] 97.Not Applicable/Not an Intersection			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
<b>[E] C17.School Bus-Related</b>	<b>100</b>		
[A] 01.No		[S] Crash => [E] C31.School Bus-Related => [A] 03.No	
[A] 02.Yes, School Bus Directly Involved		[S] Crash => [E] C31.School Bus-Related => [A] 01.Yes, School Bus Directly Involved (Contact Vehicle)	
[A] 03.Yes, School Bus Indirectly Involved		[S] Crash => [E] C31.School Bus-Related => [A] 02.Yes, School Bus Indirectly Involved (Non-Contact	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Vehicle)	
<b>[E] C18.Work Zone-Related (Construction/Maintenance/Utility)</b>	<b>50</b>		
[S] 1.Was the crash in a construction, maintenance, or utility work zone or was it re			
[A] 01.No		[S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 05.No	
[A] 02.Yes		[S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 01.Construction Work Area [S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 02.Maintenance Work Area [S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 03.Utility Work Area	
[A] 99.Unknown			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[S] 2.Location of the Crash			
[A] 01.Before the First Work Zone Warning Sign			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Advance Warning Area		[S] Crash => [E] C32.Work Zone-Related => [S] 04.Location of Crash => [A] 01.Before Work Area (After First Warning Sign and Before Lane Shift/Closure)	
[A] 03.Transition Area		[S] Crash => [E] C32.Work Zone-Related => [S] 04.Location of Crash => [A] 02.In Work Area Approach Taper (Where Lane Closed or Shifted)	
[A] 04.Activity Area		[S] Crash => [E] C32.Work Zone-Related => [S] 04.Location of Crash => [A] 03.Adjacent to Actual Work	
[A] 05.Termination Area			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 98.Not Applicable/Not Within or Related to a Work Zone		[S] Crash => [E] C32.Work Zone-Related => [S] 04.Location of Crash => [A] 98.Not Applicable/Not Within or Related to a Work Zone (D)	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] 3.Type of Work Zone			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 01.Lane Closure			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Lane Shift/Crossover			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Work on Shoulder or Median			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Intermittent or Moving Work		[S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 04.Intermittent/Moving Work - e.g., Patching Pothole	
[A] 05.Other Type of Work Zone			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 98.Not Applicable/Not Within or Related to a Work Zone		[S] Crash => [E] C32.Work Zone-Related => [S] 01.Did Crash Occur In or Near => [A] 98.Not Applicable/Not Within or Related to a Work Zone (D)	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] 4.Workers Present			
[A] 01.No		[S] Crash => [E] C32.Work Zone-Related => [S] 02.Work Activity at the Time of the Crash => [A] 02.No Apparent Activity	
[A] 02.Yes		[S] Crash => [E] C32.Work Zone-Related => [S] 02.Work Activity at the Time of the Crash => [A] 01.Ongoing	
[A] 98.Not Applicable/Not Within or Related to a Work Zone		[S] Crash => [E] C32.Work Zone-Related => [S] 02.Work Activity at the Time of the Crash => [A] 98.Not Applicable/Not Within or Related to a Work Zone (D)	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

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			received credit for this attribute.
[A] 99.Unknown			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[S] 5.Law Enforcement Present			No Mapping Comment: The State crash database does not contain attributes indicating whether law enforcement was present at the work zone nor can they be easily derived; therefore, mapping could not be completed, and the State did not receive credit for this subfield.
[A] 01.No			
[A] 02.Yes			
[A] 98.Not Applicable/Not Within or Related to a Work Zone			
<b>[E] C19.Crash Severity</b>	<b>100</b>		
[A] 01.(K) Fatal Injury**		[S] Crash => [E] C38.Crash Severity (D) => [A] 03.Fatal Injury (D) [S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 01. Killed	
[A] 02.(A) Suspected Serious Injury		[S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 02.A Type 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) Suspected Minor Injury		[S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 03.B Type Injury	
[A] 04.(C) Possible Injury		[S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 04.C Type Injury	
[A] 05.(O) Property Damage-Only		[S] Crash => [E] C38.Crash Severity (D) => [A] 01.Property Damage Only (No Injury) (D) [S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 05.No Injury	
[A] 99.Unknown		[S] Crash => [E] C48.Crash Severity (Aligned with Injury Type) => [A] 06. Unknown	
<b>[E] C20.Number of Motor Vehicles Involved</b>	<b>100</b>		
[A] x.Number of motor vehicles involved		[S] Crash => [E] C39.Number of Motor Vehicles (D) => [A] 01.Number of Motor Vehicles (D)	
<b>[E] C21.Number of Motorists</b>	<b>100</b>		
[A] x.Number of Motorists		[S] Crash => [E] C40.Number of Occupants in Crash (D) => [A] 01. Number of Occupants in Crash (D)	
<b>[E] C22.Number of Non-Motorists</b>	<b>100</b>		
[A] x.Number of Non-		[S] Crash => [E] C41.Number of Non-	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Motorists		Motorists (D) => [A] 01.Number of Non-Motorists (D)	
<b>[E] C23.Number of Non-Fatally Injured Persons</b>	<b>100</b>		
[A] x.Number of Non-Fatally Injured Persons		[S] Crash => [E] C42.Total Non-Fatal Injuries (D) => [A] 01.Total Non-Fatal Injuries (D)	
<b>[E] C24.Number of Fatalities</b>	<b>100</b>		
[A] x.Number of Fatalities		[S] Crash => [E] C43.Total Fatal Injuries (D) => [A] 01.Total Fatal Injuries (D)	
<b>[E] C25.Alcohol Involvement</b>	<b>100</b>		
[A] 01.No		[S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 00.Neither Alcohol Nor Other Drugs (D)	
[A] 02.Yes		[S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 01.Yes Alcohol, Impairment Suspected (D) [S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 02.Yes Alcohol, No Impairment Detected (D) [S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 05.Yes Alcohol and Other Drugs, Impairment Suspected (D) [S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 06.Yes Alcohol and Other Drugs, No Impairment Detected (D)	
[A] 99.Unknown		[S] Crash => [E] C44.Alcohol/Drug Involvement (D) => [A] 07.Unknown (D)	
<b>[E] C26.Drug Involvement</b>	<b>100</b>		
[A] 01.No		[S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 00.Neither Alcohol Nor Other Drugs (D)	
[A] 02.Yes		[S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 03.Yes Other Drugs, Impairment Suspected (D) [S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 04.Yes Other Drugs, No Impairment Detected (D) [S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 05.Yes Alcohol and Other Drugs, Impairment Suspected (D) [S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 06.Yes Alcohol and Other Drugs, No Impairment Detected (D)	
[A] 99.Unknown		[S] Crash => [E] C44b.Alcohol/Drug Involvement (D) => [A] 07.Unknown (D)	
<b>[E] C27.Day of Week</b>	<b>100</b>		
[A] 01.Sunday		[S] Crash => [E] C45.Day of Week (D) => [A] 07.Sunday (D)	
[A] 02.Monday		[S] Crash => [E] C45.Day of Week (D) => [A] 01.Monday (D)	
[A] 03.Tuesday		[S] Crash => [E] C45.Day of Week (D) => [A] 02.Tuesday (D)	
[A] 04.Wednesday		[S] Crash => [E] C45.Day of Week (D) => [A] 03.Wednesday (D)	
[A] 05.Thursday		[S] Crash => [E] C45.Day of Week (D) => [A] 04.Thursday (D)	
[A] 06.Friday		[S] Crash => [E] C45.Day of Week (D) => [A] 05.Friday (D)	
[A] 07.Saturday		[S] Crash => [E] C45.Day of Week (D) => [A] 06.Saturday (D)	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[S] Vehicle			
[E] V1.Vehicle Identification Number (VIN)	100		
[A] xyz.Manufacturer-assigned number (permanently affixed to the motor vehicle)		[S] Vehicle => [E] V4.Vehicle Identification Number (VIN) => [A] 01.Vehicle Identification Number (VIN)	
[E] V2.Motor Vehicle Unit Type and Number	100		
[S] 1.Type			
[A] 01.Motor Vehicle in Transport		[S] Vehicle => [E] V1.Vehicle Unit Number Unique to the Crash => [S] 01.Type => [A] 01.Motor Vehicle in Transport	
[A] 02.Parked Motor Vehicle		[S] Vehicle => [E] V1.Vehicle Unit Number Unique to the Crash => [S] 01.Type => [A] 02.Parked Motor Vehicle	
[A] 03.Working Vehicle/Equipment		[S] Vehicle => [E] V1.Vehicle Unit Number Unique to the Crash => [S] 01.Type => [A] 03.Working Vehicle/Equipment	
[S] 2.Number			
[A] x.Sequential Number		[S] Vehicle => [E] V1.Vehicle Unit Number Unique to the Crash => [S] 02.Number => [A] 02.Sequential Number (Alphanumeric and Numeric Characters)	
[E] V3.Motor Vehicle Registration State and Year	50		
[S] 1.Identifier			
[A] 00.No Driver Present			No Mapping Comment: The State crash database has a "blank" attribute; however, this attribute cannot be mapped to the MMUCC attribute "No Driver Present" because the State crash database states "if no plate is available, leave blank."
[A] 99.Unknown			No Mapping Comment: The State crash database attribute "Unknown" cannot map to the MMUCC attribute "Unknown" because the State does not have all the MMUCC attributes in this subfield. The state did not receive credit.
[A] xyz.State Identifier		[S] Vehicle => [E] V2.Vehicle Registration State and Year => [S] 01.State => [A] 01.State 2 Position Abbreviation	
[S] 2.Motor Vehicle Registration			
[A] Year of Motor Vehicle Registration		[S] Vehicle => [E] V2.Vehicle Registration State and Year => [S] 02.Year => [A] 01.Year of Plate Issued	
[E] V4.Motor Vehicle License Plate Number	100		
[A] xyz.Alphanumeric Identifier		[S] Vehicle => [E] V3.Vehicle License Plate Number => [A] 01.Vehicle Plate Number	
[E] V5.Motor Vehicle Make	100		
[A] Name		[S] Vehicle => [E] V5.Vehicle Make => [A] 01.Vehicle Make	
[E] V6.Motor Vehicle Model Year	100		
[A] Model Year		[S] Vehicle => [E] V43.Vehicle Model	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Year (D) => [A] 01.Vehicle Model Year (D)	
<b>[E] V7.Motor Vehicle Model</b>	<b>100</b>		
[A] Code for Model		[S] Vehicle => [E] V44.Vehicle Model (D) => [A] 01.Vehicle Model (D)	
<b>[E] V8.Motor Vehicle Body Type Category</b>	<b>33.33</b>		
[S] 1.Body Type Category			
[A] 01.All-Terrain Vehicle/All-Terrain Cycle (ATV/ATC)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 27.All-Terrain Vehicle (ATV)	
[A] 02.Golf Cart			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Snowmobile			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Low Speed Vehicle			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Moped or motorized bicycle		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 21.Moped [S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 22.Motor/Scooter or Motor Bike or Motor-Driven Bicycle	
[A] 06.Recreational Off-Highway Vehicles (ROV)			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 07.2-Wheeled Motorcycle			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.3-Wheeled Motorcycle			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 09.Autocycle		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 33.Autocycle	
[A] 10.Passenger Car		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 01.Passenger Car	
[A] 11.Passenger Van (< 9 seats)			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			did not receive credit.
[A] 12.(Sport) Utility Vehicle		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 04.Sport Utility	
[A] 13.Pickup		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 02.Pickup	
[A] 14.Cargo Van**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 15.Construction Equipment (backhoe, bulldozer, etc.)			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 16.Farm Equipment (tractor, combine harvester, etc.)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 18.Farm Equipment [S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 19.Farm Tractor	
[A] 17.Single-Unit Truck**		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 34.Single-Unit Truck** (D)	Mapping Comment of 34. Single-Unit Truck** (D): Derived MMUCC attributes "Single-Unit Truck**" and "Truck Tractor**" in the State crash database.
[A] 18.Truck Tractor**		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 35.Truck Tractor** (D)	Mapping Comment of 35. Truck Tractor** (D): Derived MMUCC attributes "Single-Unit Truck**" and "Truck Tractor**" in the State crash database.
[A] 19.Motor Home		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 25.Motor Home/Recreational Vehicle	
[A] 20.9- or 12-Passenger Van**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 21.15-Passenger Van**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 22.Large Limo**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 23.Mini-bus**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 24.School Bus**		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 07.School Bus	
[A] 25.Transit Bus**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 26.Motorcoach**			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 27.Other Bus Type**			No Mapping Comment: The State crash database does include the attribute "Other Bus"; however, the State does not include all the attributes to map to this subfield. Therefore, mapping could not be completed, and the State did not receive credit.
[A] 28.Other Trucks			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] 98.Other			No Mapping Comment: The State crash database does include the attribute "Other"; however, the State does not include all the attributes to map to this subfield. Therefore, mapping could not be completed, and the State did not receive credit.
[S] 2.Number of Trailing Units			
[A] 97.Not Applicable (vehicle with no trailing units)			No Mapping Comment: The State crash database does not include this attribute; therefore, mapping could not be completed, and the State did not receive credit.
[A] Number of trailers		[S] Vehicle => [E] V46.Total Trailers Attached to Truck (D) => [A] 01.Total Number of Trailers Attached to Large Truck (D)	
[S] 3.Vehicle Size			No Mapping Comment: The State crash database does not collect attributes for all vehicles for this subfield; therefore, mapping could not be completed, and the State did not receive credit.
[A] 01.Light (Less than 10,000 lbs. GVWR/GCWR)			
[A] 02.Medium (10,001 – 26,000 lbs. GVWR/GCWR)**			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 03.Heavy (Greater than 26,000 lbs. GVWR/GCWR)**			
[S] 4.Did this motor vehicle display a hazardous materials (HM) placard?			No Mapping Comment: The State crash database does not collect attributes for all vehicles for this subfield; therefore, mapping could not be completed, and the State did not receive credit.
[A] 01.No			
[A] 02.Yes**			
<b>[E] V9.Total Occupants in Motor Vehicle</b>	<b>100</b>		
[A] x.Total number of injured and uninjured occupants including the driver		[S] Vehicle => [E] V47.Total Number of Occupants (D) => [A] 01.Total Number of Occupants (D)	Mapping Comment of 01. Total Number of Occupants (D): The State crash database can derive the attribute from the Occupant's/Non-Motorists Vehicle Unit Number Unique to Crash.
<b>[E] V10.Special Function of Motor Vehicle in Transport</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[A] 00.No Special Function			
[A] 01.Bus – School (Public or Private)			
[A] 02.Bus – Childcare/Daycare			
[A] 03.Bus – Transit/Commuter			
[A] 04.Bus – Charter/Tour			
[A] 05.Bus – Intercity			
[A] 06.Bus – Shuttle			
[A] 07.Bus – Other			
[A] 08.Farm Vehicle			
[A] 09.Fire Truck			
[A] 10. Highway/Maintenance			
[A] 11.Mail Carrier			
[A] 12.Military			
[A] 13.Ambulance			
[A] 14.Police			
[A] 15.Public Utility			
[A] 16.Non-Transport Emergency Services Vehicle			
[A] 17.Safety Service Patrols – Incident Response			
[A] 18.Other Incident Response			
[A] 19.Rental Truck (Over 10,000 lbs.)			
[A] 20.Towing – Incident Response			
[A] 21.Truck Acting as Crash Attenuator			
[A] 22.Taxi			
[A] 23.Vehicle Used for Electronic Ride-hailing (transportation network company)			
[A] 98.Other			
[A] 99.Unknown			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
<b>[E] V11.Emergency Motor Vehicle Use</b>	<b>0</b>		No Mapping Comment: The State crash database contains an "Emergency Vehicle Use" element, but the attributes do not match the MMUCC attributes' definitions. Therefore, mapping could not be completed, and the State did not receive credit.
[A] 01.Non-Emergency, Non-Transport			
[A] 02.Non-Emergency Transport			
[A] 03.Emergency Operation, Emergency Warning Equipment Not in Use			
[A] 04.Emergency Operation, Emergency Warning Equipment in Use			
[A] 97.Not Applicable			
[A] 99.Unknown			
<b>[E] V12.Motor Vehicle Posted/Statutory Speed Limit</b>	<b>66.67</b>		
[A] 97.Not Applicable		[S] Vehicle => [E] V23.Vehicle Authorized Speed Limit => [A] 02.Not Applicable	
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] xx.Posted/Statutory Value (miles per hour)		[S] Vehicle => [E] V23.Vehicle Authorized Speed Limit => [A] 01. Vehicle Authorized Speed Limit	
<b>[E] V13.Direction of Travel Before Crash</b>	<b>100</b>		
[A] 00.Not on Roadway		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 09.Not on Roadway	
[A] 01.Northbound		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 01.North [S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 02.North East [S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 03.North West	
[A] 03.Eastbound		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 07.East	
[A] 06.Southbound		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 04.South [S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 05.South East [S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		(Designated Direction of Road) => [A] 06.South West	
[A] 09.Westbound		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 08.West	
[A] 99.Unknown		[S] Vehicle => [E] V28.Direction of Travel Before Crash => [S] 01.Direction (Designated Direction of Road) => [A] 10.Unknown	
<b>[E] V14.Trafficway Description</b>	<b>0</b>		No Mapping Comment: The State crash database element "Road Configuration" classifies the attributes at the crash level and not for each vehicle in the crash. The attributes are also divided differently in the MMUCC guideline. Therefore, mapping could not be completed, and the State did not receive credit.
[S] 1.Travel Directions			
[A] 01.One-Way			
[A] 02.Two-Way			
[S] 2.Divided?			
[A] 00.Not Divided			
[A] 01.Not Divided, With a Continuous Left-Turn Lane			
[A] 02.Divided, Flush Median (greater than 4ft wide)			
[A] 03.Divided, Raised Median (curbed)			
[A] 04.Divided, Depressed Median			
[A] 99.Unknown			
[S] 3.Barrier Type			
[A] 00.No Barrier			
[A] 01.Cable Barrier			
[A] 02.Concrete Barrier (e. g. Jersey Barrier)			
[A] 03.Earth Embankment			
[A] 04.Guardrail			
[A] 98.Other			
[S] 4.HOV/HOT Lanes			
[A] 00.None present			
[A] 01.Separated, Barrier, Flush (greater than 4ft wide), Raised or Depressed Median			
[A] 02.Not Separated, Painted Pavement Markings, Post-Mounted Delineators			
[S] 5.Crash Related to HOV/HOT Lane?			
[A] 01.No			
[A] 02.Yes			
<b>[E] V15.Total Lanes in Roadway</b>	<b>0</b>		No Mapping Comment: The State crash database element "Number of Lanes" has the following definition: "Total number of thru lanes of the 'road on' at the point of the crash (if two-way, total for both directions). Do

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			not count turning lanes unless they are continuous between intersections". However, the attributes in MMUCC distinguish between divided and undivided and are recorded for each vehicle and include the number of auxiliary lanes. Therefore, mapping could not be completed, and the State did not receive credit.
[S] 1.1.(Selection 1)			
[C] Undivided Trafficways			
[A] 97.Not Applicable			
[A] Enter the total through lanes in both directions, excluding auxiliary lanes.			
[A] Enter the total auxiliary lanes in both directions			
[C] Divided Trafficways			
[A] 97.Not Applicable			
[A] Enter the total through lanes in the vehicle's direction, excluding auxiliary 1			
[A] Enter the total auxiliary lanes in the vehicle's direction			
[S] 1.2.(Selection 2)			
[C] Undivided Trafficways			
[A] 97.Not Applicable			
[A] Enter the total through lanes in both directions, excluding auxiliary lanes.			
[A] Enter the total auxiliary lanes in both directions			
[C] Divided Trafficways			
[A] 97.Not Applicable			
[A] Enter the total through lanes in the vehicle's direction, excluding auxiliary 1			
[A] Enter the total auxiliary lanes in the vehicle's direction			
<b>[E] V16.Roadway Alignment and Grade</b>	<b>0</b>		No Mapping Comment: The State crash database element "Horizontal and Vertical Alignment (Road Character)" classifies the attributes at the crash level and not for each vehicle in the crash. The attributes are also divided differently in the MMUCC guideline. Therefore, mapping could not be completed, and the State did not receive credit.
[S] 1.Horizontal Alignment			
[A] 01.Straight			
[A] 02.Curve Left			
[A] 03.Curve Right			
[S] 2.Grade			
[A] 01.Level			
[A] 02.Uphill			
[A] 03.Hillcrest			



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 04.Downhill			
[A] 05.Sag (bottom)			
[E] V17.Traffic Control Device Type	0		No Mapping Comment: The State crash database labels this in their data guide as a vehicle-level element, but the guidance and instructions to the DMV-349 lend to it being a crash-level element. The State will update this in the future. Mapping could not be completed at this time; therefore, the State did not receive credit for this element.
[S] 1.1.TCD Type(s) (Selection 1)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing Marking (excluding edgelines, centerlines, or lane lines)			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.No Controls			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 1.2.TCD Type(s) (Selection 2)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.No Controls			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 1.3.TCD Type(s) (Selection 3)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.No Controls			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 1.4.TCD Type(s) (Selection 4)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.No Controls			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[S] 2.1.None inoperative or missing? (Selection 1)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing Marking (excluding edgelines, centerlines, or lane lines)			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.None inoperative or missing			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 2.2.None inoperative or missing? (Selection 2)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.None inoperative or missing			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 2.3.None inoperative or missing? (Selection 3)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 00.None inoperative or missing			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
[S] 2.4.None inoperative or missing? (Selection 4)			
[C] 1.Signs			
[A] 02.Bicycle Crossing Sign			
[A] 03."Curve Ahead" Warning Sign			
[A] 04."Intersection Ahead" Warning Sign			
[A] 05.Other Warning Sign			
[A] 06.Pedestrian Crossing Sign			
[A] 07.Railroad Crossing Sign			
[A] 08."Reduce Speed Ahead" Warning Sign			
[A] 09.School Zone Sign			
[A] 10.Stop Sign			
[A] 11.Yield Sign			
[C] 2.Signals			
[A] 12.Flashing Railroad Crossing Signal (may include gates)			
[A] 13.Flashing School Zone Signal			
[A] 14.Flashing Traffic Control Signal			
[A] 15.Lane Use Control Signal			
[A] 16.Other Signal			
[A] 17.Ramp Meter Signal			
[A] 18.Traffic Control Signal			
[C] 3.Pavement Markings			
[A] 19.Bicycle Crossing Marking (excluding edgelines, centerlines, or lane lines)			
[A] 20.Other Pavement Marking (excluding edgelines, centerlines, or lane lines)			
[A] 21.Pedestrian Crossing			
[A] 22.Railroad Crossing			
[A] 23.School Zone			
[A] 00.None inoperative or missing			
[A] 01.Person (including flagger, law enforcement, crossing guard, etc.)			
[A] 98.Other			
[A] 99.Unknown			
<b>[E] V18.Motor Vehicle Maneuver/Action</b>	<b>66.67</b>		
[A] 01.Backing		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 10.Backing	
[A] 02.Changing Lanes		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 05.Changing Lanes or Merging	
[A] 03.Entering Traffic Lane			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 04.Leaving Traffic Lane			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[A] 05.Making U-Turn		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 09.Making U Turn	
[A] 06.Movements Essentially Straight Ahead		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 04.Going Straight Ahead	
[A] 07.Negotiating a Curve			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[A] 08.Overtaking/Passing		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 06.Passing	
[A] 09.Parked		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 02.Parked Out of Travel Lanes	
[A] 10.Slowing		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 11.Slowing or Stopping	
[A] 11.Stopped in Traffic		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 01.Stopped in Travel Lane [S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 03.Parked in Travel Lanes	
[A] 12.Turning Left		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 08.Making Left Turn	
[A] 13.Turning Right		[S] Vehicle => [E] V30.Vehicle Maneuver/Actions (Prior to Crash) => [A] 07.Making Right Turn	
[A] 98.Other			No Mapping Comment: The State crash database does include the attribute "Other", but the State does not include all the MMUCC attributes; therefore, mapping could not be completed, and the State did not receive credit.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
<b>[E] V19.Vehicle Damage</b>	<b>12.5</b>		
[S] 1.Initial Point of Contact			
[A] 00.Non-Collision		[S] Vehicle => [E] V31.Point of Impact => [A] 00.Pedestrians and Non-Contact Vehicle	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

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			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 the MMUCC attributes (except, 12,6 & Undercarriage).
[A] 01.(Clock Position) 1			
[A] 02.(Clock Position) 2			
[A] 03.(Clock Position) 3			
[A] 04.(Clock Position) 4			
[A] 05.(Clock Position) 5			
[A] 06.(Clock Position) 6		[S] Vehicle => [E] V31.Point of Impact => [A] 6.Rear (State Codes 14, 15, 16, 34, 35, 36, 29)	
[A] 07.(Clock Position) 7			
[A] 08.(Clock Position) 8			
[A] 09.(Clock Position) 9			
[A] 10.(Clock Position) 10			
[A] 11.(Clock Position) 11			
[A] 12.(Clock Position) 12		[S] Vehicle => [E] V31.Point of Impact => [A] 12.Front (State Codes 1,2,3,27)	
[A] 13.Top			
[A] 14.Undercarriage		[S] Vehicle => [E] V31.Point of Impact => [A] 14.Undercarriage (State Codes 22, 23, 24)	
[A] 15.Cargo Loss			
[A] 16.Vehicle Not at Scene			
[A] 99.Unknown			
[S] 2.Location of Damaged Area (s)			No Mapping Comment: In order to fully map to V19, States must capture the initial contact point and all damaged areas for each involved vehicle. MMUCC uses the same 12-point diagram to record up to 13 damaged areas. The State is limited to the number of selections. In order to map to MMUCC the 12-point diagram must include the entire unit (power unit + trailing unit).
[A] 00.No Damage			
[A] 01.(Clock Position) 1			
[A] 02.(Clock Position) 2			
[A] 03.(Clock Position) 3			
[A] 04.(Clock Position) 4			
[A] 05.(Clock Position) 5			
[A] 06.(Clock Position) 6			
[A] 07.(Clock Position) 7			
[A] 08.(Clock Position) 8			
[A] 09.(Clock Position) 9			
[A] 10.(Clock Position) 10			
[A] 11.(Clock Position) 11			
[A] 12.(Clock Position) 12			
[A] 13.Top			
[A] 14.Undercarriage			
[A] 15.All Areas			



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 16.Vehicle Not at Scene			
[S] 3.Resulting Extent of Damage			
[A] 00.No Damage			No Mapping Comment: The MMUCC attribute is related to the overall extent of damage for the whole vehicle, not the extent for each damaged area.
[A] 01.Minor Damage			No Mapping Comment: The MMUCC attribute is related to the overall extent of damage for the whole vehicle, not the extent for each damaged area.
[A] 02.Functional Damage			No Mapping Comment: The MMUCC attribute is related to the overall extent of damage for the whole vehicle, not the extent for each damaged area.
[A] 03.Disabling Damage		[S] Vehicle => [E] V39.Vehicle Drivable => [A] 02.No	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] 04.Vehicle Not at Scene			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] V20.Sequence of Events</b>	<b>60.78</b>		
[S] 1.1.(Selection 1)			
[C] 1.Non-Harmful Events			
[A] 01.Cross Centerline			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 02.Cross Median			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 03.End Departure (T-intersection, dead-end, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 03.Ran Off Road Straight Ahead	
[A] 04.Downhill Runaway		[S] Vehicle => [E] V32.Sequence of	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 07. Downhill Runaway	
[A] 05.Equipment Failure (blown tire, brake failure, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 11. Equipment Failure (Blown Tire, Brake Failure, etc.)	
Left [A] 06.Ran Off Roadway		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 02.Ran Off Road Left	
Right [A] 07.Ran Off Roadway		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 01.Ran Off Road Right	
[A] 08.Reentering Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Separation of Units		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 12. Separation of Units	
[A] 10.Other Non-Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Non-Collision Harmful Events			
[A] 11.Cargo/Equipment Loss or Shift		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 08. Cargo/Equipment Loss or Shift	
[A] 12.Fell/Jumped From Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Fire/Explosion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 09. Fire/Explosion	
[A] 14.Immersion, Full or Partial		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 10. Immersion	
[A] 15.Jackknife		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 04. Jackknife	
[A] 16.Other Non-Collision Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 17.Overturn/Rollover		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 05. Overturn/Rollover	
[A] 18.Thrown or Falling Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Collision With Person,			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Motor Vehicle, or Non-Fixed Object [A] 19.Animal (live)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 20.Motor Vehicle in Transport		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 21.Rear End, Slow or Stop [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 22.Rear End, Turn [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 23.Left Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 24.Left Turn, Different Roadways [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 25.Right Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 26.Right Turn, Different Roadways [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 27.Head On [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 28.Sideswipe, Same Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 29.Sideswipe, Opposite Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 30.Angle [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 31.Backing Up [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 65.Motor Vehicle in Transport (D)	
[A] 21.Other Non-Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 22.Other Non-Motorist			No Mapping Comment:

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			The State does not collect and store the MMUCC attribute in their crash database.
[A] 23.Parked Motor Vehicle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	
[A] 24.Pedalcycle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 25.Pedestrian		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 26.Railway Vehicle (train, engine)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 16.Railway Vehicle (e.g., Train, Engine)	
[A] 27.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 28.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 29.Work Zone/Maintenance Equipment			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 4.Collision With Fixed Object			
[A] 30.Bridge Overhead Structure		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 51.Overhead Part of Underpass	
[A] 31.Bridge Pier or Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 52.Pier on Shoulder of Underpass [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 53.Pier in Median of Underpass	
[A] 32.Bridge Rail		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 49.Bridge Rail End [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 50.Bridge Rail Face	
[A] 33.Cable Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 34.Concrete Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 35.Culvert		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 56.Catch Basin or Culvert on Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 57.Catch Basin or Culvert in Median	database.
[A] 36.Curb			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 37.Ditch		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 58.Ditch	
[A] 38.Embankment		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 59.Embankment	
[A] 39.Fence		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 61.Fence or Fence Post	
[A] 40.Guardrail End Terminal		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 41.Guardrail End-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 43.Guardrail End-In Median	
[A] 41.Guardrail Face		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 42.Guardrail Face-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 44.Guardrail Face-In Median	
[A] 42.Impact Attenuator/Crash Cushion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 63.Crash Cushion	
[A] 43.Mailbox		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 60.Mailbox	
[A] 44.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does include the attribute "Other Fixed Object"; however, this attribute cannot map to the MMUCC attribute "Other Fixed Object" per MMUCC rule 11. Mapping could not be competed and the State did not receive credit.
[A] 45.Other Post, Pole or Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 46.Other Traffic Barrier			database. No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 47.Traffic Sign Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 37.Official Highway Sign (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 38.Official Highway Sign (Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 39.Overhead Sign Support	
[A] 48.Traffic Signal Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 49.Tree (standing)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 33.Tree	
[A] 50.Utility Pole/Light Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 34.Utility Pole (With or Without Light) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 35.Luminaire Pole (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 36.Luminaire Pole (Breakaway)	
[A] 51.Unknown Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 1.2.(Selection 2)			
[C] 1.Non-Harmful Events			
[A] 01.Cross Centerline			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 02.Cross Median			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 03.End Departure (T-intersection, dead-end, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 03.Ran Off Road Straight Ahead	
[A] 04.Downhill Runaway		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 07. Downhill Runaway	
[A] 05.Equipment Failure (blown tire, brake failure, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 11. Equipment Failure (Blown Tire, Brake Failure, etc.)	
[A] 06.Ran Off Roadway Left		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 02.Ran Off Road Left	
[A] 07.Ran Off Roadway Right		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 01.Ran Off Road Right	
[A] 08.Reentering Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Separation of Units		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 12. Separation of Units	
[A] 10.Other Non-Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[C] 2.Non-Collision Harmful Events			
[A] 11.Cargo/Equipment Loss or Shift		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 08. Cargo/Equipment Loss or Shift	
[A] 12.Fell/Jumped From Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Fire/Explosion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 09. Fire/Explosion	
[A] 14.Immersion, Full or Partial		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 10. Immersion	
[A] 15.Jackknife		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 04. Jackknife	
[A] 16.Other Non-Collision Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 17.Overturn/Rollover		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 01.Non-Collision => [A] 05. Overturn/Rollover	database.
[A] 18.Thrown or Falling Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Collision With Person, Motor Vehicle, or Non-Fixed Object			
[A] 19.Animal (live)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 20.Motor Vehicle in Transport		<p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 21.Rear End, Slow or Stop</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 22.Rear End, Turn</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 23.Left Turn, Same Roadway</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 24.Left Turn, Different Roadways</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 25.Right Turn, Same Roadway</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 26.Right Turn, Different Roadways</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 27.Head On</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 28.Sideswipe, Same Direction</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 29.Sideswipe, Opposite Direction</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 30.Angle</p> <p>[S] Vehicle =&gt; [E] V32.Sequence of Events (Vehicle) =&gt; [S] 02.Selection 2 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 31.Backing Up</p>	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 03.Collision of Two or More Motor Vehicles => [A] 65.Motor Vehicle in Transport (D)	
[A] 21.Other Non-Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 22.Other Non-Motorist			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 23.Parked Motor Vehicle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	
[A] 24.Pedalcycle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 25.Pedestrian		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 26.Railway Vehicle (train, engine)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 02.Collision of Motor Vehicle With => [A] 16.Railway Vehicle (e.g., Train, Engine)	
[A] 27.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 28.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 29.Work Zone/Maintenance Equipment			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 4.Collision With Fixed Object			
[A] 30.Bridge Overhead Structure		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 51.Overhead Part of Underpass	
[A] 31.Bridge Pier or Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 52.Pier on Shoulder of Underpass [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 53.Pier in Median of Underpass	
[A] 32.Bridge Rail		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 49.Bridge Rail End [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		=> [C] 04.Collision with Fixed Object => [A] 50.Bridge Rail Face	
[A] 33.Cable Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 34.Concrete Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 35.Culvert		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 56.Catch Basin or Culvert on Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 57.Catch Basin or Culvert in Median	
[A] 36.Curb			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 37.Ditch		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 58.Ditch	
[A] 38.Embankment		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 59.Embankment	
[A] 39.Fence		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 61.Fence or Fence Post	
[A] 40.Guardrail End Terminal		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 41.Guardrail End-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 43.Guardrail End-In Median	
[A] 41.Guardrail Face		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 42.Guardrail Face-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 44.Guardrail Face-In Median	
[A] 42.Impact Attenuator/Crash Cushion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 63.Crash Cushion	
[A] 43.Mailbox		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 60.Mailbox	
[A] 44.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does include the attribute "Other Fixed Object"; however, this attribute

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			cannot map to the MMUCC attribute "Other Fixed Object" per MMUCC rule 11. Mapping could not be completed and the State did not receive credit.
[A] 45.Other Post, Pole or Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 46.Other Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 47.Traffic Sign Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 37.Official Highway Sign (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 38.Official Highway Sign (Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 39.Overhead Sign Support	
[A] 48.Traffic Signal Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 49.Tree (standing)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 33.Tree	
[A] 50.Utility Pole/Light Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 34.Utility Pole (With or Without Light) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 35.Luminaire Pole (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 02.Selection 2 => [C] 04.Collision with Fixed Object => [A] 36.Luminaire Pole (Breakaway)	
[A] 51.Unknown Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 1.3.(Selection 3)			
[C] 1.Non-Harmful Events			
[A] 01.Cross Centerline			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 02.Cross Median			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 03.End Departure (T-intersection, dead-end, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 03.Ran Off Road Straight Ahead	
[A] 04.Downhill Runaway		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 07. Downhill Runaway	
[A] 05.Equipment Failure (blown tire, brake failure, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 11. Equipment Failure (Blown Tire, Brake Failure, etc.)	
[A] 06.Ran Off Roadway Left		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 02.Ran Off Road Left	
[A] 07.Ran Off Roadway Right		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 01.Ran Off Road Right	
[A] 08.Reentering Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Separation of Units		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 12. Separation of Units	
[A] 10.Other Non-Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Non-Collision Harmful Events			
[A] 11.Cargo/Equipment Loss or Shift		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 08. Cargo/Equipment Loss or Shift	
[A] 12.Fell/Jumped From Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Fire/Explosion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 09. Fire/Explosion	
[A] 14.Immersion, Full or		[S] Vehicle => [E] V32.Sequence of	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Partial		Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 10. Immersion	
[A] 15.Jackknife		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 04. Jackknife	
[A] 16.Other Non-Collision Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 17.Overturn/Rollover		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 01.Non-Collision => [A] 05. Overturn/Rollover	
[A] 18.Thrown or Falling Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Collision With Person, Motor Vehicle, or Non-Fixed Object			
[A] 19.Animal (live)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 20.Motor Vehicle in Transport		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 21.Rear End, Slow or Stop [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 22.Rear End, Turn [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 23.Left Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 24.Left Turn, Different Roadways [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 25.Right Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 26.Right Turn, Different Roadways [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 27.Head On [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 28.Sideswipe, Same Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		=> [C] 03.Collision of Two or More Motor Vehicles => [A] 29.Sideswipe, Opposite Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 30.Angle [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 31.Backing Up [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 65.Motor Vehicle in Transport (D)	
[A] 21.Other Non-Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 22.Other Non-Motorist			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 23.Parked Motor Vehicle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	
[A] 24.Pedalcycle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 25.Pedestrian		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 26.Railway Vehicle (train, engine)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 02.Collision of Motor Vehicle With => [A] 16.Railway Vehicle (e.g., Train, Engine)	
[A] 27.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 28.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 29.Work Zone/Maintenance Equipment			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[C] 4.Collision With Fixed Object			
[A] 30.Bridge Overhead Structure		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 51.Overhead Part of Underpass	
[A] 31.Bridge Pier or Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		=> [A] 52.Pier on Shoulder of Underpass [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 53.Pier in Median of Underpass	
[A] 32.Bridge Rail		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 49.Bridge Rail End [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 50.Bridge Rail Face	
[A] 33.Cable Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 34.Concrete Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 35.Culvert		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 56.Catch Basin or Culvert on Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 57.Catch Basin or Culvert in Median	
[A] 36.Curb			No Mapping Comment: The State does not collect and store the MMUCC element and attributes in their crash database.
[A] 37.Ditch		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 58.Ditch	
[A] 38.Embankment		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 59.Embankment	
[A] 39.Fence		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 61.Fence or Fence Post	
[A] 40.Guardrail End Terminal		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 41.Guardrail End-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 43.Guardrail End-In Median	
[A] 41.Guardrail Face		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 42.Guardrail Face-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 44.Guardrail Face-In Median	
[A] 42.Impact Attenuator/Crash Cushion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		=> [C] 04.Collision with Fixed Object => [A] 63.Crash Cushion	
[A] 43.Mailbox		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 60.Mailbox	
[A] 44.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does include the attribute "Other Fixed Object"; however, this attribute cannot map to the MMUCC attribute "Other Fixed Object" per MMUCC rule 11. Mapping could not be completed and the State did not receive credit.
[A] 45.Other Post, Pole or Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 46.Other Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 47.Traffic Sign Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 37.Official Highway Sign (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 38.Official Highway Sign (Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 39.Overhead Sign Support	
[A] 48.Traffic Signal Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 49.Tree (standing)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 33.Tree	
[A] 50.Utility Pole/Light Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 34.Utility Pole (With or Without Light) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 35.Luminaire Pole (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 03.Selection 3 => [C] 04.Collision with Fixed Object => [A] 36.Luminaire Pole (Breakaway)	
[A] 51.Unknown Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute in their crash database.
[S] 1.4.(Selection 4)			
[C] 1.Non-Harmful Events			
[A] 01.Cross Centerline			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 02.Cross Median			No Mapping Comment: The State crash database includes the attribute "Crossed Centerline/Median"; therefore, mapping could not be completed for MMUCC attributes "Cross Centerline" or "Cross Median" and the State did not receive credit.
[A] 03.End Departure (T-intersection, dead-end, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 03.Ran Off Road Straight Ahead	
[A] 04.Downhill Runaway		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 07. Downhill Runaway	
[A] 05.Equipment Failure (blown tire, brake failure, etc.)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 11. Equipment Failure (Blown Tire, Brake Failure, etc.)	
[A] 06.Ran Off Roadway Left		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 02.Ran Off Road Left	
[A] 07.Ran Off Roadway Right		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 01.Ran Off Road Right	
[A] 08.Reentering Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Separation of Units		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 12. Separation of Units	
[A] 10.Other Non-Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Non-Collision Harmful Events			
[A] 11.Cargo/Equipment Loss or Shift		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 08.	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 12.Fell/Jumped From Motor Vehicle		Cargo/Equipment Loss or Shift	No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Fire/Explosion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 09. Fire/Explosion	
[A] 14.Immersion, Full or Partial		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 10. Immersion	
[A] 15.Jackknife		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 04. Jackknife	
[A] 16.Other Non-Collision Harmful Event			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 17.Overturn/Rollover		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 01.Non-Collision => [A] 05. Overturn/Rollover	
[A] 18.Thrown or Falling Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Collision With Person, Motor Vehicle, or Non-Fixed Object			
[A] 19.Animal (live)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 20.Motor Vehicle in Transport		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 21.Rear End, Slow or Stop [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 22.Rear End, Turn [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 23.Left Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 24.Left Turn, Different Roadways [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 25.Right Turn, Same Roadway [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 26.Right Turn, Different Roadways	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 27.Head On [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 28.Sideswipe, Same Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 29.Sideswipe, Opposite Direction [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 30.Angle [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 31.Backing Up [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 65.Motor Vehicle in Transport (D)	
[A] 21.Other Non-Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 22.Other Non-Motorist			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 23.Parked Motor Vehicle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	
[A] 24.Pedalcycle		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 25.Pedestrian		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 26.Railway Vehicle (train, engine)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 02.Collision of Motor Vehicle With => [A] 16.Railway Vehicle (e.g., Train, Engine)	
[A] 27.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 28.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 29.Work Zone/Maintenance Equipment			No Mapping Comment: The State does not collect and store the MMUCC

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute in their crash database.
[C] 4.Collision With Fixed Object			
[A] 30.Bridge Overhead Structure		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 51.Overhead Part of Underpass	
[A] 31.Bridge Pier or Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 52.Pier on Shoulder of Underpass [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 53.Pier in Median of Underpass	
[A] 32.Bridge Rail		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 49.Bridge Rail End [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 50.Bridge Rail Face	
[A] 33.Cable Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 34.Concrete Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 35.Culvert		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 56.Catch Basin or Culvert on Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 57.Catch Basin or Culvert in Median	
[A] 36.Curb			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 37.Ditch		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 58.Ditch	
[A] 38.Embankment		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 59.Embankment	
[A] 39.Fence		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 61.Fence or Fence Post	
[A] 40.Guardrail End Terminal		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 41.Guardrail End-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 41.Guardrail Face		=> [A] 43.Guardrail End-In Median [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 42.Guardrail Face-On Shoulder [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 44.Guardrail Face-In Median	
[A] 42.Impact Attenuator/Crash Cushion		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 63.Crash Cushion	
[A] 43.Mailbox		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 60.Mailbox	
[A] 44.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does include the attribute "Other Fixed Object"; however, this attribute cannot map to the MMUCC attribute "Other Fixed Object" per MMUCC rule 11. Mapping could not be completed and the State did not receive credit.
[A] 45.Other Post, Pole or Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 46.Other Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 47.Traffic Sign Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 37.Official Highway Sign (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 38.Official Highway Sign (Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 39.Overhead Sign Support	
[A] 48.Traffic Signal Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 49.Tree (standing)		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 33.Tree	
[A] 50.Utility Pole/Light Support		[S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 34.Utility Pole (With or Without Light) [S] Vehicle => [E] V32.Sequence of	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 35.Luminaire Pole (Non-Breakaway) [S] Vehicle => [E] V32.Sequence of Events (Vehicle) => [S] 04.Selection 4 => [C] 04.Collision with Fixed Object => [A] 36.Luminaire Pole (Breakaway)	
[A] 51.Unknown Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] V21.Most Harmful Event for this Motor Vehicle</b>	<b>60.98</b>		
[C] 1.Non-Collision Harmful Events			
[A] 01.Cargo/Equipment Loss or Shift		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 08. Cargo/Equipment Loss or Shift	
[A] 02.Fell/Jumped From Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 03.Fire/Explosion		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 09. Fire/Explosion	
[A] 04.Immersion, Full or Partial		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 10. Immersion	
[A] 05.Jackknife		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 04. Jackknife	
[A] 06.Other Non-Collision Harmful Event			No Mapping Comment: The State crash database does include the attribute "Other Non-Collision"; however, this attribute cannot map to the MMUCC attribute "Other Non-Collision Harmful Event" per MMUCC rule 11. Mapping could not be completed, and the State did not receive credit.
[A] 07.Overturn/Rollover		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 01.Non-Collision => [A] 05. Overturn/Rollover	
[A] 08.Thrown or Falling Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Collision With Person, Motor Vehicle, or Non-Fixed Object			
[A] 09.Animal (live)		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 17.Animal	
[A] 10.Motor Vehicle in Transport		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		<p>Vehicles =&gt; [A] 21.Rear End, Slow or Stop  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 22.Rear End, Turn  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 23.Left Turn, Same Roadway  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 24.Left Turn, Different Roadways  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 25.Right Turn, Same Roadway  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 26.Right Turn, Different Roadways  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 27.Head On  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 28.Sideswipe, Same Direction  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 29.Sideswipe, Opposite Direction  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 30.Angle  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 31.Backing Up  [S] Vehicle =&gt; [E] V33.Most Harmful Event (Vehicle) =&gt; [S] 01.Selection 1 =&gt; [C] 03.Collision of Two or More Motor Vehicles =&gt; [A] 65.Motor Vehicle in Transport (D)</p>	
[A] 11.Other Non-Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 12.Other Non-Motorist			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Parked Motor Vehicle		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 03.Collision of Two or More Motor Vehicles => [A] 20.Parked Motor Vehicle	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 14.Pedalcycle		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 15.Pedalcyclist	
[A] 15.Pedestrian		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 14.Pedestrian	
[A] 16.Railway Vehicle (train, engine)		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 02.Collision of Motor Vehicle With => [A] 16.Railway Vehicle (e.g., Train, Engine)	
[A] 17.Strikes Object at Rest from MV in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 18.Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 19.Work Zone / Maintenance Equipment			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Collision With Fixed Object			
[A] 20.Bridge Overhead Structure		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 51.Overhead Part of Underpass	
[A] 21.Bridge Pier or Support		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 52.Pier on Shoulder of Underpass [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 53.Pier in Median of Underpass	
[A] 22.Bridge Rail		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 49.Bridge Rail End [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 50.Bridge Rail Face	
[A] 23.Cable Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 24.Concrete Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 25.Culvert		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 56.Catch Basin or Culvert on Shoulder [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object =>	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[A] 57.Catch Basin or Culvert in Median	
[A] 26.Curb			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 27.Ditch		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 58.Ditch	
[A] 28.Embankment		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 59.Embankment	
[A] 29.Fence		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 61.Fence or Fence Post	
[A] 30.Guardrail End Terminal		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 41.Guardrail End-On Shoulder [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 43.Guardrail End-In Median	
[A] 31.Guardrail Face		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 42.Guardrail Face-On Shoulder [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 44.Guardrail Face-In Median	
[A] 32.Impact Attenuator/Crash Cushion		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 63.Crash Cushion	
[A] 33.Mailbox		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 60.Mailbox	
[A] 34.Other Fixed Object (wall, building, tunnel, etc.)			No Mapping Comment: The State crash database does include the attribute "Other Fixed Object"; however, this attribute cannot map to the MMUCC attribute "Other Fixed Object" per MMUCC rule 11. Mapping could not be completed, and the State did not receive credit.
[A] 35.Other Post, Pole or Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 36.Other Traffic Barrier			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 37.Traffic Sign Support		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 37.Official Highway Sign (Non-	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Breakaway) [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 38.Official Highway Sign (Breakaway) [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 39.Overhead Sign Support	
[A] 38.Traffic Signal Support			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 39.Tree (standing)		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 33.Tree	
[A] 40.Utility Pole/Light Support		[S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 34.Utility Pole (With or Without Light) [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 35.Luminaire Pole (Non-Breakaway) [S] Vehicle => [E] V33.Most Harmful Event (Vehicle) => [S] 01.Selection 1 => [C] 04.Collision with Fixed Object => [A] 36.Luminaire Pole (Breakaway)	
[A] 41.Unknown Collision With Fixed Object			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] V22.Hit and Run</b>	<b>100</b>		
[A] 01.No, Did Not Leave Scene		[S] Vehicle => [E] V49.Hit & Run => [A] 02.No (Check Box Not Checked)	
[A] 02.Yes, Driver or Car and Driver Left Scene		[S] Vehicle => [E] V49.Hit & Run => [A] 01.Yes (Check Box Checked)	
<b>[E] V23.Towed Due to Disabling Damage</b>	<b>0</b>		No Mapping Comment: The State crash database contains information pertaining to if a vehicle was towed and what company towed the vehicle, but does not contain this specific MMUCC element/attributes related to being towed due to disabling damage. Therefore, mapping could not be completed to this MMUCC element, and the State did not receive credit.
[A] 00.Not towed			
[A] 01.Towed, But Not Due to Disabling Damage			
[A] 02.Towed Due to Disabling Damage			
<b>[E] V24.Contributing Circumstances, Motor Vehicle</b>	<b>31.25</b>		
[A] 00.None		[S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 01.	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Selection 1 => [A] 00.None Detected [S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 02. Selection 2 => [A] 00.None Detected	
[A] 01.Brakes		[S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 01. Selection 1 => [A] 01.Brakes [S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 02. Selection 2 => [A] 01.Brakes	
[A] 02.Exhaust System			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 03.Body, Doors			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 04.Steering		[S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 01. Selection 1 => [A] 04.Steering [S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 02. Selection 2 => [A] 04.Steering	
[A] 05.Power Train			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 06.Suspension			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 07.Tires		[S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 01. Selection 1 => [A] 05.Tires [S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 02. Selection 2 => [A] 05.Tires	
[A] 08.Wheels			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Lights (head, signal, tail)			No Mapping Comment: The State crash database attributes "Headlights" and "Rear Lights" cannot map to the MMUCC attribute "Lights (head, Signal, Tail)", because they do not include tail lights.
[A] 10. Windows/Windshield			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 11.Mirrors			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 12.Wipers			No Mapping Comment: The State does not collect

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			and store the MMUCC attribute in their crash database.
[A] 13.Truck Coupling/Trailer Hitch/Safety Chains			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State crash database does collect and store the attribute "Other Defects"; however, per Rule 11 mapping could not be completed, and the State did not receive credit.
[A] 99.Unknown		[S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 01. Selection 1 => [A] 07.Unknown [S] Vehicle => [E] V22.Vehicle Defects (Possible Contributing) => [S] 02. Selection 2 => [A] 07.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] Person			
<b>[E] P1.Name of Person Involved</b>	<b>100</b>		
[A] Name		[S] Person => [E] P2.Person Name => [A] 01.Person Name [S] Person => [E] P2.Person Name => [A] 02.Hit and Run if Hit and Run and No Driver Present [S] Person => [E] P2.Person Name => [A] 03.Owner's Name (if Parked Vehicle and No Driver)	
<b>[E] P2.Date of Birth</b>	<b>100</b>		
[S] 1.Date of Birth			
[A] 99.Unknown		[S] Person => [E] P5.Date of Birth/Approximate Age => [A] 04. Unknown	
[A] Year (YYYY)		[S] Person => [E] P5.Date of Birth/Approximate Age => [A] 01.Year	
[A] Month (MM)		[S] Person => [E] P5.Date of Birth/Approximate Age => [A] 02. Month	
[A] Day (DD)		[S] Person => [E] P5.Date of Birth/Approximate Age => [A] 03.Day	
[S] 2.Age			
[A] AAA.Age		[S] Person => [E] P5.Date of Birth/Approximate Age => [A] 06.Age (D)	
<b>[E] P3.Sex</b>	<b>100</b>		
[A] 01.Female		[S] Person => [E] P6.Gender => [A] 02. Female	
[A] 02.Male		[S] Person => [E] P6.Gender => [A] 01. Male	
[A] 99.Unknown		[S] Person => [E] P6.Gender => [A] 03. Unknown	
<b>[E] P4.Person Type</b>	<b>16.67</b>		
[S] 1.Person Type			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[C] 1.Motorist			
[A] 01.Driver		[S] Person => [E] P1.Person Type => [A] 01.Driver	
[A] 02.Passenger		[S] Person => [E] P1.Person Type => [A] 02.Passenger	
[A] 03.Occupant of MV Not in Transport			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Non-Motorist			
[A] 04.Bicyclist**			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Other Cyclist**			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 06.Pedestrian**		[S] Person => [E] P1.Person Type => [A] 03.Pedestrian	
[A] 07.Other Pedestrian (wheelchair, person in a building, skater, personal convey.)**			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 08.Occupant of a Non-Motor Vehicle Transportation Device**			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 09.Unknown Type of Non-Motorist**			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State does collect and store the MMUCC attribute "Unknown" in their crash database; however, per rule mapping could not be completed, and the State did not receive credit.
[S] 2.Incident Responder?			No Mapping Comment: The State does not collect and store the MMUCC subfield and associated attributes in their crash database.
[A] 01.No			
[A] 98.Other			
[A] 99.Unknown			
[C] Yes, Type of Incident Responder			
[A] 02.EMS			
[A] 03.Fire			
[A] 04.Police			
[A] 05.Tow Operator			
[A] 06.Transportation (i.e. maintenance workers, safety service patrol operators, etc.			
<b>[E] P5.Injury Status</b>	<b>100</b>		
[A] 01.(K) Fatal Injury**		[S] Person => [E] P8.Injury Status =>	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 02.(A) Suspected Serious Injury		[A] 01.Killed [S] Person => [E] P8.Injury Status => [A] 02.Suspected Serious Injury (A)	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.(B) Suspected Minor Injury		[S] Person => [E] P8.Injury Status => [A] 03.Suspected Minor Injury (B)	
[A] 04.(C) Possible Injury		[S] Person => [E] P8.Injury Status => [A] 04.Possible Injury (C)	
[A] 05.(O) No Apparent Injury		[S] Person => [E] P8.Injury Status => [A] 05.No Injury	
<b>[E] P6.Occupant's Motor Vehicle Unit Number</b>	<b>100</b>		
[A] Number to indicate in which motor vehicle the occupant was located		[S] Person => [E] P9.Occupant's/Non-Motorist Vehicle Unit Number Unique to Crash => [A] 01.Vehicle Occupant Unit Number	
<b>[E] P7.Seating Position</b>	<b>58.82</b>		
[S] 1.1.(Selection 1)			
[C] 1.Row			
[A] 01.Front		[S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 01a. Front-Left (Driver/Motorcycle Driver) [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 02a. Front-Middle [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 03a. Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	
[A] 02.Second		[S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 04a. Second Seat-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 05a. Second Seat-Middle [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 06a. Second Seat-Right	
[A] 03.Third		[S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 07a. Third Row-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 08a. Third Row-Middle [S] Person => [E] P10.Seating Position => [S] 01.Row (Selection 1) => [A] 09a. Third Row-Right	
[A] 04.Fourth			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Other Row (bus, 15 passenger van, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 06.Unknown Row			No Mapping Comment: The State does not collect and store the MMUCC

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute in their crash database.
[C] 2.Seat			
[A] 07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles)		[S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 01a. Front-Left (Driver/Motorcycle Driver) [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 04a. Second Seat-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 07a. Third Row-Left (Motorcycle Passenger)	
[A] 08.Middle		[S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 02a. Front-Middle [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 05a. Second Seat-Middle [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 08a. Third Row-Middle	
[A] 09.Right		[S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 03a. Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck) [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 06a. Second Seat-Right [S] Person => [E] P10.Seating Position => [S] 03.Seat (Selection 1) => [A] 09a. Third Row-Right	
[A] 10.Unknown Seat			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Other Location			
[A] 11.Other Enclosed Cargo Area			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 12.Riding on Motor Vehicle Exterior (non-trailing unit)		[S] Person => [E] P10.Seating Position => [S] 05.Other Location and Other/Unknown (Selection 1) => [A] 14. Riding on Vehicle Exterior	
[A] 13.Sleeper Section of Cab (truck)		[S] Person => [E] P10.Seating Position => [S] 05.Other Location and Other/Unknown (Selection 1) => [A] 10. Sleeper Section of Cab (Truck)	
[A] 14.Trailing Unit		[S] Person => [E] P10.Seating Position => [S] 05.Other Location and Other/Unknown (Selection 1) => [A] 13. Trailing Unit	
[A] 15.Unenclosed Cargo Area		[S] Person => [E] P10.Seating Position => [S] 05.Other Location and Other/Unknown (Selection 1) => [A] 12. Passenger in Unenclosed Area (Pickup)	
[A] 98.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State crash database attribute "Unknown" cannot map to the

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			MMUCC attribute "Unknown" because the State crash database does not contain all the MMUCC attributes.
[S] 1.2.(Selection 2)			
[C] 1.Row			
[A] 01.Front		[S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 01a. Front-Left (Driver/Motorcycle Driver) [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 02a. Front-Middle [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 03a. Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck)	
[A] 02.Second		[S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 04a. Second Seat-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 05a. Second Seat-Middle [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 06a. Second Seat-Right	
[A] 03.Third		[S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 07a. Third Row-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 08a. Third Row-Middle [S] Person => [E] P10.Seating Position => [S] 02.Row (Selection 2) => [A] 09a. Third Row-Right	
[A] 04.Fourth			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Other Row (bus, 15 passenger van, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 06.Unknown Row			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Seat			
[A] 07.Left (usually the motor vehicle or motorcycle driver except for postal vehicles)		[S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 01a. Front-Left (Driver/Motorcycle Driver) [S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 04a. Second Seat-Left (Motorcycle Passenger) [S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 07a. Third Row-Left (Motorcycle Passenger)	
[A] 08.Middle		[S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 02a. Front-Middle [S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 05a. Second Seat-Middle	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 08a. Third Row-Middle	
[A] 09.Right		[S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 03a. Front-Right (Also Valid for Seating Position for Driver of U.S. Mail Truck) [S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 06a. Second Seat-Right [S] Person => [E] P10.Seating Position => [S] 04.Seat (Selection 2) => [A] 09a. Third Row-Right	
[A] 10.Unknown Seat			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 3.Other Location			
[A] 11.Other Enclosed Cargo Area			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 12.Riding on Motor Vehicle Exterior (non-trailing unit)		[S] Person => [E] P10.Seating Position => [S] 06.Other Location and Other/Unknown (Selection 2) => [A] 14. Riding on Vehicle Exterior	
[A] 13.Sleeper Section of Cab (truck)		[S] Person => [E] P10.Seating Position => [S] 06.Other Location and Other/Unknown (Selection 2) => [A] 10. Sleeper Section of Cab (Truck)	
[A] 14.Trailing Unit		[S] Person => [E] P10.Seating Position => [S] 06.Other Location and Other/Unknown (Selection 2) => [A] 13. Trailing Unit	
[A] 15.Unenclosed Cargo Area		[S] Person => [E] P10.Seating Position => [S] 06.Other Location and Other/Unknown (Selection 2) => [A] 12. Passenger in Unenclosed Area (Pickup)	
[A] 98.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State crash database attribute "Unknown" cannot map to the MMUCC attribute "Unknown" because the State crash database does not contain all the MMUCC attributes.
<b>[E] P8.Restraint Systems/Motorcycle Helmet Use</b>	<b>20</b>		
[S] 1.Restraint Systems			
[C] 1.Restraint Systems			
[A] 01.Booster Seat			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 02.Child Restraint System – Forward Facing			No Mapping Comment: The State crash database attribute "Child Restraint" does not match the more specific

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			MMUCC attributes that identify child restraint systems; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Child Restraint System – Rear Facing			No Mapping Comment: The State crash database attribute "Child Restraint" does not match the more specific MMUCC attributes that identify child restraint systems; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Child Restraint – Type Unknown			No Mapping Comment: The State crash database attribute "Child Restraint" does not match the more specific MMUCC attributes that identify child restraint systems; therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Lap Belt Only Used		[S] Person => [E] P11.Occupant Protection System Use => [A] 01.Lap Belt Only	
[A] 06.None Used – Motor Vehicle Occupant		[S] Person => [E] P11.Occupant Protection System Use => [A] 00.None Used	
[A] 07.Restraint Used – Type Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 08.Shoulder and Lap Belt Used		[S] Person => [E] P11.Occupant Protection System Use => [A] 02.Shoulder and Lap Belt	
[A] 09.Shoulder Belt Only Used		[S] Person => [E] P11.Occupant Protection System Use => [A] 03.Shoulder Belt Only	
[A] 10.Stretcher			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 11.Wheelchair			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[C] 2.Motorcycle Helmet Use			No Mapping Comment: MMUCC attributes specify DOT compliance. Also, the State crash database attribute refers to both bicyclists and motorcyclists. Mapping could not be completed, and the State did not receive credit.
[A] 12.DOT-Compliant Motorcycle Helmet			
[A] 13.Not DOT-Compliant			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Motorcycle Helmet			
[A] 14.Unknown If DOT-Compliant Motorcycle Helmet			
[A] 15.No Helmet			
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 2.Any Indication of Improper Use?			No Mapping Comment: The State does not collect and store the MMUCC subfield and associated attributes in their crash database.
[A] 01.No			
[A] 02.Yes			
<b>[E] P9.Air Bag Deployed</b>	<b>18.18</b>		
[A] 00.Not Deployed		[S] Person => [E] P12.Air Bag Deployed => [S] 01.Deployment => [A] 01.Not Deployed	
[A] 97.Not Applicable		[S] Person => [E] P12.Air Bag Deployed => [S] 01.Deployment => [A] 00.No Air Bags	
[S] 1.1.(Selection 1)			
[A] 01.Curtain			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 02.Front		[S] Person => [E] P12.Air Bag Deployed => [S] 01.Deployment => [A] 02. Deployed - Front	
[A] 03.Side		[S] Person => [E] P12.Air Bag Deployed => [S] 01.Deployment => [A] 03. Deployed - Side	
[A] 04.Other (knee, air belt, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Deployment Unknown			No Mapping Comment: The State crash database attribute "Deployment Unknown" cannot map because all MMUCC attributes are not satisfied.
[S] 1.2.(Selection 2)			No Mapping Comment: MMUCC allows for up to 4 selections for this element; however, the State crash database only allows for 1 selection, so mapping could not be completed for subfields 1.2 (selection 2), 1.3 (selection 3), and 1.4

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			(selection 4). The State did not receive credit for these subfields.
[A] 01.Curtain			
[A] 02.Front			
[A] 03.Side			
[A] 04.Other (knee, air belt, etc.)			
[A] 05.Deployment Unknown			
[S] 1.3.(Selection 3)			No Mapping Comment: MMUCC allows for up to 4 selections for this element; however, the State crash database only allows for 1 selection, so mapping could not be completed for subfields 1.2 (selection 2), 1.3 (selection 3), and 1.4 (selection 4). The State did not receive credit for these subfields.
[A] 01.Curtain			
[A] 02.Front			
[A] 03.Side			
[A] 04.Other (knee, air belt, etc.)			
[A] 05.Deployment Unknown			
[S] 1.4.(Selection 4)			No Mapping Comment: MMUCC allows for up to 4 selections for this element; however, the State crash database only allows for 1 selection, so mapping could not be completed for subfields 1.2 (selection 2), 1.3 (selection 3), and 1.4 (selection 4). The State did not receive credit for these subfields.
[A] 01.Curtain			
[A] 02.Front			
[A] 03.Side			
[A] 04.Other (knee, air belt, etc.)			
[A] 05.Deployment Unknown			
<b>[E] P10.Ejection</b>	<b>100</b>		
[A] 00.Not Ejected		[S] Person => [E] P13.Ejection => [A] 01.Not Ejected	
[A] 01.Ejected, Partially		[S] Person => [E] P13.Ejection => [A] 03.Partially Ejected	
[A] 02.Ejected, Totally		[S] Person => [E] P13.Ejection => [A] 02.Totally Ejected	
[A] 97.Not Applicable		[S] Person => [E] P13.Ejection => [A] 05.Not Applicable (D)	
[A] 99.Unknown		[S] Person => [E] P13.Ejection => [A] 04.Unknown	
<b>[E] P11.Driver License Jurisdiction</b>	<b>80</b>		
[S] 1.Type			
[A] 00.Not Licensed		[S] Person => [E] P15.Driver License State/Province => [A] 01.Not Licensed	
[A] 01.Canada		[S] Person => [E] P15.Driver License	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		State/Province => [A] 05.Canadian Province	
[A] 02.Indian Nation		[S] Person => [E] P15.Driver License State/Province => [A] 03.Indian Nation	
[A] 03.International License (other than Mexico or Canada)		[S] Person => [E] P15.Driver License State/Province => [A] 07.International License (Other Than Mexico, Canada)	
[A] 04.Mexico		[S] Person => [E] P15.Driver License State/Province => [A] 06.Mexican State	
[A] 05.State		[S] Person => [E] P15.Driver License State/Province => [A] 02.State Code	
[A] 06.U.S. Government		[S] Person => [E] P15.Driver License State/Province => [A] 04.U.S. Government	
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State crash database attribute "Unknown" cannot map because all MMUCC attributes are not mapped.
[S] 2.Name of Jurisdiction (ANSI Code)			
[A] Name of Jurisdiction (ANSI Code)		[S] Person => [E] P15.Driver License State/Province => [A] 09.Name of Jurisdiction	
<b>[E] P12.Driver License Number, Class, CDL and Endorsements</b>	<b>77.78</b>		
[S] 1.License Number			
[A] License Number		[S] Person => [E] P16.Driver License Number => [A] 01.Driver License Number	
[S] 2.Class			
[A] 00.None			
[A] 01.Class A		[S] Person => [E] P35.Driver License Class (L) => [A] 01.Class A	
[A] 02.Class B		[S] Person => [E] P35.Driver License Class (L) => [A] 02.Class B	
[A] 03.Class C		[S] Person => [E] P35.Driver License Class (L) => [A] 03.Class C	
[A] 04.Class M		[S] Person => [E] P35.Driver License Class (L) => [A] 04.Class M	
[A] 05.Regular Driver License Class		[S] Person => [E] P35.Driver License Class (L) => [A] 05.Regular C	
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 3.Commercial Driver License (CDL)			
[A] 01.No		[S] Person => [E] P17.Commercial Driver License (CDL) Flag => [A] 02.No, Check Box Not Checked	
[A] 02.Yes		[S] Person => [E] P17.Commercial Driver License (CDL) Flag => [A] 01.Yes, Check Box Checked	
[S] 4.Endorsements			
[A] 00.None/Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 01.H - Hazardous Materials		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 04.H-Hazardous Materials	
[A] 02.N - Tank Vehicle		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 03.N-Tank Vehicle	
[A] 03.P - Passenger		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 02.P-Passenger Vehicle	
[A] 04.S - School		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 07.S-School	
[A] 05.T - Double/Triple Trailers		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 01.T-Double/Triple Trailer	
[A] 06.X - Combination of Tank Vehicle and Hazardous Materials		[S] Person => [E] P37.Commercial Motor Vehicle Endorsements (L) => [A] 05.X-Combined Tank/Hazmat	
[A] 07.Other non-commercial license endorsements (e.g., motorcycle, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] P13.Speeding-Related</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and associated attributes in their crash database.
[A] 01.No Limit			
[A] 02.Exceeded Speed			
[A] 03.Racing			
[A] 04.Too Fast for Conditions			
[A] 99.Unknown			
<b>[E] P14.Driver Actions at Time of Crash</b>	<b>61.43</b>		
[A] 98.Other Contributing Action			No Mapping Comment: The State crash database collects the attribute "Other"; however, mapping could not be completed to MMUCC attribute "Other Contributing Action" per rule 11.
[A] 99.Unknown		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 34.Unknown [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 34.Unknown [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 34.Unknown	
[S] 1.1.(Selection 1)			
[A] 00.No Contributing Action		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 00.No Contributing Circumstances Indicated	
[A] 01.Disregarded Other Road Markings		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 05.Disregarded Road Markings	
[A] 02.Disregarded Other Traffic Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 03.Disregarded Other	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 03.Failed to Keep in Proper Lane		<p>Traffic Signs</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 12.Improper Lane Change</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 13.Use of Improper Lane</p>	
[A] 04.Failed to Yield Right-of-Way		<p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 01.Disregarded Yield Sign</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 19.Failed to Yield Right of Way</p>	
[A] 05.Followed Too Closely		<p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 25.Followed Too Closely</p>	
[A] 06.Improper Backing		<p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 21.Improper Backing</p>	
[A] 07.Improper Passing		<p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 15.Passed Stopped School Bus</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 16.Passed on Hill</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 17.Passed on Curve</p> <p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 18.Other Improper Passing</p>	
[A] 08.Improper Turn		<p>[S] Person =&gt; [E] P18.Contributing Circumstances - Driver =&gt; [S] 01. Selection 1 =&gt; [A] 09.Improper Turn</p>	
[A] 09.Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner			<p>No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.</p>
[A] 10.Operated Motor Vehicle in Reckless or Aggressive Manner			<p>No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC</p>

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 11.Over-Correcting/Over-Steering		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 14. Overcorrected/Oversteered	
[A] 12.Ran Off Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Ran Red Light		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 04.Disregarded Traffic Signals	
[A] 14.Ran Stop Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 02.Disregarded Stop Sign	
[A] 15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	
[A] 16.Wrong Side or Wrong Way		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 01. Selection 1 => [A] 11.Crossed Centerline/Going Wrong Way	
[S] 1.2.(Selection 2)			
[A] 00.No Contributing Action		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 00.No Contributing Circumstances Indicated	
[A] 01.Disregarded Other Road Markings		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 05.Disregarded Road Markings	
[A] 02.Disregarded Other Traffic Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 03.Disregarded Other Traffic Signs	
[A] 03.Failed to Keep in Proper Lane		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 12.Improper Lane Change [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 13.Use of Improper Lane	
[A] 04.Failed to Yield Right-of-Way		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 01.Disregarded Yield Sign [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 19.Failed to Yield Right of Way	
[A] 05.Followed Too Closely		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02.	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Selection 2 => [A] 25.Followed Too Closely	
[A] 06.Improper Backing		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 21.Improper Backing	
[A] 07.Improper Passing		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 15.Passed Stopped School Bus [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 16.Passed on Hill [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 17.Passed on Curve [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 18.Other Improper Passing	
[A] 08.Improper Turn		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 09.Improper Turn	
[A] 09.Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner			No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 10.Operated Motor Vehicle in Reckless or Aggressive Manner			No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 11.Over-Correcting/Over-Steering		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 14. Overcorrected/Oversteered	
[A] 12.Ran Off Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			database.
[A] 13.Ran Red Light		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 04.Disregarded Traffic Signals	
[A] 14.Ran Stop Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 02.Disregarded Stop Sign	
[A] 15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	
[A] 16.Wrong Side or Wrong Way		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 02. Selection 2 => [A] 11.Crossed Centerline/Going Wrong Way	
[S] 1.3.(Selection 3)			
[A] 00.No Contributing Action		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 00.No Contributing Circumstances Indicated	
[A] 01.Disregarded Other Road Markings		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 05.Disregarded Road Markings	
[A] 02.Disregarded Other Traffic Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 03.Disregarded Other Traffic Signs	
[A] 03.Failed to Keep in Proper Lane		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 12.Improper Lane Change [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 13.Use of Improper Lane	
[A] 04.Failed to Yield Right-of-Way		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 01.Disregarded Yield Sign [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 19.Failed to Yield Right of Way	
[A] 05.Followed Too Closely		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 25.Followed Too Closely	
[A] 06.Improper Backing		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 21.Improper Backing	
[A] 07.Improper Passing		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 15.Passed Stopped School Bus [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 16.Passed on Hill [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 17.Passed on Curve [S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 18.Other Improper Passing	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 08.Improper Turn		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 09.Improper Turn	
[A] 09.Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner			No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 10.Operated Motor Vehicle in Reckless or Aggressive Manner			No Mapping Comment: The State crash database attribute "Operated Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner" is a combination of two MMUCC attributes "Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner" and "Operated Motor Vehicle in Reckless or Aggressive Manner". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 11.Over-Correcting/Over-Steering		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 14. Overcorrected/Oversteered	
[A] 12.Ran Off Roadway			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Ran Red Light		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 04.Disregarded Traffic Signals	
[A] 14.Ran Stop Sign		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 02.Disregarded Stop Sign	
[A] 15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 27.Swerved or Avoided Due to Wind, Slippery Surface, Vehicle, Object, Non-Motorist	
[A] 16.Wrong Side or Wrong Way		[S] Person => [E] P18.Contributing Circumstances - Driver => [S] 03. Selection 3 => [A] 11.Crossed Centerline/Going Wrong Way	
[S] 1.4.(Selection 4)			No Mapping Comment:

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			MMUCC allows for up to 4 selections for this element; however, the State crash database only allows for 3 selections, so mapping could not be completed for subfield 1.4 (selection 4). The State did not receive credit for this subfield.
[A] 00.No Contributing Action			
[A] 01.Disregarded Other Road Markings			
[A] 02.Disregarded Other Traffic Sign			
[A] 03.Failed to Keep in Proper Lane			
[A] 04.Failed to Yield Right-of-Way			
[A] 05.Followed Too Closely			
[A] 06.Improper Backing			
[A] 07.Improper Passing			
[A] 08.Improper Turn			
[A] 09.Operated Motor Vehicle in Inattentive, Careless, Negligent, or Erratic Manner			
[A] 10.Operated Motor Vehicle in Reckless or Aggressive Manner			
[A] 11.Over-Correcting/Over-Steering			
[A] 12.Ran Off Roadway			
[A] 13.Ran Red Light			
[A] 14.Ran Stop Sign			
[A] 15.Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Mo			
[A] 16.Wrong Side or Wrong Way			
<b>[E] P15.Violation Codes</b>	<b>50</b>		
[A] 00.No Violation			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 1.1.(Selection 1)			
[A] State Violation Code 1		[S] Person => [E] P19.Traffic Violations => [S] 02.Charge(s) => [A] 01.Violation Charge	
[S] 1.2.(Selection 2)			
[A] State Violation Code 2		[S] Person => [E] P19.Traffic Violations => [S] 02.Charge(s) => [A] 02.Violation Charge 2	
<b>[E] P16.Driver License Restrictions</b>	<b>63.79</b>		
[S] 2.Alcohol Interlock Present?			No Mapping Comment: The State does not collect and store the MMUCC subfield and associated attributes in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			database.
[A] 01.No			
[A] 02.Yes			
[A] 99.Unknown			
[S] 1.1.Driver License Restrictions (Selection 1)			
[A] 00.None		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 00.None	
[A] 01.Alcohol Interlock Device		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 20.BAC .04/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 22.BAC .00/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 23.Ignition Interlock Only	
[A] 02.CDL Intrastate Only		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 04.NC Intrastate Only-CDL	
[A] 03.Corrective Lenses		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 01.Corrective Lenses	
[A] 04.Farm Waiver			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Except Class A Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 14.Passenger Class B & C Only	
[A] 06.Except Class A and Class B Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 15.Passenger Class C Only	
[A] 07.Except Tractor-Trailer		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 08.No Tractor Trailer	
[A] 08.Intermediate License Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 17.Graduated License Level 2 Restriction	
[A] 09.Learner's Permit Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 16.Graduated License Level 1 Restriction	
[A] 10.Limited to Daylight Only		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 03.Daylight Driving Only	
[A] 11.Limited to Employment		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 11.Fleet Vehicles Only	
[A] 12.Limited-Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Mechanical Devices (special brakes, hand controls, or other adaptive devices)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 14.Military Vehicles Only			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 15.Motor Vehicles		[S] Person => [E] P39.Driver License	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Without Air Brakes		Restrictions (L) => [S] 01.Selection 1 => [A] L.No Air Brakes	
[A] 16.Outside Mirror		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 01.Selection 1 => [A] 07.Outside Mirrors	
[A] 17.Prosthetic Aid			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 1.2.Driver License Restrictions (Selection 2)			
[A] 01.Alcohol Interlock Device		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 20.BAC .04/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 22.BAC .00/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 23.Ignition Interlock Only	
[A] 02.CDL Intrastate Only		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 04.NC Intrastate Only-CDL	
[A] 03.Corrective Lenses		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 01.Corrective Lenses	
[A] 04.Farm Waiver			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Except Class A Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 14.Passenger Class B & C Only	
[A] 06.Except Class A and Class B Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 15.Passenger Class C Only	
[A] 07.Except Tractor-Trailer		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 08.No Tractor Trailer	
[A] 08.Intermediate License Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 17.Graduated License Level 2 Restriction	
[A] 09.Learner's Permit Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 16.Graduated License Level 1 Restriction	
[A] 10.Limited to Daylight Only		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 03.Daylight Driving Only	
[A] 11.Limited to Employment		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 11.Fleet Vehicles Only	
[A] 12.Limited-Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Mechanical Devices (special brakes, hand controls, or other adaptive devices)			No Mapping Comment: The State does not collect and store the MMUCC

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute in their crash database.
Only [A] 14.Military Vehicles			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 15.Motor Vehicles Without Air Brakes		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] L.No Air Brakes	
[A] 16.Outside Mirror		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 02.Selection 2 => [A] 07.Outside Mirrors	
[A] 17.Prosthetic Aid			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 1.3.Driver License Restrictions (Selection 3)			
[A] 01.Alcohol Interlock Device		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 20.BAC .04/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 22.BAC .00/Ignition Interlock [S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 23.Ignition Interlock Only	
[A] 02.CDL Intrastate Only		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 04.NC Intrastate Only-CDL	
[A] 03.Corrective Lenses		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 01.Corrective Lenses	
[A] 04.Farm Waiver			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 05.Except Class A Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 14.Passenger Class B & C Only	
[A] 06.Except Class A and Class B Bus		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 15.Passenger Class C Only	
[A] 07.Except Tractor-Trailer		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 08.No Tractor Trailer	
[A] 08.Intermediate License Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 17.Graduated License Level 2 Restriction	
[A] 09.Learner's Permit Restrictions		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 16.Graduated License Level 1 Restriction	
Only [A] 10.Limited to Daylight		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 03.Daylight Driving Only	
[A] 11.Limited to Employment		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 11.Fleet Vehicles Only	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 12.Limited-Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 13.Mechanical Devices (special brakes, hand controls, or other adaptive devices)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 14.Military Vehicles Only			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 15.Motor Vehicles Without Air Brakes		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] L.No Air Brakes	
[A] 16.Outside Mirror		[S] Person => [E] P39.Driver License Restrictions (L) => [S] 03.Selection 3 => [A] 07.Outside Mirrors	
[A] 17.Prosthetic Aid			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] P17.Driver License Status</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and associated attributes in their crash database.
[S] 1.Type Applicable for This Person			
[A] 01.Non-CDL Driver license			
[A] 02.Non-CDL Restricted Driver license (Learner's permit, Temporary/ Limited, Gradua			
[A] 03.Commercial Driver License (CDL)			
[S] 2.Status			No Mapping Comment: The State crash database attributes for "License Status" only include the broad terms "Eligible", "Licensed", "Not Eligible", and "Reported Deceased". The attributes do not align with the more specific MMUCC attributes.
[A] 00.Not Licensed			
[A] 01.Canceled or Denied			
[A] 02.Disqualified (CDL)			
[A] 03.Expired			
[A] 04.Revoked			
[A] 05.Suspended			
[A] 06.Valid License			
[A] 99.Unknown			
<b>[E] P18.Distracted By</b>	<b>0</b>		No Mapping Comment: The State crash database attributes "Driver



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			Distracted By" cannot map to the MMUCC element because it is included with other driver contributing factors, limited to three selections, and the MMUCC element describes both driver and non-motorist distractions. The State did not receive credit. The MMUCC element also separates the action (type) and source of distraction.
[S] 1.Action			
[A] 00.Not Distracted			
[A] 01.Talking/listening			
[A] 02.Manually Operating (texting, dialing, playing game, etc.)			
[A] 03.Other Action (looking away from task, etc.)			
[A] 99.Unknown			
[S] 2.Source			
[A] 01.Hands-Free Mobile Phone			
[A] 02.Hand-Held Mobile Phone			
[A] 03.Other Electronic Device			
[A] 04.Vehicle-Integrated Device			
[A] 05.Passenger/Other Non-Motorist			
[A] 06.External (to vehicle/non-motorist area)			
[A] 07.Other Distraction (animal, food, grooming)			
[A] 97.Not Applicable (Not Distracted)			
[A] 99.Unknown			
<b>[E] P19.Condition at Time of the Crash</b>	<b>18.75</b>		
[S] 1.1.(Selection 1)			
[A] 00.Apparently Normal		[S] Person => [E] P23.Driver/Non-Motorist Condition => [A] 01. Apparently Normal	
[A] 01.Asleep or Fatigued			No Mapping Comment: The State crash database collects the following attribute "Fell Asleep, Fainted, Loss of Consciousness" that is a combination of the MMUCC attributes "Asleep or Fatigued" and "Ill (sick), Fainted"; therefore, mapping could not be completed for these MMUCC attributes, and the State did not receive credit.
[A] 02.Emotional (depressed, angry, disturbed, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 03.Ill (sick), Fainted			No Mapping Comment:

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			The State crash database collects the following attribute "Fell Asleep, Fainted, Loss of Consciousness" that is a combination of the MMUCC attributes "Asleep or Fatigued" and "Ill (sick), Fainted"; therefore, mapping could not be completed for these MMUCC attributes, and the State did not receive credit.
[A] 04.Physically Impaired			No Mapping Comment: The State crash database does collect the MMUCC attribute "Other Physical Impairment"; however, it is not clear that can map to the MMUCC attribute "Physically Impaired". Therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Under the Influence of Medications/Drugs/Alcohol		[S] Person => [E] P23.Driver/Non-Motorist Condition => [A] 05. Impairment Due to Medications/Drugs/Alcohol	
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State crash database collects the attribute "Other"; however, mapping could not be completed to MMUCC attribute "Other" per rule 11.
[A] 99.Unknown		[S] Person => [E] P23.Driver/Non-Motorist Condition => [A] 10.Unknown	Mapping Comment of 10. Unknown: The State crash database attribute "Unknown" can map to the MMUCC attribute "Unknown" per rule 12.
[S] 1.2.(Selection 2)			No Mapping Comment: MMUCC allows for up to 2 selections for this element; however, the State crash database only allows for 1 selection, so mapping could not be completed for subfield 1.2 (selection 2). The State did not receive credit for this subfield.
[A] 01.Asleep or Fatigued			
[A] 02.Emotional (depressed, angry, disturbed, etc.)			
[A] 03.Ill (sick), Fainted			
[A] 04.Physically Impaired			
[A] 05.Under the Influence of Medications/Drugs/Alcohol			
[A] 97.Not Applicable			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 98.Other			
<b>[E] P20.Law Enforcement Suspects Alcohol Use</b>	<b>100</b>		
[A] 01.No		[S] Person => [E] P20.Alcohol/Drug Suspected => [A] 00.No [S] Person => [E] P20.Alcohol/Drug Suspected => [A] 03.Yes - Other Drugs, Impairment Suspected [S] Person => [E] P20.Alcohol/Drug Suspected => [A] 04.Yes - Other Drugs, No Impairment Detected	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] 02.Yes		[S] Person => [E] P20.Alcohol/Drug Suspected => [A] 01.Yes - Alcohol, Impairment Suspected [S] Person => [E] P20.Alcohol/Drug Suspected => [A] 02.Yes - Alcohol, No Impairment Detected [S] Person => [E] P20.Alcohol/Drug Suspected => [A] 05.Yes - Alcohol and Other Drugs, Impairment Suspected [S] Person => [E] P20.Alcohol/Drug Suspected => [A] 06.Yes - Alcohol and Other Drugs, No Impairment Detected	
[A] 99.Unknown		[S] Person => [E] P20.Alcohol/Drug Suspected => [A] 07.Unknown	
<b>[E] P21.Alcohol Test</b>	<b>46.15</b>		
[S] 1.Test Status			
[A] 00.Test Not Given		[S] Person => [E] P21.Test for Alcohol/Other Drugs => [A] 00.No Test [S] Person => [E] P21.Test for Alcohol/Other Drugs => [A] 02.Test for Drugs Other Than Alcohol	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.Test Given		[S] Person => [E] P21.Test for	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Alcohol/Other Drugs => [A] 01.Alcohol Test [S] Person => [E] P21.Test for Alcohol/Other Drugs => [A] 03.Test for Alcohol and Other Drugs	
[A] 02.Test Refused		[S] Person => [E] P21.Test for Alcohol/Other Drugs => [A] 04.Test Refused	
[A] 99.Unknown if Tested		[S] Person => [E] P21.Test for Alcohol/Other Drugs => [A] 05. Unknown	
[S] 2.Type of Test			No Mapping Comment: The State combines alcohol and drug test related attributes into various elements. There is not a specific element to the type of test given; therefore, the attributes cannot be mapped to the MMUCC elements. Also, attributes will need a way to distinguish between alcohol tests and drug test types. The State did not receive credit for this subfield.
[A] 01.Blood			
[A] 02.Breath			
[A] 03.Urine			
[A] 97.Not Applicable (Test Not Given)			
[A] 98.Other			
[S] 3.BAC Test Result			
[A] 01.Pending			No Mapping Comment: The State combines alcohol and drug test related attributes into various elements. The State Test Results element does not distinguish between alcohol and drug test results (except for BAC); therefore, the State did not receive credit for this attribute.
[A] 97.Not Applicable (Test Not Given)		[S] Person => [E] P22.Test Results => [A] 00.No Test	
[A] 99.Unknown			No Mapping Comment: The State combines alcohol and drug test into one element, they are not specific to the type of test given; therefore, the attributes cannot be mapped to the MMUCC attributes because there is no way to distinguish between alcohol tests and drug tests. The State did not receive credit for this attribute.
[A] Value		[S] Person => [E] P22.Test Results => [A] 02.Alcohol (Percent BAC or BrAC)	
<b>[E] P22.Law Enforcement Suspects Drug Use</b>	<b>100</b>		
[A] 01.No		[S] Person => [E] P20b.Alcohol/Drug	Mapping Comment of 00.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Suspected => [A] 00.No [S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 01.Yes - Alcohol, Impairment Suspected [S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 02.Yes - Alcohol, No Impairment Detected	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] 02.Yes		[S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 03.Yes - Other Drugs, Impairment Suspected [S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 04.Yes - Other Drugs, No Impairment Detected [S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 05.Yes - Alcohol and Other Drugs, Impairment Suspected [S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 06.Yes - Alcohol and Other Drugs, No Impairment Detected	
[A] 99.Unknown		[S] Person => [E] P20b.Alcohol/Drug Suspected => [A] 07.Unknown	
<b>[E] P23.Drug Test</b>	<b>8.7</b>		
[S] 1.Test Status			
[A] 00.Test Not Given		[S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 00.No Test [S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 01.Alcohol Test	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.Test Given		[S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 02.Test for Drugs Other Than Alcohol [S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 03.Test for	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 02.Test Refused		Alcohol and Other Drugs [S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 04.Test Refused	
[A] 99.Unknown if Tested		[S] Person => [E] P21b.Test for Alcohol/Other Drugs => [A] 05. Unknown	
[S] 2.Type of Test			No Mapping Comment: The State combines alcohol and drug test related attributes into various elements. There is not a specific element to the type of test given; therefore, the attributes cannot be mapped to the MMUCC elements. Also, attributes will need a way to distinguish between alcohol tests and drug test types. The State did not receive credit for this subfield.
[A] 01.Blood			
[A] 02.Saliva			
[A] 03.Urine			
[A] 97.Not Applicable (Test Not Given)			
[A] 98.Other			
[S] 3.1.Drug Test Result (Selection 1)			No Mapping Comment: The State combines alcohol and drug test related attributes into various elements. The State Test Results element does not list specific drugs listed in the MMUCC element; therefore, theState did not receive credit for this subfield. Also, attributes will need a way to distinguish between alcohol and drug test results.
[A] 01.Negative			
[A] 02.Amphetamine			
[A] 03.Cocaine			
[A] 04.Marijuana			
[A] 05.Opiate			
[A] 06.Other Controlled Substance			
[A] 07.PCP			
[A] 08.Other Drug (excludes post-crash drugs)			
[A] 97.Not Applicable (Test Not Given)			
[A] 99.Unknown			
[S] 3.2.Drug Test Result (Selection 2)			No Mapping Comment: The State combines alcohol and drug test into one element, they are not specific to the type of test given; therefore, the attributes cannot be mapped to the MMUCC attributes because there is no way to distinguish

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			between alcohol tests and drug tests. The State does not collect specific information for this subfield, and did not receive credit for this subfield.
[A] 02.Amphetamine			
[A] 03.Cocaine			
[A] 04.Marijuana			
[A] 05.Opiate			
[A] 06.Other Controlled Substance			
[A] 07.PCP			
[A] 08.Other Drug (excludes post-crash drugs)			
[A] 97.Not Applicable (Test Not Given)			
[A] 99.Unknown			
[S] 3.3.Drug Test Result (Selection 3)			No Mapping Comment: The State combines alcohol and drug test into one element, they are not specific to the type of test given; therefore, the attributes cannot be mapped to the MMUCC attributes because there is no way to distinguish between alcohol tests and drug tests. The State does not collect specific information for this subfield, and did not receive credit for this subfield.
[A] 02.Amphetamine			
[A] 03.Cocaine			
[A] 04.Marijuana			
[A] 05.Opiate			
[A] 06.Other Controlled Substance			
[A] 07.PCP			
[A] 08.Other Drug (excludes post-crash drugs)			
[A] 97.Not Applicable (Test Not Given)			
[A] 99.Unknown			
[S] 3.4.Drug Test Result (Selection 4)			No Mapping Comment: The State combines alcohol and drug test into one element, they are not specific to the type of test given; therefore, the attributes cannot be mapped to the MMUCC attributes because there is no way to distinguish between alcohol tests and drug tests. The State does not collect specific information for this subfield, and did not receive credit for this subfield.
[A] 02.Amphetamine			
[A] 03.Cocaine			
[A] 04.Marijuana			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 05.Opiate			
[A] 06.Other Controlled Substance			
[A] 07.PCP			
[A] 08.Other Drug (excludes post-crash drugs)			
[A] 97.Not Applicable (Test Not Given)			
[A] 99.Unknown			
<b>[E] P24.Transported to First Medical Facility By</b>	<b>22.22</b>		
[S] 1.Source of Transport to First Medical Facility			No Mapping Comment: The State does not collect and store the MMUCC subfield and associated attributes in their crash database.
[A] 00.Not Transported			
[A] 01.EMS Air			
[A] 02.EMS Ground			
[A] 03.Law Enforcement			
[A] 98.Other			
[A] 99.Unknown			
[S] 2.EMS Response Agency Identifier			
[A] ID for EMS agency that responds		[S] Person => [E] P33.EMS Responding to Crash => [A] 01.Name or Unit Number of EMS	
[S] 3.EMS Response Run Number			No Mapping Comment: The State does not collect and store the MMUCC subfield and associated attributes in their crash database.
[A] EMS Response Run Number			
[S] 4.Medical Facility Receiving Patient			
[A] Name or Number of Medical Facility Receiving Patient		[S] Person => [E] P34.Injured Taken by EMS to => [A] 01.Destination of Injured Person	
<b>[E] P25.Injury Area</b>	<b>100</b>		
[A] 01.Head		[S] Person => [E] P40.Injury Area (L) => [A] 01.Head/Brain	
[A] 02.Face		[S] Person => [E] P40.Injury Area (L) => [A] 02.Face	
[A] 03.Neck		[S] Person => [E] P40.Injury Area (L) => [A] 03.Neck	
[A] 04.Upper Extremity		[S] Person => [E] P40.Injury Area (L) => [A] 07.Upper Extremities	
[A] 05.Thorax (chest)		[S] Person => [E] P40.Injury Area (L) => [A] 06.Chest	
[A] 06.Spine		[S] Person => [E] P40.Injury Area (L) => [A] 04.Spine	
[A] 07.Abdomen and Pelvis		[S] Person => [E] P40.Injury Area (L) => [A] 08.Abdomen	
[A] 08.Lower Extremity		[S] Person => [E] P40.Injury Area (L) => [A] 09.Lower Extremities	
[A] 09.Unspecified		[S] Person => [E] P40.Injury Area (L) => [A] 11.Injured, Area Unknown	
<b>[E] P26.Injury Diagnosis</b>	<b>100</b>		
[A] Description of the injury...		[S] Person => [E] P41.Injury Description (L) => [A] 01.Visible Bleeding [S] Person => [E] P41.Injury Description (L) => [A] 02.Visible Broken Bone [S] Person => [E] P41.Injury Description (L) => [A] 03.Visible Burn	



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		[S] Person => [E] P41.Injury Description (L) => [A] 04.Complaint of Pain [S] Person => [E] P41.Injury Description (L) => [A] 05.Apparently Unconscious [S] Person => [E] P41.Injury Description (L) => [A] 06.Other Visible or Expressed Injury [S] Person => [E] P41.Injury Description (L) => [A] 07.Injury Type Not Otherwise Specified and Not Visible [S] Person => [E] P41.Injury Description (L) => [A] 08.Unknown	
<b>[E] P27.Injury Severity</b>	<b>0</b>		No Mapping Comment: The MMUCC element defines the source of the information through linkage to pre-hospital EMS, emergency department, and/or hospital discharge data files. Linkage to the National Emergency Medical Services Information Service (NEMSIS) is recommended, if possible, to obtain this data. Mapping could not be completed to this MMUCC element, and the State did not receive credit.
[A] 01.Fatal			
[A] 02.Serious			
[A] 03.Moderate			
[A] 04.Minor			
[A] 05.No Injury			
[A] 99.Unknown			
<b>[S] Roadway</b>			
<b>[E] R1.Bridge/Structure Identification Number</b>	<b>100</b>		
[A] Number		[S] Roadway => [E] RL1. Bridge/Structure Identification (L) => [A] 01.Unique Structure Code	
<b>[E] R2.Roadway Curvature</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and associated attributes in their crash database.
[A] 977.Not Applicable			
[A] xxx.Curve Radius			
[A] yyy.Length			
[A] zzz.Superelevation			
<b>[E] R3.Grade</b>	<b>100</b>		
[S] 1.Direction of Slope			
[A] Up (+) or Down (-)		[S] Roadway => [E] RL2.Grade (L) => [S] 01.Direction of Slope => [A] 01.Up [S] Roadway => [E] RL2.Grade (L) => [S] 01.Direction of Slope => [A] 02.Down	
[S] 2.Percent of Slope			
[A] Nearest Percent of Slope		[S] Roadway => [E] RL2.Grade (L) => [S] 02.Percent of Slope => [A] 01.Percent of Slope	
<b>[E] R4.Part of National Highway System</b>	<b>100</b>		

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 01.No		[S] Roadway => [E] RL3.Part of National Highway System (L) => [A] 02.No	
[A] 02.Yes		[S] Roadway => [E] RL3.Part of National Highway System (L) => [A] 01.Yes	
[A] 99.Unknown		[S] Roadway => [E] RL3.Part of National Highway System (L) => [A] 03.Unknown	
<b>[E] R5.Roadway Functional Class</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and associated attributes in their crash database.
[A] 99.Unknown			
[C] Rural			
[A] 01.Interstate			
[A] 02.Principal Arterial – Other Freeway or Expressway			
[A] 03.Principal Arterial – Other			
[A] 04.Minor Arterial			
[A] 05.Major Collector			
[A] 06.Minor Collector			
[A] 07.Local			
[A] 08.Unknown Rural			
[C] Urban			
[A] 09.Interstate			
[A] 10.Principal Arterial – Other Freeway or Expressway			
[A] 11.Principal Arterial – Other			
[A] 12.Minor Arterial			
[A] 13.Collector			
[A] 14.Local			
[A] 15.Unknown Urban			
<b>[E] R6.Annual Average Daily Traffic</b>	<b>50</b>		
[S] 1.AADT (Year)			
[A] AADT (Year) Value		[S] Roadway => [E] RL4.Annual Average Daily Traffic (L) => [S] 01.Calendar Year => [A] 01.Calendar Year	
[S] 2.AADT			
[A] AADT Value		[S] Roadway => [E] RL4.Annual Average Daily Traffic (L) => [S] 02.Vehicles Per Day (AADT) => [A] 01.Vehicles Per Day (AADT)	
[S] 3.Truck (over 10,000 lbs.) Count or Percentage			No Mapping Comment: The State does not collect and store the MMUCC attribute for this subfield in their crash database.
[A] Truck Count or Percentage			
[S] 4.Motorcycle Count or Percentage			No Mapping Comment: The State does not collect and store the MMUCC attribute for this subfield in their crash database.
[A] Motorcycle Count or Percentage			
<b>[E] R7.Widths of Lane(s) and Shoulder(s)</b>	<b>100</b>		
[S] 1.Lane Width			
[A] Width in feet		[S] Roadway => [E] RL6.Lane Width	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		(L) => [A] 01.Lane Width in Feet	
[S] 2.Left Shoulder Width			
[A] Width in feet		[S] Roadway => [E] RL5.Shoulder Type/Width (L) => [S] 02.Shoulder Width => [A] 01.Shoulder Width - Left	
[S] 3.Right Shoulder Width			
[A] Width in feet		[S] Roadway => [E] RL5.Shoulder Type/Width (L) => [S] 02.Shoulder Width => [A] 02.Shoulder Width - Right	
<b>[E] R8.Width of Median</b>	<b>0</b>		No Mapping Comment: The State crash database attributes for the element are not specific measurements in feet; therefore, mapping could not be completed, and the State did not receive credit.
[A] xx.Width of Median (feet)			
<b>[E] R9.Access Control</b>	<b>100</b>		
[A] 01.No Access Control		[S] Crash => [E] C29.Access Control => [A] 01.No Access Control - Permits Private Access (Driveway, etc.)	
[A] 02.Partial Access Control		[S] Crash => [E] C29.Access Control => [A] 03.Partial Access Control - Provides no Private Access	
[A] 03.Full Access Control		[S] Crash => [E] C29.Access Control => [A] 02.Full Access Control - Provides Access Only at Interchanges (Interstate, etc.)	
<b>[E] R10.Railway Crossing ID</b>	<b>100</b>		
[A] State specific number assigned by a State in cooperation with the American Asso		[S] Crash => [E] C30.RR Crossing ID => [A] 01.RR Crossing ID	
<b>[E] R11.Roadway Lighting</b>	<b>20</b>		
[A] 01.Continuous Lighting on Both Sides			No Mapping Comment: The State crash database attribute "Continuous Lighting" is not specific to one side or both sides of roadway; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Continuous Lighting on One Side			No Mapping Comment: The State crash database attribute "Continuous Lighting" is not specific to one side or both sides of roadway; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.No Lighting		[S] Roadway => [E] RL8.Roadway Lighting (L) => [A] 01.No Lighting	
[A] 04.Spot Illumination on Both Sides			No Mapping Comment: The State crash database attribute "Spot Illumination" is not specific to one side or both sides of roadway; therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Spot Illumination on One Side			No Mapping Comment: The State crash database

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			attribute "Spot Illumination" is not specific to one side or both sides of roadway; therefore, mapping could not be completed, and the State did not receive credit.
<b>[E] R12.Pavement Markings, Longitudinal</b>	<b>0</b>		No Mapping Comment: The State crash database has an element for pavement markings, but not specific to the MMUCC attributes; therefore, mapping could not be completed, and the State did not receive credit.
[S] 1.Edgeline Presence/Type			
[A] 01.No Marked Edgeline			
[A] 02.Standard Width Edgeline			
[A] 03.Wide Edgeline			
[A] 98.Other			
[S] 2.Centerline Presence/Type			
[A] 01.No Marked Centerline			
[A] 02.Centerline With Centerline Rumble Strip			
[A] 03.Standard Centerline Markings			
[S] 3.Lane Line Markings			
[A] 01.No Lane Markings			
[A] 02.Standard Lane Line			
[A] 03.Wide Lane Line			
<b>[E] R13.Presence/Type of Bicycle Facility</b>	<b>40</b>		
[S] 1.Facility			
[A] 00.None		[S] Roadway => [E] RL10.Bikeway (L) => [A] 01.No Bikeway	
[A] 01.Marked Bicycle Lane		[S] Roadway => [E] RL10.Bikeway (L) => [A] 03.Bicycle Lane (Striped) - Right Only [S] Roadway => [E] RL10.Bikeway (L) => [A] 04.Bicycle Lane (Striped) - Both Sides [S] Roadway => [E] RL10.Bikeway (L) => [A] 05.Bicycle Lane (Striped) - Left Only	
[A] 02.Separate Bicycle Path/Trail		[S] Roadway => [E] RL10.Bikeway (L) => [A] 06.Separate Bicycle Path/Trail	
[A] 03.Unmarked Paved Shoulder			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 04.Wide Curb Lane			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 2.Signed Bicycle Route			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 01.No			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 02.Yes		[S] Roadway => [E] RL10.Bikeway (L) => [A] 02.Bicycle Route (Signed)	
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] R14.Mainline Number of Lanes at Intersection</b>	<b>100</b>		
[A] 00.Not an Intersection or Interchange		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 07.Not an Intersection (D)	
[A] 01.One Lane		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 01.One Lane	
[A] 02.Two Lanes		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 02.Two Lanes	
[A] 03.Three Lanes		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 03.Three Lanes	
[A] 04.Four to Six Lanes		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 04.Four to Six Lanes	
[A] 05.Seven or More Lanes		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 05.Seven or More Lanes	
[A] 99.Unknown		[S] Roadway => [E] RL18.Mainline Number of Lanes at Intersection (L) => [A] 06.Unknown	
<b>[E] R15.Cross-Street Number of Lanes at Intersection</b>	<b>100</b>		
[A] 00.Not an Intersection or Interchange		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 07.Not an Intersection (D)	
[A] 01.One Lane		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 01.One Lane	
[A] 02.Two Lanes		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 02.Two Lanes	
[A] 03.Three Lanes		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 03.Three Lanes	
[A] 04.Four to Six Lanes		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 04.Four to Six Lanes	
[A] 05.Seven or More Lanes		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 05.Seven or More Lanes	
[A] 99.Unknown		[S] Roadway => [E] RL19.Side-Road Number of Lanes at Intersection (L) => [A] 06.Unknown	
<b>[E] R16.Total Volume of Entering Vehicles</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element and associated attributes in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			database.
[S] 1.AADT (Year)			
[A] AADT (Year) Value			
[S] 2.AADT			
[A] AADT Value			
[S] Fatal Section			No Mapping Comment: The state crash database does not have additional variables related to investigations of fatal crashes. As a result, the state did not receive credit for mapping to any of these elements.
[E] F1.Attempted Avoidance Maneuver	0		No Mapping Comment: The State does not report this data for crashes, nor is it reported additionally for fatal crashes. It also cannot be derived. As a result, the State cannot be given credit for mapping to this element.
[A] 00.No Driver Present/Unknown if Driver Present			
[A] 01.Accelerating			
[A] 02.Accelerating and Steering Left			
[A] 03.Accelerating and Steering Right			
[A] 04.Braking and Steering Left			
[A] 05.Braking and Steering Right			
[A] 06.Braking (Lockup)			
[A] 07.Braking (Lockup Unknown)			
[A] 08.Braking (No Lockup)			
[A] 09.No Avoidance Maneuver			
[A] 10.Releasing Brakes			
[A] 11.Steering Left			
[A] 12.Steering Right			
[A] 98.Other Actions			
[A] 99.Unknown			
[E] F2.Alcohol Test Type and Results	0		No Mapping Comment: The State crash database does not have a fatal-level element. Some of the attributes could have been derived from existing attributes if they had been collected and mapped for all drivers/non-motorists. As a result, the State cannot be given credit for mapping to this element.
[S] 1.Test Type			
[A] 00.Test Not Given			
[A] 01.Breath Test (AC)			
[A] 02.Blood			
[A] 03.Blood Clot			
[A] 04.Blood Plasma/Serum			
[A] 05.Liver			
[A] 06.Preliminary Breath			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Test (PBT)			
[A] 07.Unknown if Tested			
[A] 08.Urine			
[A] 09.Vitreous			
[A] 98.Other Test Type			
[A] 99.Unknown Test Type			
[S] 2.Test Result			
[A] 940.0.94 or Greater			
[A] 996.Test Not Given			
[A] 997.AC Test Performed, Results Unknown			
[A] 998.Positive Reading with No Actual Value			
[A] 999.Unknown if Tested			
[A] Actual Value			
<b>[E] F3.Drug Test Type and Results</b>	<b>0</b>		No Mapping Comment: The State crash database does not have a fatal-level element. Some of the attributes could have been derived from existing attributes if they had been collected and mapped for all drivers/non-motorists. As a result, the State cannot be given credit for mapping to this element.
[S] 1.Test Type			
[A] 00.Test Not Given			
[A] 01.Blood			
[A] 02.Both Blood and Urine			
[A] 03.Unknown Test Type			
[A] 04.Urine			
[A] 98.Other Test Type			
[A] 99.Unknown if Tested			
[S] 2.Test Result			
[A] 000.Test Not Given			
[A] 001.Tested No Drugs Found/Negative			
[A] 996.Other Drug			
[A] 997.Tested for Drugs, Results Unknown			
[A] 998.Tested for Drugs, Drugs Found, Type Unknown/Positive			
[A] 999.Unknown if Tested			
[A] Narcotic*			
[A] Depressant*			
[A] Stimulant*			
[A] Hallucinogen*			
[A] Cannabinoid*			
[A] Phencyclidine (PCP)*			
[A] Anabolic Steroid*			
[A] Inhalant*			
<b>[S] Large Vehicles &amp; Hazardous Materials Section</b>			
<b>[E] LV1.CMV License Status and Compliance with CDL Endorsements</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.CMV License Status			No Mapping Comment: The State crash database attributes for "License Status" only include the

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			broad terms "Eligible", "Licensed", "Not Eligible", and "Reported Deceased". The attributes do not align with the more specific MMUCC attributes; therefore, mapping could not be completed, and the State did not receive credit.
[A] 00.No CDL			
[A] 01.Canceled or Denied			
[A] 02.Disqualified			
[A] 03.Expired			
[A] 04.Revoked			
[A] 05.Suspended			
[A] 06.Learner's Permit			
[A] 07.Valid			
[A] 98.Other – Not Valid			
[A] 99.Unknown License			
Status			
[S] 2.Compliance with CDL Endorsement(s)			
[A] 00.No Endorsement(s) Required for the Vehicle			
[A] 01.Endorsement(s) Required, Complied With			
[A] 02.Endorsement(s) Required, Not Complied With			
[A] 03.Endorsement(s) Required, Compliance Unknown			
[A] 99.Unknown if Required			
<b>[E] LV2.Trailer License Plate Number</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] License Plate 1 – Alphanumeric identifier			
[S] 2.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] License Plate 2 – Alphanumeric identifier			
[S] 3.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] License Plate 3 – Alphanumeric identifier			
<b>[E] LV3.Trailer VIN(s)</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] VIN 1 – Manufacturer-			



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
assigned number permanently affixed to trailer			
[S] 2.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] VIN 2 – Manufacturer-assigned number permanently affixed to trailer			
[S] 3.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] VIN 3 – Manufacturer-assigned number permanently affixed to trailer			
<b>[E] LV4.Trailer Make(s)</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Make 1 – Name assigned by manufacturer			
[S] 2.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Make 2 – Name assigned by manufacturer			
[S] 3.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Make 3 – Name assigned by manufacturer			
<b>[E] LV5.Trailer Model(s)</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Model 1 – Name assigned by manufacturer			
[S] 2.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] Model 2 – Name assigned by manufacturer			
[S] 3.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Model 3 – Name assigned by manufacturer			
<b>[E] LV6.Trailer Model Year(s)</b>	<b>0</b>		No Mapping Comment: The State does not collect and store the MMUCC element in their crash database.
[S] 1.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Model Year 1 – Year assigned by manufacturer			
[S] 2.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Model Year 2 – Year assigned by manufacturer			
[S] 3.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] Model Year 3 – Year assigned by manufacturer			
<b>[E] LV7.Motor Carrier Identification</b>	<b>42.86</b>		
[S] 1.Identification Type			
[A] 01.US DOT Number		[S] Vehicle => [E] V9.Carrier Identification Number => [S] 02.Issuing Authority => [A] 01.USDOT	
[A] 02.State Number			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 97.Not Applicable			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown/Unable to Determine			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 2.Country/State Code			
[A] Non-US Country Code (e.g. Mexico or Canada)		[S] Vehicle => [E] V9.Carrier Identification Number => [S] 02.Issuing Authority => [A] 04.Mexico [S] Vehicle => [E] V9.Carrier Identification Number => [S] 02.Issuing Authority => [A] 05.Canada	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] US State Code		[S] Vehicle => [E] V9.Carrier Identification Number => [S] 02.Issuing Authority => [A] 06.US State Code	
[S] 3.Identification Number			
[A] US DOT Number – up to 7 digits, right justified		[S] Vehicle => [E] V9.Carrier Identification Number => [S] 01.Carrier Identification Number => [A] 01.USDOT Number	
[A] If not a US DOT Number, include State-issued Identification Number and State			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 4.Name			
[A] Motor Carrier Name		[S] Vehicle => [E] V7.Carrier Name => [S] 01.Carrier Name => [A] 01.Carrier Name	
[S] 5.Motor Carrier Address			
[A] Motor Carrier Address and Country		[S] Vehicle => [E] V8.Carrier Street Address => [A] 01.Carrier Street Address	
[S] 6.Type of Carrier			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 01.Interstate Carrier			
[A] 02.Intrastate Carrier			
[A] 03.Not in Commerce/Government			
[A] 04.Not in Commerce/Other Truck or Bus			
<b>[E] LV8.Vehicle Configuration</b>	<b>19.35</b>		
[S] 1.Vehicle Configuration			
[A] 01.Vehicle 10,000 lbs. or less placarded for hazardous materials			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 02.Bus/Large Van (seats for 9-15 occupants, including driver)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 03.Bus (seats more than 15 occupants, including driver)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 04.Single-Unit Truck (2-axle and GVWR > 10,000 lbs.)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 10.Single Unit Truck (2 Axle, 6-Tire)	
[A] 05.Single-Unit Truck (3 or more axles)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 11.Single Unit Truck (3-or-More Axles)	
[A] 06.Truck Pulling Trailer(s)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 12.Truck/Trailer	
[A] 07.Truck Tractor (Bobtail)		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 13.Truck Tractor (Bobtail)	
[A] 08.Truck Tractor/Semi-Trailer		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 14.Tractor/Semi-Trailer	
[A] 09.Truck Tractor/Double		[S] Vehicle => [E] V10.Vehicle Style (Type) => [A] 17.Tractor/Doubles	
[A] 10.Truck Tractor/Triple			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			database.
[A] 11.Truck More Than 10,000 lbs., cannot classify			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 99.Unknown			No Mapping Comment: The State crash database cannot map to the MMUCC attribute "Unknown" because it does not contain all of the other MMUCC attributes.
[S] 3.Permitted?			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 01.Non-Permitted Load			
[A] 02.Permitted Load			
[S] 2.1.Special Sizing (Selection 1)			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 00.No special sizing			
[A] 01.Over-height			
[A] 02.Over-length			
[A] 03.Over-weight			
[A] 04.Over-width			
[S] 2.2.Special Sizing (Selection 2)			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 01.Over-height			
[A] 02.Over-length			
[A] 03.Over-weight			
[A] 04.Over-width			
[S] 2.3.Special Sizing (Selection 3)			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 01.Over-height			
[A] 02.Over-length			
[A] 03.Over-weight			
[A] 04.Over-width			
[S] 2.4.Special Sizing (Selection 4)			No Mapping Comment: The State does not collect and store the MMUCC subfield in their crash database.
[A] 01.Over-height			
[A] 02.Over-length			
[A] 03.Over-weight			
[A] 04.Over-width			
<b>[E] LV9.Cargo Body Type</b>	<b>70.59</b>		
[A] 00.No Cargo Body (bobtail, light MV with hazardous materials [HM] placard, etc.)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 01.Bus		[S] Vehicle => [E] V11.Cargo Body Type => [A] 01.Bus (Seats for 16 or More People, Including Driver) [S] Vehicle => [E] V11.Cargo Body	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
		Type => [A] 02.Bus (Seats for Less Than 16 People, Including Driver)	
[A] 02.Auto Transporter		[S] Vehicle => [E] V11.Cargo Body Type => [A] 10.Auto Transport	
[A] 03.Cargo Tank		[S] Vehicle => [E] V11.Cargo Body Type => [A] 06.Cargo Tank	
[A] 04.Concrete Mixer		[S] Vehicle => [E] V11.Cargo Body Type => [A] 09.Concrete Mixer	
[A] 05.Dump		[S] Vehicle => [E] V11.Cargo Body Type => [A] 08.Dump	
[A] 06.Flatbed		[S] Vehicle => [E] V11.Cargo Body Type => [A] 07.Flatbed	
[A] 07.Garbage/Refuse		[S] Vehicle => [E] V11.Cargo Body Type => [A] 11.Garbage/Refuse	
[A] 08.Grain/Chips/Gravel		[S] Vehicle => [E] V11.Cargo Body Type => [A] 04.Grain/Chips/Gravel Truck	
[A] 09.Intermodal Container Chassis		[S] Vehicle => [E] V11.Cargo Body Type => [A] 14.Intermodal Cargo Container	
[A] 10.Log		[S] Vehicle => [E] V11.Cargo Body Type => [A] 12.Log Truck	
[A] 11.Pole-Trailer		[S] Vehicle => [E] V11.Cargo Body Type => [A] 05.Pole Truck	
[A] 12.Van/Enclosed Box		[S] Vehicle => [E] V11.Cargo Body Type => [A] 03.Van/Enclosed Box	
[A] 13.Vehicle Towing Another Vehicle			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 97.Not Applicable (MV 10,000 lbs. or less, not displaying HM placard)			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does collect and store the MMUCC attribute "Other" in their crash database; however, mapping could not be completed per rule 11.
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] V10.Hazardous Materials (Cargo Only)</b>	<b>70</b>		
[S] 1.Hazardous Materials ID			
[A] 000.No HM Placard Displayed		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 03.Hazardous Materials Placard Numbers => [A] 01a.No Placard for 4-Digit ID	
[A] 999.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] xxx.4-digit Hazardous Materials ID number or name taken from the middle of the diam		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 03.Hazardous Materials Placard Numbers => [A] 01.4-Digit Placard Number	
[S] 2.Hazardous Materials Class			
[A] x.1-digit Hazardous		[S] Vehicle => [E] V12.Hazardous	

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
Materials Class number from the bottom of diamond		Materials Involvement (Cargo Only) => [S] 03.Hazardous Materials Placard Numbers => [A] 02.1-Digit Placard Number	
[A] 00.No HM Placard Displayed		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 03.Hazardous Materials Placard Numbers => [A] 2a.No Placard for 1-Digit Class	
[A] 99.Unknown			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[S] 3.Release of hazardous materials from a cargo compartment (e.g. trailer), cargo c			
[A] 01.No		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 04.Hazardous Materials, Cargo Released From the Cargo Compartment? => [A] 02.No - Hazardous Materials Not Released	
[A] 02.Yes		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 04.Hazardous Materials, Cargo Released From the Cargo Compartment? => [A] 01.Yes - Hazardous Materials Released	
[A] 97.Not Applicable		[S] Vehicle => [E] V12.Hazardous Materials Involvement (Cargo Only) => [S] 04.Hazardous Materials, Cargo Released From the Cargo Compartment? => [A] 03.Not Applicable	
[A] 99.Unknown if Released			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
<b>[E] V11.Total Number of Axles</b>	<b>0</b>		No Mapping Comment: The State crash database elements "Number of Axles - Trailer 1" and "Number of Axles - Trailer 2" include the total number of axles on the truck or bus including the axles on truck semi-trailers and trailers; therefore, mapping could not be completed for the MMUCC element, and the State did not receive credit.
[S] 1.Truck Tractor			
[A] 99.Unknown (information unavailable)			
[A] xx.Number of Axles			
[S] 2.First Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] xx.Number of Axles			
[S] 3.Second Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 99.Unknown (information unavailable)			
[A] xx.Number of Axles			
[S] 4.Third Trailer Behind Tractor			
[A] 97.Not Applicable (Bus or truck with no trailing units)			
[A] 99.Unknown (information unavailable)			
[A] xx.Number of Axles			
<b>[S] Non-Motorist Section</b>			
<b>[E] NM1.Unit Number of Motor Vehicle Striking Non-Motorist</b>	<b>100</b>		
[A] Unit number of MV that was the first MV to strike the non-motorist		[S] Person => [E] P9.Occupant's/Non-Motorist Vehicle Unit Number Unique to Crash => [A] 02.Unit Number that Struck Non-Motorist	
<b>[E] NM2.Non-Motorist Action/Circumstance Prior to Crash</b>	<b>20</b>		
[S] 1.Action/Circumstance			
[A] 00.None			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 01.Adjacent to Roadway (e.g., Shoulder, Median)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Crossing Roadway		[S] Person => [E] P26.Non-Motorist Action Prior to Crash => [A] 01.Entering or Crossing Specified Location	
[A] 03.In Roadway – Other			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Waiting to Cross Roadway			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 05.Walking/Cycling Along Roadway Against Traffic (In or Adjacent to Travel Lane)		[S] Person => [E] P26.Non-Motorist Action Prior to Crash => [A] 03. Walking, Riding, Running/Jogging Against Traffic	
[A] 06.Walking/Cycling Along Roadway with Traffic (In or Adjacent to Travel Lane)		[S] Person => [E] P26.Non-Motorist Action Prior to Crash => [A] 02. Walking, Riding, Running/Jogging with Traffic	
[A] 07.Walking/Cycling on Sidewalk			No Mapping Comment: The State crash database does not contain this attribute, nor can it be

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.Working in Trafficway (Incident Response)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 98.Other			No Mapping Comment: The State cannot map to "Other" because the State does not possess all the specific attributes for the MMUCC element.
[A] 99.Unknown			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[S] 2.Origin/Destination			No Mapping Comment: The State does not collect and store the MMUCC attributes for subfield 2 in their crash database.
[A] 01.Going to or from School (K-12)			
[A] 02.Going to or from Transit			
[A] 97.Not Applicable			
[A] 99.Unknown			
<b>[E] NM3.Non-Motorist Contributing Action(s) /Circumstance(s)</b>	<b>70.37</b>		
[S] 1.1.(Selection 1)			
[A] 00.None (No Improper Action)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 00.None	
[A] 01.Dart/Dash		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 02.Darting	
[A] 02.Disabled Vehicle-Related (Working on, Pushing, Leaving/Approaching)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Entering/Exiting Parked/Standing Vehicle		[S] Person => [E] P26.Non-Motorist Action Prior to Crash => [A] 06. Approaching or Leaving Vehicle	
[A] 04.Failure to Obey Traffic Signs, Signals, or Officer		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 07.Failure to Obey Traffic Signs, Signals	
[A] 05.Failure to Yield Right-Of-Way		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 04.Failure to Yield Right of Way	
[A] 06.Improper Passing			No Mapping Comment: The State crash database



Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 07.Improper Turn/Merge			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.Inattentive (Talking, Eating, etc.)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 06.Inattentive (Talking, Eating, etc.)	
[A] 09.In Roadway Improperly (Standing, Lying, Working, Playing)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 03.Lying and/or Illegally in the Roadway	
[A] 10.Not Visible (Dark Clothing, No Lighting, etc.)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 05.Not Visible (Dark Clothing, etc.)	
[A] 11.Wrong-Way Riding or Walking		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 08.Wrong Side of Road	
[A] 98.Other			No Mapping Comment: The State cannot map to "Other" because the State does not possess all the specific attributes for the MMUCC element.
[A] 99.Unknown		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 01. Selection 1 => [A] 10.Unknown	
[S] 1.2.(Selection 2)			
[A] 01.Dart/Dash		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 02.Darting	
[A] 02.Disabled Vehicle-Related (Working on, Pushing, Leaving/Approaching)			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 03.Entering/Exiting Parked/Standing Vehicle		[S] Person => [E] P27.Non-Motorist Action at Time of Crash => [A] 06. Approaching or Leaving Vehicle	
[A] 04.Failure to Obey Traffic Signs, Signals, or Officer		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 07.Failure to Obey Traffic Signs, Signals	
[A] 05.Failure to Yield Right-Of-Way		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 04.Failure to Yield Right of Way	
[A] 06.Improper Passing			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
			completed, and the State did not receive credit.
[A] 07.Improper Turn/Merge			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 08.Inattentive (Talking, Eating, etc.)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 06.Inattentive (Talking, Eating, etc.)	
[A] 09.In Roadway Improperly (Standing, Lying, Working, Playing)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 03.Lying and/or Illegally in the Roadway	
[A] 10.Not Visible (Dark Clothing, No Lighting, etc.)		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 05.Not Visible (Dark Clothing, etc.)	
[A] 11.Wrong-Way Riding or Walking		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 08.Wrong Side of Road	
[A] 98.Other			No Mapping Comment: The State cannot map to "Other" because the State does not possess all the specific attributes for the MMUCC element.
[A] 99.Unknown		[S] Person => [E] P29.Non-Motorist Contributing Circumstances => [S] 02. Selection 2 => [A] 10.Unknown	
<b>[E] NM4.Non-Motorist Location at Time of Crash</b>	<b>42.11</b>		
[A] 98.Other			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[A] 99.Unknown			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[C] Roadway Facility			
[A] 01.Intersection – Marked Crosswalk		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 01. Marked Crosswalk at Intersection	
[A] 02.Intersection – Unmarked Crosswalk		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 02.At Intersection but no Crosswalk	
[A] 03.Intersection – Other			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 04. Median/Crossing Island		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 07. Median (But not on Shoulder) [S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 08. Island	
[A] 05. Midblock – Marked Crosswalk		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 03. Non-Intersection Crosswalk	
[A] 06. Shoulder/Roadside		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 09. Shoulder [S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 11. Within 10 Feet of Roadway (Not on Shoulder, Median, Sidewalk, Island) [S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 12. Beyond 10 Feet of Roadway (Within Trafficway)	
[A] 07. Travel Lane – Other Location			No Mapping Comment: The State crash database does not contain this attribute, nor can it be easily derived; therefore, mapping could not be completed, and the State did not receive credit.
[C] Bicycle Facility			No Mapping Comment: The State does not collect and store the MMUCC attributes for this cluster in their crash database.
[A] 08. Signed Route (no pavement marking)			
[A] 09. Shared Lane Markings			
[A] 10. On-Street Bike Lanes			
[A] 11. On-Street Buffered Bike Lanes			
[A] 12. Separated Bike Lanes			
[A] 13. Off-Street Trails/Sidepaths			
[C] Other Facility			
[A] 14. Driveway Access			No Mapping Comment: The State attribute "Driveway Access Crosswalk" in the crash database cannot map to the MMUCC attribute "Driveway Access" because of the inclusion of crosswalk. The State did not receive credit.
[A] 15. Non-Trafficway Area		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 13. Outside Trafficway	
[A] 16. Shared-Use Path or Trail		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 14. Shared-Use Path or Trails	
[A] 17. Sidewalk		[S] Person => [E] P30.Non-Motorist Location at Time of Crash => [A] 10. Sidewalk	
<b>[E] NM5. Non-Motorist Safety Equipment</b>	<b>12.5</b>		
[S] 1.1.(Selection 1)			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 00.None		[S] Person => [E] P31.Non-Motorist Safety Equipment => [A] 00.None Used	
[A] 01.Helmet			No Mapping Comment: The State crash database attribute "Helmet" refers to both bicyclists and motorcyclists; therefore, mapping could not be completed, and the State did not receive credit.
[A] 02.Protective Pads Used (elbows, knees, shins, etc.)		[S] Person => [E] P31.Non-Motorist Safety Equipment => [C] 01.Non-Motorist Only => [A] 06.Protective Pads	
[A] 03.Reflective Wear (backpack, triangles, etc.)			No Mapping Comment: The State crash database attribute "Reflective Clothing" cannot map to the MMUCC attribute "Reflective Wear (Backpack, Triangles, etc.)" because the definitions are not the same. Therefore, mapping could not be completed, and the State did not receive credit.
[A] 04.Lighting		[S] Person => [E] P31.Non-Motorist Safety Equipment => [C] 01.Non-Motorist Only => [A] 08.Lighting	
[A] 05.Reflectors			No Mapping Comment: The State does not collect and store the MMUCC attribute in their crash database.
[A] 98.Other			No Mapping Comment: The State does collect and store the MMUCC attribute "Other" in their crash database; however, mapping could not be completed due to rule 11. The State did not receive credit.
[A] 99.Unknown		[S] Person => [E] P31.Non-Motorist Safety Equipment => [C] 01.Non-Motorist Only => [A] 10.Unable to Determine	
[S] 1.2.(Selection 2)			No Mapping Comment: MMUCC allows for up to 5 selections. The State crash database only allows 1 selection. The State crash database attributes will only map to Selection 1.  The State does not collect and store the MMUCC attributes for subfields 1.2, 1.3, 1.4, and 1.5 in their crash database.
[A] 01.Helmet			
[A] 02.Protective Pads Used (elbows, knees, shins, etc.)			
[A] 03.Reflective Wear (backpack, triangles, etc.)			
[A] 04.Lighting			
[A] 05.Reflectors			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 98.Other [S] 1.3.(Selection 3)			No Mapping Comment: MMUCC allows for up to 5 selections. The State crash database only allows 1 selection. The State crash database attributes will only map to Selection 1.  The State does not collect and store the MMUCC attributes for subfields 1.2, 1.3, 1.4, and 1.5 in their crash database.
[A] 01.Helmet			
[A] 02.Protective Pads Used (elbows, knees, shins, etc.)			
[A] 03.Reflective Wear (backpack, triangles, etc.)			
[A] 04.Lighting			
[A] 05.Reflectors			
[A] 98.Other			
[S] 1.4.(Selection 4)			No Mapping Comment: MMUCC allows for up to 5 selections. The State crash database only allows 1 selection. The State crash database attributes will only map to Selection 1.  The State does not collect and store the MMUCC attributes for subfields 1.2, 1.3, 1.4, and 1.5 in their crash database.
[A] 01.Helmet			
[A] 02.Protective Pads Used (elbows, knees, shins, etc.)			
[A] 03.Reflective Wear (backpack, triangles, etc.)			
[A] 04.Lighting			
[A] 05.Reflectors			
[A] 98.Other			
[S] 1.5.(Selection 5)			No Mapping Comment: MMUCC allows for up to 5 selections. The State crash database only allows 1 selection. The State crash database attributes will only map to Selection 1.  The State does not collect and store the MMUCC attributes for subfields 1.2, 1.3, 1.4, and 1.5 in their crash database.
[A] 01.Helmet			
[A] 02.Protective Pads Used (elbows, knees, shins, etc.)			
[A] 03.Reflective Wear (backpack, triangles, etc.)			
[A] 04.Lighting			
[A] 05.Reflectors			
[A] 98.Other			
<b>[E] NM6.Initial Contact Point on</b>	<b>0</b>		No Mapping Comment:

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
<b>Non-Motorist</b>			The State crash database does not report the initial point of contact with non-motorists, nor can it be derived. As a result, the state cannot receive credit for mapping to this element.
[A] 03.Right			
[A] 06.Rear			
[A] 09.Left			
[A] 12.Front			
[A] 99.Unknown			
<b>[S] Dynamic Data Elements</b>			No Mapping Comment: The State does not record or report the presence of or automation level of any automated driving systems within a vehicle in the state crash database. These are not able to be derived from other data, either. As a result, the state cannot be given credit for mapping to this element.
<b>[E] DV1.Motor Vehicle Automated Driving System(s)</b>	<b>0</b>		
[S] 1.Automation System or Systems in Vehicle			
[A] 01.No			
[A] 02.Yes			
[A] 99.Unknown			
[S] 2.1.Automation System Levels in Vehicle (Selection 1)			
[A] 00.No Automation			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[A] 06.Automation Level Unknown			
[A] 99.Unknown			
[S] 2.2.Automation System Levels in Vehicle (Selection 2)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 2.3.Automation System Levels in Vehicle (Selection 3)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 2.4.Automation System Levels in Vehicle (Selection 4)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			

Guideline Elements & Attributes	Mapping Score (%)	State Elements / Attributes That Map	Mapping Comments
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 2.5.Automation System Levels in Vehicle (Selection 5)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 3.1.Automation System Levels Engaged at Time of Crash (Selection 1)			
[A] 00.No Automation			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[A] 06.Automation Level Unknown			
[A] 99.Unknown			
[S] 3.2.Automation System Levels Engaged at Time of Crash (Selection 2)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 3.3.Automation System Levels Engaged at Time of Crash (Selection 3)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 3.4.Automation System Levels Engaged at Time of Crash (Selection 4)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			
[S] 3.5.Automation System Levels Engaged at Time of Crash (Selection 5)			
[A] 01.Driver Assistance			
[A] 02.Partial Automation			
[A] 03.Conditional Automation			
[A] 04.High Automation			
[A] 05.Full Automation			