#### **MPD Crash Data**

# Legacy data Crash Data Mapping to

### (Draft)

### Traffic Records Coordinating Committee

#### and

#### **KLS Engineering, LLC**

## 07/21/2017

#### Crash Data Mapping from Legacy System to Cobalt Crash Data System

MPD in August of 2015 has moved to a different application which is COBALT RMS system which comprises of both crime and traffic crash applications. In this process there were many schema level changes applied in the new database to store the traffic crashes which were more compliant to MMUCC IV edition than the prior application. The old crash data which is residing separately has its own schema definitions which are different from the new database. MPD has performed a data migration from the old legacy database to the new database but largely the assets and attributes migrated were generally unsuccessful.

The mapping complexity is identified by the following colors:

- Perfect Map -
- Possible Map -
- No Map required -

Below are the detailed table level mappings with the corresponding mapping complexity:

- 1. TrafficCrashReport (Pages 3 10)
- 2. InvolvedVehicle (Pages 11 22)
- 3. InvolvedPerson (Pages 23 28)

Also there are some reference materials attached for some of the mapping cases which are:

- 1. Ref 1.0 PersonInjury (Page 29)
- Ref 2.0 Additional Mapping for item 189 (TrafficCrashReport) and item213 (InvolvedVehicle) – (Page 30)

				Legacy system - TrafficC	rashReport Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Data	base		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	TrafficCrashReport	trafficCrashReportId				CrimeID	Crime	RMS	
dbo	TrafficCrashReport	addDate				SourceAddTime	Crime	RMS	
dbo	TrafficCrashReport	modDate				SourceModTime	Crime	RMS	
dbo	TrafficCrashReport	creatorUserId		No. solution of a section of the					
ubu	Trafficerasificeport	creatoroseria		No related asset and is					
dbo	TrafficCrashReport	recordStatus		not required for any					
				data analysis. Suggest					
dbo	TrafficCrashReport	record252Prepared		no mapping.					
dbo	TrafficCrashReport	ccn				CCN	Crime	RMS	
				(Concatenate					
dbo	TrafficCrashReport	crashDate		crashDate &		StartDate	Crime	RMS	
				crashStartTime)					
				(Concatenate					
dbo	TrafficCrashReport	crashEndDate		crashEndDate &		EndDate	Crime	RMS	
				crashEndTime)					
				Used above in					
dbo	TrafficCrashReport	crashStartTime		crashDate. Suggest no					
				mapping					
				Used above in					
dbo	TrafficCrashReport	crashEndTime		crashEndDate. Suggest					
				no mapping					
dbo	TrafficCrashReport	dayOfWeek		No related asset and					
dbo	TrafficCrashReport	crashType		can be derived if any					
dbo	TrafficCrashReport	crashTypeOther		data analysis is					
dbo	TrafficCrashReport	исс		required.					
dbo	TrafficCrashReport	location				Address1	Crime	RMS	
dbo	TrafficCrashReport	longitude				Longitude	Crime	RMS	
dbo	TrafficCrashReport	latitude				Latitude	Crime	RMS	
dbo	TrafficCrashReport	district				District	Crime	RMS	
dbo	TrafficCrashReport	psa				PSA	Crime	RMS	
dbo	TrafficCrashReport	reportDate				ReportDate	Crime	RMS	
dbo	TrafficCrashReport	locFeet				DCLocationFeet	Crash	RMS	
dbo	TrafficCrashReport	locBearing				DCLocationBearing	Crash	RMS	
dbo	TrafficCrashReport	locInterBlock				DCLocationIntersectionBlock	Crash	RMS	
dbo	TrafficCrashReport	locSection				DCLocationSection	Crash	RMS	
dbo	TrafficCrashReport	locMilePost				DCLocationMilePost	Crash	RMS	
dbo	TrafficCrashReport	locPepcoPollNo				DCLocationPepcoPollNo	Crash	RMS	
dbo	TrafficCrashReport	locExitRamp				DCLocationExitRamp	Crash	RMS	
dbo	TrafficCrashReport	locBridge				DCLocationBridge	Crash	RMS	
dbo	TrafficCrashReport	locTunnel				DCLocationTunnel	Crash	RMS	
dbo	TrafficCrashReport	locOther				DCLocationOther	Crash	RMS	

				Legacy system - Traffi	icCrashReport Table Mapping				
		Old Legacy Databa	ISE	Mapping Relation		New Cobalt Data	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name		New Schema	Notes
dbo	TrafficCrashReport	constructionZone				IsWorkZoneRelated	Crash	RMS	110100
			None Selected		NULL				
			At Intersection		Intersection				
			Within 100mts of Intersection		* See - Map1 (in Notes)				
dbo	TrafficCrashReport	onStreetLoc	Not at Intersection		Non-Junction				
			Private Property		* See - Map2 (in Notes)				Suggested changes to the
			N/A		Unknown				attributes:
			Other		Unknown				Include the following
	ļ				Other remaining attributes				-
					Entrance / Exit Ramp				items:
					Railway Grade Crossing				
					Crossover - Related	JunctionSpecificLocation	Crash	RMS	• Within 250ft of
					Intersection-Related	·			intersection (Map1) (OR)
					Driveway Access Related				Intersection-Related
					Shared-Use Path or Trail				(From existing list)
					Accelaration / Decelaration Lane				<ul> <li>Private Property (Map2)</li> </ul>
					Through Deadway				(
					Through Roadway				
					Other location not listed above				
					within an interchange area (median,				
					shoulder, and roadside)				
dbo	TrafficCrashReport	onStreetOther		No related asset.					
				Suggest no mapping.					
			None Selected		NULL	4			
	<b>T</b> (() <b>D</b>   <b>D</b>		Public Space		Public			51.45	
dbo	TrafficCrashReport	offStreetLoc	Private Property		Private	Property Type	Crime	RMS	
			N/A		NULL				
			Other		NULL				
dbo	TrafficCrashReport	offStreetOther		No related asset and					
				required for any data					
dbo	TrafficCrashReport	reportOnScene		analysis. Suggest no					
dbo	TrafficCrashReport	werePhotosTaken		mapping.					
dbo	TrafficCrashReport	photosTakenNum				NumberPhotosTaken	Crash	RMS	
dbo	TrafficCrashReport	vehInvolvedNum				Namber notostaken	Crush	- Rivij	
dbo	TrafficCrashReport	injuredPersonsNum		Data elements can be					
dbo	TrafficCrashReport	fatalitiesNum		derived.			1		
dbo	TrafficCrashReport	detailedNarrative				Narrative	Narrative	RMS	
dbo	TrafficCrashReport	cadComments		No related asset.		Nurrutive		1.113	
dbo	TrafficCrashReport	reporterFirstLast		Suggest no mapping.		SourceAddUser	Crime	RMS	
dbo	TrafficCrashReport	reporterName				SourceAuuOSer	Crime	CIVIA	
dbo	TrafficCrashReport	reporterCadNo							
dbo	TrafficCrashReport	reporterBadgeno							
dbo	TrafficCrashReport	reporterRank							
dbo		reporterUnitOther					+		
dbo	TrafficCrashReport TrafficCrashReport	reporterUnit							
dbo	TrafficCrashReport	officialsName		Not required for any			+		
	TrafficCrashReport	officialsCadNo		data analysis. Suggest					
dbo									

					cCrashReport Table Mapping		
		Old Legacy Databas	se	Mapping Relation		New Cobalt Data	ıbase
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name
dbo	TrafficCrashReport	officialsRank					
dbo	TrafficCrashReport	officialsUnit					
dbo	TrafficCrashReport	officialsUnitOther					
dbo	TrafficCrashReport	reviewer					
dbo	TrafficCrashReport	reviewerOther					
dbo	TrafficCrashReport	distribution					
			MPD		MPD		
			U.S. Capitol Police		US Capitol Police		
dbo	TrafficCrashReport	agencyldent	U.S. Park Police		US Park Police		
			U.S. Secret Service Police		US Secret Service		
			Other		Other Law Enforcement Agency		
					Other remaining attributes		
					Amtrak Police	Agency	Crime
					Bureau of Engraving		
					DC Fire Department		
					DC Housing Authority Police		
					DC Protective Services Police		
					Federal Protective Service		
					Metro Transit Police		
dbo	TrafficCrashReport	agencyldentOther		Not required for any			
dbo	TrafficCrashReport	approvallevel		data analysis. Suggest			
dbo	TrafficCrashReport	rejectionNote		no mapping.			
dbo	TrafficCrashReport	deleteFlag				IsDeleted	Crime
			Unknown		Unknown		
			Right Angle		Angle		
			Left Turn Hit Vehicle		Angle		
			Right Turn Hit Vehicle		Angle		
			Rear End		Front To Rear		
			Side Swiped		Sideswipe, Same Direction		
		Γ	Head On		Front To Front		
			Parked Vehicle		Unknown		
			Fixed Object		Other		
dha	TrofficCrachDapart	item 190	Ran Off Roadway		Other		
dbo	TrafficCrashReport	item189	Left Turn Hit Pedestrian		Angle		
			Right Turn Hit Pedestrian		Angle	FirstHarmfulEventImpact	Crash
			Straight Hit Pedestrian		Front To Front		
			Backing Hit Moving Vehicle		Rear To Side		
			Backing Hit Parked Vehicle		Rear To Side		
			Backing Hit Pedestrian		Other		
		Ē	Non-Collision Accident		Other		
		Γ	Under ride		Other		
		Γ	Override		Other		
		F	Other		Other		
					Other remaining attributes		
					Sideswipe, Opposite Direction		
					Rear To Rear		
dbo	TrafficCrashReport	item1890ther					1

New Schema	Notes
RMS	
RMS	
RMS	See Ref 2.0 - for additional mapping details.

					CrashReport Table Mapping									
		Old Legacy Databas	se	Mapping Relation		New Cobalt Dat	tabase							
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes					
			Unknown											
			Concrete											
			Asphalt	No related asset.					A new asset to be adde					
dbo	TrafficCrashReport	item190	Brick	Not required as per					on the Cobalt Crash					
		_	Gravel	MMUCC.					Application is suggeste					
			Dirt						Application is suggeste					
			Other											
dbo	TrafficCrashReport	item1900ther												
		_	Unknown		NULL									
		_	Straight		Straight				Legacy system record					
dbo		_	Curve		Curve Right				this as a single cras					
		-	Grade		* See - Map3 (in Notes)	RoadwayAlignment		system event involv Also this Roadwa	event, while the ne					
	TrafficCrashReport	item191	Underpass		* See - Map4 (in Notes)	, .	_		system captures this a					
		-	Ramp		* See - Map5 (in Notes)				event for each vehic					
			Bridge		* See - Map6 (in Notes)				involved in the cras					
			Other		NULL				Also this asset is split in					
		-	Level Crest		Level Hillcrest	RoadwayGrade			RoadwayAlignment a					
			0.000						RoadwayGrade in th					
					Curve Left	RoadwayAlignment								the best possible scer would be to Map th asset from legacy sys to the PrimaryPartici
					Downhill		Vehicle RMS	RMS	Vehicle which can retrieved from PrimaryParticipantIE CrashEvents Table Splitting one asset to					
					Sag (Bottom)	RoadwayGrade			assets is achieved b assigning NULL to ot asset. Suggested the follow changes to the attribu					
					Uphill				Include the followin items - to RoadwayAlignmen . Grade (Map3) . Underpass (Map4 . Ramp (Map5) . Bridge (Map6)					
dbo	TrafficCrashReport	item1910ther		No related asset. Suggest no mapping.										

				Legacy system - Traffi	cCrashReport Table Mapping		
		Old Legacy Datab	base	Mapping Relation		New Cobalt Data	abase
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name
			Unknown		Unknown		
			Repairing		Other		
			Dry		Dry		
			Wet		Wet		
dha	TrafficCrachDapart	item192	Standing Water		Water(standing,moving)		
dbo	TrafficCrashReport	item192	Slush		Slush	Attribute (Attribute Type:	CrimeAttribu
			Snow		Snow	SURFACE_CONDITIONS)	te
			lce		Ice / frost		
			Sand, Mud, Dirt, Oil or Gravel		Mud, dirt, gravel		
			Other		Other		
			•		Other remaining attributes		
					Sand		
	Traffie Care de Deux ent	it and 020th an		No related asset.			
dbo	TrafficCrashReport	item1920ther		Suggest no mapping.			
			Unknown		Unknown		
			Defective		Defective		
-11	Two ffi - Cuo als Dava ant	it 102	Street Lights On		Street lights on	Church this hat is a	Currah
dbo	TrafficCrashReport	item193	Street Lights Off		Street lights off	StreetLighting	Crash
			None		NULL		
			Other		Other		
				No related asset.			
dbo	TrafficCrashReport	item1930ther		Suggest no mapping.			
			Unknown		Unknown		
			Daylight		Daylight		
			Dark (Not Lighted)		Dark - Not Lighted		
			Dark (Lighted)		Dark - Lighted		
dbo	TrafficCrashReport	item194	Dark (Unknown Roadway Lighting)		Dark Unknown Lighted	LightCondition	Crime
			Dawn		Dawn		
			Dusk		Dusk		
			Other		Other		
dbo	TrafficCrashReport	item1940ther				LightConditionOther	Crime
			Unknown		Unknown		
			Fog / Mist		Fog, Smog, Smoke		
			Rain		Rain		
			Snow		Snow		
dbo	TrafficCrashReport	item195	Sleet / Hail		Sleet or Hail		
			Blowing Sand, Soil, Dirt or Snow		Blowing Sand, Soil, Dirt		
			Severe Crosswind		Severe Crosswinds	\\/aathar	Crimes
			Clear / No adverse Conditions		Clear	Weather	Crime
			Other		Other		
					Other remaining attributes		
					Blowing Snow		
					Freezing Rain or Freezing Drizzle		
					Mist		
					Cloudy		
		ite		No related asset.	, ,		
-11-		item1950ther		Suggest no mapping.			
dbo	TrafficCrashReport						1
dbo	TrafficCrashReport		Unknown		Unknown		
dbo	TrafficCrashReport		Unknown Heavy				
		item196	Неаvy		Неаvy	TrafficCondition	Crime
dbo dbo	TrafficCrashReport	item196				TrafficCondition	Crime

New Schema	Notes
RMS	
RMS	
RMS	
RMS	
RMS	
RMS	

				Legacy system - Traffi	icCrashReport Table Mapping				
		Old Legacy Datab		Mapping Relation		New Cobalt Data	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	TrafficCrashReport	item1960ther		No related asset. Suggest no mapping.				RMS	
			Unknown		Unknown				Legacy system recorded
			Two-Way, Not Divided		Two-way, not divided				this as a single crash
					Two-way, divided,				event, while the new
			Two-Way, Divided Unprotected Median		unprotected(painted > 4 feet)				system captures this as a
dha	TrafficCrashReport	item197			median				event for each vehicle
dbo	TraincerasiiReport	item197	Two-Way, Divided Positive Median		Two-way, divided, positive median				involved in the crash. In
			Barrier		barrier				order to map the data
			One-Way, Not Divided		One-way trafficway	TrafficWayDescription	Vehicle	RMS	the best possible scenario
			Other		Other	HancwayDescription	Venicle	RIVIS	would be to Map this
					Other remaining attributes				asset from legacy system to the PrimaryParticipant
					Two-way, not divided with a continuous left turn lane				Vehicle which can retrieved from PrimaryParticipantID in CrashEvents Table.
dbo	TrafficCrashReport	item1970ther		No related asset. Suggest no mapping.					
			Unknown		Unknown				
			None		No Controls				
			Flashing		Flashing Traffic Control Signal				
			Yield		Yield Signs on Cross Street Only				
	TrafficCrashReport	item198	Stop Sign		All-way Stop Signs	ase)			
dbo			Signal		Signals Fully Actuated (multi-phase)				Legacy system recorded this as a single crash
			Officer		Person(including flagger, law enforcement officer, crossing guard)				event, while the new system captures this as a
			Restricted Turn		Restricted Turn				event for each vehicle
			Other		Other				involved in the crash. In
			<b>O</b> ther		Other remaining attributes				order to map the data
					All-way Flasher (red on cross street)	TrafficControlDeviceType	Vehicle	RMS	the best possible scenario would be to Map this
					All-way Flasher (yellow on main, red				asset from legacy system
					on all legs)				to the PrimaryParticipant
					Stop Signs on Cross Street Only				Vehicle which can
					School Zone Sign/Device				retrieved from
					Signals Fully Actuated (two-phase)				PrimaryParticipantID in
					Signals Pre-timed(multi-phase)				CrashEvents Table.
					Signals Pre-timed(two-phase)				
					Signals Semi-Actuated(multi-phase)				
					Signals Semi-Actuated(two-phase)				
dbo	TrafficCrashReport	item1980ther		No related asset. Suggest no mapping.					

				Legacy system - Traffi	cCrashReport Table Mapping		
		Old Legacy Databa	ase	Mapping Relation		New Cobalt Data	base
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name
			Unknown		Unknown		
			With Signal in Crosswalk		* See - Map7 (in Notes)		
			Against Signal in Crosswalk		* See - Map8 (in Notes)		
			In Crosswalk: No Signal	Not related attributes.	* See - Map9 (in Notes)		
dbo	TrafficCrashReport	item199	From Between Parked Cars	Not related attributes.	* See - Map10 (in Notes)		
			Not in Crosswalk		* See - Map11 (in Notes)		
			In Unmarked Crosswalk		* See - Map12 (in Notes)		
			N/A		NULL		
			Other		Other		
					Other remaining attributes		
					Adjacent to Roadway (ex: Shoulder,		
					Median)		
					Crossing Roadway		
					Going to or from School (K-12)		
					In Roadway – Other (Working,		
					Playing, etc.)		
					Waiting to Cross Roadway		
					Walking/Cycling Along Roadway Against Traffic (In or Adjacent to Travel Lane)	ActionsPriorToCrash	Person
					Walking/Cycling Along Roadway With Traffic (In or Adjacent to Travel Lane)		
					Walking/Cycling on Sidewalk		

New Schema	Notes
	Legacy system recorded
	this as a single crash
	event, while the new
	system captures this as a
	event for each non-
	motorist involved in the
	crash. In order to map
	the data the best possible
	scenario would be to
	Map this asset from
	legacy system to the Non-
	motorist involved in the
	crash which can retrieved
	from Non-motoristType
	in Person Table.
	But the problem would
	occur if there are
	multiple non-motorist
	involved, mapping would
	not be possible.
	Suggested the following
RMS	changes to the attributes:
	Include the following
	items:
	i cernor
	• With signal in crosswalk
	(Map7)
	<ul> <li>Against signal in</li> </ul>
	crosswalk (Map8)
	• In Crosswalk: No Signal
	(Map9)
	<ul> <li>From Between Parked</li> </ul>
	Cars (Map10)

				egacy system - Traffi	cCrashReport Table Mapping					
		Old Legacy Databa	se	Mapping Relation	New Cobalt Database					
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes	
					Working in Trafficway (Incident Response)				<ul> <li>Not in crosswalk (Map11)</li> <li>In unmarked crosswalk (Map12)</li> <li>Cycling within bikelane <ul> <li>Cycle in bike box</li> </ul> </li> <li>Shared bicycle facility <ul> <li>"sharrows"</li> <li>Separate bicycle path/trail.</li> <li>N/A</li> </ul> </li> </ul>	
dbo	TrafficCrashReport	item1990ther		No related asset. Suggest no mapping.						
dbo	TrafficCrashReport	supp252PreparedBool		No related asset. Suggest no mapping.						

				Legacy system - Involv	edVehicle Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	InvolvedVehicle	involvedVehicleId				VehicleID	Vehicle	RMS	
dbo	InvolvedVehicle	trafficCrashReportId				CrimeID	Vehicle	RMS	
dbo	InvolvedVehicle	assocVehNum				VehicleIdentifier	Vehicle	RMS	
dbo	InvolvedVehicle	wasStrikingVehicle				PrimaryParticipantID	CrashEvents	RMS	
dbo	InvolvedVehicle	wasCommVehicle				SecondaryParticipantID	CrashEvents	RMS	
			Parked Vehicle		Parked motor vehicle	VehicleDesignation	Vehicle	RMS	
			Other Fixed Object	Mapped in vehicle type in vehicle table.					
			Pedestrian		Pedestrian				
			Other fixed object	Mapped in vehicle					
			Car						
dbo	InvolvedVehicle	ObjectType	Scooter	type in vehicle table					
ubo	IIIvoiveuvenicie	ObjectType	Bicycle		Bicyclist	NonMotoristType	Person	RMS	
			Other						
			Motorcycle						
			MotorCycle	Mapped in vehicle					
			Moped	type in vehicle table					Suggested new attribute
			Truck	type in venicle table					to NonMotoristType:
			N/A						Segway
			Animal						
					Other remaining attributes				
					Motor Vehicle in transport	VehicleDesignation	Vehicle	RMS	
					Working Vehicle/equipment	VenicleDesignation	Venicie	INVIS	
					Occupant of a non-motor vehicle				
					transportation device				
					Other Cyclist				
					Other Pedestrian (wheelchair,	NonMotoristType	Person	RMS	
					Person in a building, skater,				
					Pedestrian Conveyance)				
					Unknown type of Non-Motorist				
dbo	InvolvedVehicle	ObjectTypeOther		No related asset. Suggest no mapping.					
dha	InvolvedVehicle	dcGovAssetCollisionList		No related mapping asset. Already Covered in the Traffic Event					
dbo	involvedvenicie	ucovasseconisioneist		Specific Types. Suggest no mapping.					
dbo	InvolvedVehicle	driverLastName							
dbo	InvolvedVehicle	driverFirstName					1	<u> </u>	
dbo	InvolvedVehicle	driverMiddleName							
dbo	InvolvedVehicle	driverSex							
dbo	InvolvedVehicle	driverBirthDate							
dbo	InvolvedVehicle	driverStreetAddress		Mapped in Person					
dbo	InvolvedVehicle	driverCity		table.					
dbo	InvolvedVehicle	driverState							
dbo	InvolvedVehicle	driverZip					1		
dbo	InvolvedVehicle	driverMainNumber					1	1	
dbo	InvolvedVehicle	driverWorkNumber					1		
dbo	InvolvedVehicle	driverLicenseState				DrivingLicenseState	Person	RMS	
	InvolvedVehicle	driverLicenseNumber				DrivingLicenseNumber	Person	RMS	1

				Legacy system - Involve	dVehicle Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Da	tabase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	InvolvedVehicle	driverLicenseClass				DrivingLicenseClass	Person	RMS	
dbo	InvolvedVehicle	driverLicenseClassOther							
dbo	InvolvedVehicle	driverInsPolicyNumber							
dbo	InvolvedVehicle	driverInsCompName							
dbo	InvolvedVehicle	driverInsCompNameOther							
dbo	InvolvedVehicle	driverInsExp							
dbo	InvolvedVehicle	agencyName							
dbo	InvolvedVehicle	ownerNotified							
dbo	InvolvedVehicle	ownerLastName							
dbo	InvolvedVehicle	ownerFirstName		Not Required for any					
dbo	InvolvedVehicle	ownerMiddleName		data analysis. Suggest					
dbo	InvolvedVehicle	ownerStreetAddress		no mapping.					
dbo	InvolvedVehicle	ownerCity							
dbo	InvolvedVehicle	ownerState							
dbo	InvolvedVehicle	ownerSex							
dbo	InvolvedVehicle	ownerDOB				1			
dbo	InvolvedVehicle	ownerZip							
dbo	InvolvedVehicle	ownerMainNumber							
dbo	InvolvedVehicle	vehInsCompName							
dbo	InvolvedVehicle	vehicleMake				VehicleMake	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleModel				VehicleModel	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleYear				VehicleYear	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleBody				VehicleStyle	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleBodyOther		No related asset. Suggest no mapping.					
dbo	InvolvedVehicle	vehicleColor		Suggest no mapping.		Color1	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleColorOther				Color2	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleVIN				VINNumber	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleTagNo				TagNumber	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleTagState				LicensePlateState	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleTagYear				RegistrationYear	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleNumOccupants		can be derived			Vernore	11110	
4.50	interventer		NE						
			NW	No related attributes.		1			
			SE	See Notes		ł			
			SW			1			For the NE, NW, SE and
dbo	InvolvedVehicle	vehicleBearing	UNKNOWN		Unknown	1			SW attributes the data
4.50			N		Northbound	DirectionOfTravel	Vehicle	RMS	can be looked at mappir
			S		Southbound		Vernore	11110	mannually as the relate
			E		Eastbound	ł			data elements are very
			Ŵ		Westbound	1			less.
		II.			Other remaining attributes	1			
				l l	Not on roadway	1			
								1	
dbo	InvolvedVehicle	vehConditionComments							
			Yes		Disabling Damage	4			
dbo	InvolvedVehicle	vehicleDisabled	No		No Damage	4			
		<u> </u>	NA		NULL				
					Other remaining attributes	DamageExtent	Vehicle	RMS	
					Functional Damage	4			
					Minor Damage	4			
					Unknown				

			L	egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Databa		Mapping Relation		New Cobalt Data	base		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name		New Schema	Notes
dbo	InvolvedVehicle	skidMarksToImpact		(,	Sub Attributes	SkidMarksBefore	Vehicle	RMS	Notes
dbo	InvolvedVehicle	skidMarksAfterImpact				SkidMarksAfter	Vehicle	RMS	
dbo	InvolvedVehicle	vehicleDamageArea				VehicleDamageInitialContact	Vehicle	RMS	
			Driven Away		Driven Away				
			Left on Scene		Left Near Scene				
			N/A		N/A				
			None Selected		NULL				
dbo	InvolvedVehicle	vehicleStatus	Other		NULL			5146	
			Towed		Towed due to disabling damage	VehicleStatus	Vehicle	RMS	
			Tours d. But Not Due to Dischling Down		Towed, but not due to disabling				
			Towed, But Not Due to Disabling Dam		damage				
			•		Other remaining attributes				
					Held as Evidence				
dbo	InvolvedVehicle	statusLeftOnScene		Already mapped in vehicleStatus					
dbo	InvolvedVehicle	statusTowedBy							
dbo	InvolvedVehicle	statusTowedTo		No related asset.					
dbo	InvolvedVehicle	statusTowingControl		Suggest no mapping.					
dbo	InvolvedVehicle	statusDrivenAwayBy				DrivenAwayBy	Vehicle	RMS	
dbo	InvolvedVehicle	statusNotAvailable		No related asset.					
dbo	InvolvedVehicle	statusOther		Suggest no mapping.					
			Unknown		Unknown				
			Non-Collision: Ran Off Road		* See - MapV1 (in Notes)				
			Non-Collision: Jackknife		Jackknife				
			Non-Collision: Overturn (Rollover)		Overturn / rollover				
			Non-Collision: Downhill Runaway		* See - MapV2 (in Notes)				
			Non-Collision: Cargo Loss or Shift		Cargo/Equipment Loss or Shift				
			Non-Collision: Explosion or Fire		Fire/Explosion				
			Non-Collision: Separation of Units		* See - MapV3 (in Notes)				This asset in the legacy
			Non-Collision: Cross Median /		* See - MapV4 (in Notes)				system has to be mappe
			Centerline						to
			Non-Collision: Equipment Failure (tire,		* See - MapV5 (in Notes)				TrafficEventTypeSpecific
			etc.)						in CrashEvents table in
			Non-Collision: Other		Other Non-collision				the new Cobalt System
			Non-Collision: Unknown		Unknown				through the
			Collision Involving Pedestrian		Pedestrian				MostHarmfulEvent asse
			Collision Involving Motor Vehicle in		Motor vehicle in transport				from the Vehicle Table.
			Transport						
dbo	InvolvedVehicle	item200a	Collision Involving Parked Motor		Parked motor vehicle				Suggested changes to th
			Vehicle		Deiluseusekiele/teeine en eine)				attributes:
			Collision Involving Train		Railway vehicle(train, engine)				Include the following:
			Collision Involving Pedacycle		Pedal cycle				
			Collision Involving Animal		Animal Other fixed object (wall, building,				• Ran Off Road (MapV1
			Collision Involving Fixed Object						Downhill Runaway
			Collision Involving Work Zone		tunnel etc.) Workzone / maintenance				(MapV2)
			Maintenance Equipment						Seperation of units
			Collision Involving Other Movable		equipment				(MapV3)
			Object		* See - MapV6 (in Notes)			1	• Cross Median /
			Collision Involving Unknown Movable						
			Object		* See - MapV7 (in Notes)				Centerline (MapV4)
			Collision: Hit & Run		Hit and run				• Equipment failure
	ı I						I	I	(tire. etc) (MapV5)

			L	egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Databas		Mapping Relation		New Cobalt Data	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name		New Schema	Notes
			Collision Involving Moving Motor		* See - MapV8 (in Notes)				Collision Involving
			Vehicle		See - Map v8 (in Notes)				Other Movable Object
			Not applicable, no more vehicles or		NULL	TrafficEventTypeSpecifics	CrashEvents	RMS	(MapV6)
			event sequences for this vehicle						Collision involving
			Other		Other Non-fixed object				unknown movable object
					Other remaining attributes				(MapV7)
					Bridge Overhead Structure				Collision involving
					Struck by falling, shifting cargo or				moving motor vehicle
					anything set in motion by motor vehicle				(MapV8)
					Bridge Pier or Support				Streetlight Fixtures
					Bridge Rail				Traffic light fixtures
					Cable Barrier				Attenuators
					Commercial Vehicle				Signal Boxes
					Concrete Traffic Barrier				Control Boxes
					Culvert				DDOT Camera
					Curb				Equipment
					D.C. Property				Bollard
					Ditch				<ul> <li>MPD Camera</li> </ul>
					Embankment				Equipment
					Fatality				<ul> <li>Parking Meters</li> </ul>
					Fell/Jumped from Motor Vehicle Fence				Sidewalks
					Fire/Explosion				<ul> <li>Traffic Counting Devices</li> </ul>
					Guardrail End				Tunnel Ceiling
					Guardrail Face				Portable Variable
					Impact Attenuator / Crash Cushion				Message Sign(VMS) <ul> <li>Communication</li> </ul>
					Injury				Cabinets
					Mailbox				
					Other post, pole or support				
					Other property damage				
					Other traffic barrier				
					Traffic sign support				
					Tree (standing)				
	I		1	No voletedeset	Utility pole / light support				
dbo	InvolvedVehicle	item200aOther		No related asset.					
dbo	InvolvedVehicle	item200b		Suggest no mapping.			+ +		
dbo	InvolvedVehicle	item200bOther	1	There are no specific			1 1		
dbo	InvolvedVehicle	item200c		crash events are					
dbo	InvolvedVehicle	item200cOther		collected for every					
dbo	InvolvedVehicle	item200d		vehicle to be mapped.					
dbo	InvolvedVehicle	item200dOther							Suggestions were
dbo	InvolvedVehicle	item201							provided to capture this
dbo	InvolvedVehicle	item2010ther		These assets are being					asset.
dbo	InvolvedVehicle	item202		covered in the			_ <b>_</b>		
dbo	InvolvedVehicle	item2020ther		InvolvedPerson table			-		
dbo	InvolvedVehicle	item203		from legacy system					
dbo	InvolvedVehicle	item2030ther		and mapped there.					
dbo	InvolvedVehicle	item204							
dbo	InvolvedVehicle	item2040ther	1						

				Legacy system - Involve	edVehicle Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	InvolvedVehicle	item210 (Cell Phone/Other Electronic Device Present in Vehicle?)			Other electronic device(navigation device etc.) (See Notes)				In the legacy system thi value was stored in the InvolvedVehicle table an the new application is storing these details at the Person level in the PersonAttribute table. This mapping can be achieved by retrieving the associated personlo from the legacy system and then populating thi value with the personlo retrieved and the associated values for th DRIVER_DISTRACTIONS the PersonAttribute table.
dbo	InvolvedVehicle	item210Other		No related asset. Suggest no mapping.					Suggested changes to th attributes:
			Unknown		Unknown	Attribute (Attribute Type: DRIVER_DISTRACTIONS)	Vehicle	RMS	Include the following: DRIVER_DISTRACTIONS • Personal grooming
			Cell Phone (hand held)		* See - MapV9 (in Notes)				(MapV13)
			Cell Phone (hands free)		* See - MapV10 (in Notes)				<ul> <li>Interacting with pets</li> </ul>
			Reading		* See - MapV11 (in Notes)				(MapV14)
			Writing		* See - MapV12 (in Notes)				<ul> <li>Eating (MapV16)</li> </ul>
		item211	Personal Grooming		* See - MapV13 (in Notes)				<ul> <li>Reading (MapV11)</li> </ul>
dbo	InvolvedVehicle	(Driver/Pedestrian	Interacting w/Pets		* See - MapV14 (in Notes)				<ul> <li>Writing (MapV12)</li> </ul>
		Distraction)	Interacting w/unsecured cargo		External Distraction(outside the vehicle)				<ul> <li>Manually operating electronic</li> </ul>
			Using personal communication technologies		* See - MapV15 (in Notes)				communication device (texting, typing, dialing
		[	Eating		* See - MapV16 (in Notes)				(texting, typing, dialing (MapV15)
			Distracted by passenger(s)		* See - MapV17 (in Notes)				• Talking on hands-free
			N/A		NULL				
			Other		Other inside the vehicle				electronic device
					Other remaining attributes				(MapV10) • Talking on hand-held
					Phone				electronic device (MapV9) • Other activity,
					Not distracted				<ul> <li>electronic device</li> <li>Passenger (MapV17)</li> </ul>
dbo	InvolvedVehicle	item2110ther		No related asset. Suggest no mapping.					

				Legacy system - InvolvedVehicle Table Mapping					
		Old Legacy Databas		Mapping Relation		New Cobalt Data			•
chema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes In the legacy system th
			Unknown		* See - MapV27 (in Notes)				value was stored in th InvolvedVehicle table a
			No Violation		No Contributing Action				the new application i
			Speed		Drove too fast for conditions				storing these details
			Driver Inattention		* See - MapV18 (in Notes)				the Person level in th
			Following Too Close		Followed too closely				PersonAttribute tab
			Improper Passing		Improper passing				This mapping can b
					Operated motor vehicle in erratic,				achieved by retrievi
			Changing Lanes Without Cautioning		reckless, careless, negligent, or				the associated perso
					aggressive manner				from the legacy syst
			Right Turn on Red		Ran red light				and then populating
			Stop Sign		Ran stop sign				value with the perso
			Yield Sign		Failed to yield right of way				retrieved and the
		item212	Red Light Violation		Ran red light				associated values for
dbo	InvolvedVehicle	(Primary Contributing	Flashing / Directional Light		* See - MapV19 (in Notes)				
		Circumstance)	Automobile / Pedestrian Right of Way		Failed to yield right of way				ACTIONS_AT_CRASH the PersonAttribut
			Wrong Way / Side of Street		* See - MapV20 (in Notes)				table.
			Defective Brakes, Lights, etc		* See - MapV21 (in Notes)				
			Fail to Set Parking Brake		* See - MapV22 (in Notes)				Suggested changes to
			Open Door to Traffic		* See - MapV23 (in Notes)				attributes:
			Improper Backing		Improper backing				Include the followi
			Drug / Alcohol Influence		Other contributing action				ACTIONS_AT_CRAS
			Pedestrian Violation		* See - MapV25 (in Notes)	Attribute (Attribute Type:	PersonAttrib	5145	Driver Inattentic
			Driver Vision Obstructed		* See - MapV26 (in Notes)	ACTIONS_AT_CRASH)	ute	RMS	(MapV18)
			Cell Phone / Other Electronic Device		Other contributing action	/			<ul> <li>Flashing / Directio light (MapV19)</li> </ul>
			Other Distraction		* See - MapV27 (in Notes)				Automobile violat
			Road Defects		* See - MapV28 (in Notes)				Pedestrian Violati
			Other		Other contributing action				
					Other remaining attributes				(MapV25)
					Disregarded other traffic sign				Bicycle Violation
					Exceeded post speed limit				<ul> <li>Violated no right t on red restriction</li> </ul>
					Disregarded other road markings				<ul> <li>Wrong way / side street (MapV20)</li> </ul>
					Failed to keep in proper lane				<ul> <li>Defective brakes, lig etc. (MapV21)</li> </ul>
					Improper turn				• Failed to set parki
					Over-correcting/over steering				<ul> <li>brakes (MapV22)</li> <li>Open door to trat</li> </ul>
					Ran off roadway				(MapV23) • Open door to bi
					Swerved or avoided due to wind, slippery surface, motor vehicle, object, non-motorist in roadway etc.				<ul> <li>Driver vision obstru (MapV26)</li> <li>Improper startin</li> <li>Unknown (MapV</li> <li>Road Defects (Map</li> </ul>

			L	egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Databa	ise	Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	InvolvedVehicle	item2120ther		No related asset. Suggest no mapping.					
			Unknown		Unknown				Suggested changes to attributes:
			Backing		Backing				attributes.
			Turning Right		Turning Right				Include the following
			Turning Left		Turning Left				•
			Stopped / Standing: Traffic Lane		Stopped in traffic				items:
			Parked		Parked				
			Entering / Leaving Parked Position		Entering Traffic Lane			• Exiting Drive	<ul> <li>Ran Off road (MapV29</li> </ul>
	InvolvedVehicle	item213	Making "U" Turn		Making U-turn				<ul> <li>Exiting Driveway</li> </ul>
dbo		(Driver Action)	Merging		Entering Traffic Lane				<ul> <li>Entering Driveway</li> </ul>
		(Driver Action)	Ran Off Road		* See - MapV29 (in Notes)	VehicleAction	Vehicle RMS	PMS	<ul> <li>Yield to traffic</li> </ul>
			Changing Lanes		Changing Lanes	VenicieAction	venicie	11115	<ul> <li>Entering highway ram</li> </ul>
			Going Straight		Movements Essentially Straight				<ul> <li>Entering freeway ram</li> </ul>
			Going Straight		Ahead				<ul> <li>Exiting highway ramp</li> </ul>
			Overtaking		Overtaking/passing				<ul> <li>Exiting freeway ramp</li> </ul>
			Slowing / Stopping		Slowing				• Entering a traffic circle
			Avoiding		* See - MapV30 (in Notes)				<ul> <li>Avoiding (MapV30)</li> </ul>
			N/A		NULL				
			Other		Other				Also See Ref 2.0 - for
					Other remaining attributes				additional mapping
					Leaving Traffic Lane				
					Negotiating a curve				details.
dbo	InvolvedVehicle	item213Other				VehicleActionOther	Vehicle	RMS	

			L	.egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Database	2	Mapping Relation		New Cobalt Da	tabase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
			Unknown		Other Vehicle				
			Passenger Auto		Passenger Car/automobile				
			Motorcycle		Motorcycle				
			Moped		Moped/Scooter				
			Bicycle	Update the ObjectType to reflect the vehicle as Bicycle					Here for item214 and
dbo	InvolvedVehicle	item214 (Vehicle Type Private)	Segway	and later map it to NonMotorist in Person Table.					item215, which are vehicle types private and government in the legacy system, are combined
			SUV		SUV (sport utility vehicle)				into a single asset as
			Minivan		* See - MapV31 (in Notes)				VehicleType in the new
			Pick-up Truck		Pickup Truck				Cobalt system. Also there
			Recreational Vehicle		Motorhome/camper/rv(recreational vehicle)				is another asset OwnerType which
			Scooter		Moped/Scooter				identifies if the vehicle is
			N/A		NULL				
			Other		Other Vehicle				private or goverment.
dbo	InvolvedVehicle	item2140ther		No related asset. Suggest no mapping.					In this scenario the
			Unknown		Other Vehicle				mapping has two parts, 1. If the vehicle is either 214 or 215, populate the
			Passenger Auto		Passenger Car/automobile				OwnerType with
			Motorcycle		Motorcycle				appropriate category.
			Moped		Moped/Scooter				2. Then map the
			Bicycle	Update the ObjectType to reflect the vehicle as Bicycle		VehicleType	Vehicle	RMS	corresponding vehicletype to the VehicleType in the Cobalt
			Segway	and later map it to NonMotorist in Person Table.					System. Also in the new system
		item215	SUV		SUV (sport utility vehicle)				the bicycle is classified as
dbo	InvolvedVehicle	(Vehicle Type Government)	Minivan		Passenger Van				Non-Motorist, so prior to
			Pick-up Truck		Pickup Truck				mapping this field update
			Recreational Vehicle		Motorhome/camper/rv(recreational vehicle)				the ObjectType in the InvolvedVehicle table in
			Scooter		Moped/Scooter				the legacy system with
			Bus (Seats 9-15 people, incl driver)		Bus				appropriate Bicycle
			Bus (more than 15 people, incl driver)		Bus				attributes from item214 and 215. And them map
			Truck		Large/heavy Truck				the objectTypes with
			Marked Police Car		Other Vehicle				appropriate Bicycles in
			Unmarked Police Car		Other Vehicle				the NonMotorist in the
			Fire Truck		Other Vehicle				new system.
			Other Emergency Vehicle		Other Vehicle				
			N/A		NULL				
			Other		Other Vehicle				Suggested New

				egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Database	e	Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
			•		Other remaining attributes				Juggested New
					Atv(all-terrain vehicle)				Attributes:
					Cargo Van				Streetcar
					Construction/industrial equipment				Minivan <mark>(Mapv31)</mark>
					Drugs/Narcotics				
					Farm Equipment				
					Firearms				
					Other Small/light truck				
					Trailer				
					WaterCraft/boat				
dbo	InvolvedVehicle	item2150ther		No related asset.					
ubu	Involvedvenicie	itemzisotnei		Suggest no mapping.					
			Unknown Heavy Truck, Unclassified, >		Truck more than 10,000 lbs (4,536				
			10,000 lb		kg) cannot classify				
			Passenger Auto (only if vehicle has HM		Passenger auto (only if vehicle has				
			Placard)		HM placard)				
			Light Truck (only if vehicle has HM		Vehicle 10,000 pounds or less				
			Placard)		placarded for hazardous materials				
			Bus (Seats 9-15 people)		Bus/large van(seats for 9-15				
					occupants, including driver)				
			Bus (Seats more than 15 people)		Bus (seats for more than 15				
ماله م	lieu a lua d'Alabia la	item216			occupants, including driver)				
dbo	InvolvedVehicle	(Vehicle Type Commercial)			Single-unit truck (2-axle and gvwr	VahieleConfiguration	Vehicle	RMS	
			Single-Unit Truck (2 axles, 6 tires)		more than 10,000 lbs (4,536 kg))	VehicleConfiguration	venicie		
			Single-Unit Truck (3 or more axles)		Single-unit truck (3 or more axles)				
			Truck / Trailer		Truck pulling trailer(s)				
			Truck / Tractor (Bobtail)		Truck tractor (bobtail)				
			Tractor / Semitrailer		Truck tractor/semi-trailer				
			Tractor / Double		Truck tractor/double				
			Taxi Cab		Taxi cab				
			N/A Other		N/A				
			Other		Other Other remaining attributes				
					Unknown				
				No related asset.	Onknown				
dbo	InvolvedVehicle	item216Other		Suggest no mapping.					
			Unknown		Unknown				
			School		School				
		ite 247	Transit		Transit/co				
dbo	InvolvedVehicle	item217	Intercity		Intercity				
		(Bus Type)	Charter		Charter/to	BusUse	Vehicle	RMS	
			N/A, Not a Bus		Not A Bus				
			Other		Other				
					Other remaining attributes				
					Shuttle				
dbo	InvolvedVehicle	item2170ther		No related asset.					
ubo	involveuvenicie	item21/Other		Suggest no mapping.					

			Le	egacy system - Involv	edVehicle Table Mapping				
		Old Legacy Databa	ise	Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
			Unknown		Unknown				
			Bus (Seats 9-15, incl driver)		* See - MapV32 (in Notes)				
			Bus (Seats more than 15, including		Bus (seats for more than 15				
			driver)		Occupants, Including Driver)				
			Van / Enclosed Box		Van/enclosed box				
			Cargo Tank		Cargo Tank				
			Flatbed		Flatbet				
			Dump		Dump				
		item218	Concrete Mixer		Concrete Mixer				
dbo	InvolvedVehicle	(Cargo Body Type)	Auto Transporter		Auto Transporter				
		(Cargo bouy Type)	Garbage / Refuse		Garbage/refuse				Suggested changes to
			Grain, Chips, Gravel		Grain/chips/gravel				attributes:
			Pole		Pole-trailer	CargoBodyType	Vehicle	RMS	Include the following
			Log		Log	CargobodyType	Venicie	RIVIS	items:
			Intermodal Chassis		Intermodal Container Chassis				. Bus (Seats 9-15, incl
			Vehicle-Towing Another Motor Vehicle		Vehicle towing another vehicle				driver) <mark>(MapV32)</mark>
			N/A		NULL				
			Other		Other	-			
					No Cargo Body (bobtail, Light Motor Vehicle With Hazardous Materials (hm) Placard, etc.) Not Applicable (motor vehicle 10,000 lbs (4,536 kg) or less not displaying hm placard)				
dbo	InvolvedVehicle	item2180ther				CargoBodyTypeOther	Vehicle	RMS	
dbo	InvolvedVehicle	item219 (US DOT #)		See Notes					This data is not provided by MPD from their datawarehouse. Can be requested to MPD to provide this information if this is useful to DDOT? And can be mapped.
dbo	InvolvedVehicle	item2190ther		No related asset. Suggest no mapping.					
dbo	InvolvedVehicle	item220 (MC #/MX #)				MotorCarrierNumber	Vehicle	RMS	
dbo	InvolvedVehicle	item221		No related asset.					
		(State #)		Suggest no mapping.	ļļ				
dbo	InvolvedVehicle	item222		No related asset.					
		(Issuing State)		Suggest no mapping.					

			L	egacy system - Involve	edVehicle Table Mapping				
		Old Legacy Database	2	Mapping Relation		New Cobalt Data	base		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
			Unknown		Unknown				Suggested changes to
			10,000 lbs or less		10,000 lbs or less	4			attributes:
			10,000 ibs of itess 10,001 - 26,000 lbs		10,001 - 26,000 lbs	4			Replace "More than
			10,001 20,000 103		10,001 20,000 103	4			26,000 lbs" with:
dbo	InvolvedVehicle	item223 (Gross Vehicle/Combination	Greater than 26,000 lbs		More than 26,000 lbs	GrossWeight	Vehicle	RMS	• 26,001 – 50,000 lbs Include the following
		Weight Rating)	N/A		Not Applicable				items: • 50,001 – 80,000 lbs • More than 80,000 lbs
			Unknown		NULL				
			Interstate Carrier		InterstateCarrier				
			Intrastate Carrier		IntrastateCarrier				
dbo	InvolvedVehicle	item224 (Interstate Vehicle Type)	Not In Commerce: Government (Trucks and Buses)		Not in commerce/government	MotorCarrierType	Vehicle	RMS	
		(interstate venicle rype)	Not In Commerce: Other Truck (over 10,000 lbs)		Not in commerce/other truck				
			N/A		NULL				
			Other		Other				
dbo	InvolvedVehicle	item224Other		No related asset. Suggest no mapping.					
dbo	InvolvedVehicle	item225 (Carrier Name)				MotorCarrierName	Vehicle	RMS	
dbo	InvolvedVehicle	item226a (Street)		Concatenate the					
dbo	InvolvedVehicle	item226b (City)		complete motorcarrier address from 226 a - d		MotorCarrierAddress	Vehicle	RMS	
dbo	InvolvedVehicle	item226c (State)		into Motorcarrier		WotoreamerAddress	Verneie	NIVI3	
dbo	InvolvedVehicle	item226d (Zipcode)		address					
dbo	InvolvedVehicle	item227 (Haz Mat Placard? Yes/no	Yes		TRUE				
			No		FALSE	Is Hazardous Material Placard	Vehicle	RMS	
			N/A		NULL	1			
			NULL		NULL				
dbo	InvolvedVehicle	item2270ther		No related asset. Suggest no mapping.					
dbo	InvolvedVehicle	item228 (Placard Number)				HazmatNumber	Vehicle	RMS	
dbo	InvolvedVehicle	item229 (Haz Mat Class Number)		See Notes.					This data is not provided by MPD from their datawarehouse. Can be requested to MPD to provide this information if this is useful to DDOT? And can be mapped.

	Legacy system - InvolvedVehicle Table Mapping										
		Old Legacy Database		Mapping Relation		New Cobalt Datab	base				
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes		
		item230	Yes		TRUE						
dbo	InvolvedVehicle	(Hazardous Cargo Materials	No		FALSE	IsHazardousMaterialSpilled	Vehicle	RMS			
ubo	Involveuvenicie		N/A		NULL	Isnazaruousiviateriaispilleu	venicie				
		Released?)	NULL		NULL						

				Legacy system - Involv	edPerson Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Dat	abase		
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name		New Schema	Notes
dbo	InvolvedPerson	involvedPersonId				PersonID	Person	RMS	
dbo	InvolvedPerson	trafficCrashReportId				CrimeID	Person	RMS	
dbo	InvolvedPerson	vehicleAssocNum				VehicleIdentifier	Vehicle	RMS	This attribute has to be linked through the PersonVehicle and Vehicle Tables
			Pedestrian		Pedestrian	NonMotoristType	Person	RMS	
			Passenger		Passenger				
dbo	InvolvedPerson	type	Driver		Driver	PersonType	Person	RMS	
			None		NULL				
		lI			Other remaining attributes				
					Occupant of a non-motor vehicle				
					transportation device				
					Bicyclist				
					Other Cyclist	NonMotoristType	Person	RMS	
					Other Pedestrian (wheelchair,	Nonwotoristrype	i cison	11113	
					Person in a building, skater,				
					Pedestrian Conveyance)				
					Unknown type of Non-Motorist				4
					NON-MOTORIST Occupant of Motor Vehicle Not in				
					Transport	PersonType	Person	RMS	
					REPORTING PERSON IN INCIDENT	reisonrype	reison	RIVIS	
					WITNESS IN TRAFFIC CRASH				
dbo	InvolvedPerson	lastName				LastName	Person	RMS	
dbo	InvolvedPerson	firstName				FirstName	Person	RMS	
dbo	InvolvedPerson	middleName				MiddleName	Person	RMS	
dbo	InvolvedPerson	streetAddress				Address1	Person	RMS	
dbo	InvolvedPerson	city				City	Person	RMS	
dbo	InvolvedPerson	state				State	Person	RMS	
dbo	InvolvedPerson	zip				ZIP5	Person	RMS	
dbo	InvolvedPerson	mainNumber				HomePhoneNumber	Person	RMS	
dbo	InvolvedPerson	sex				Sex	Person	RMS	
dbo	InvolvedPerson	age				Age	Person	RMS	Create a new asset in the Person Table and map to it.
dbo	InvolvedPerson	dcGovtEmployee				IsDCEmployee	Person	RMS	
dbo	InvolvedPerson	wasInjured		Not required as the injury is mapped					
dbo	InvolvedPerson	wasInjuredUnknown		seperately and it would be duplication.					
dbo	InvolvedPerson	wasTreatmentRefused				WasTreatmentRefused	Person	RMS	
dbo	InvolvedPerson	wasTakenToHospital		No related asset. Suggest no mapping.					
dbo	InvolvedPerson	takenTo				HospitalTreatedAt	Person	RMS	

					edPerson Table Mapping				
		Old Legacy Database		Mapping Relation		New Cobalt Data			
chema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
dbo	InvolvedPerson	takenBy				HospitalTakenBy	Person	RMS	
dbo	InvolvedPerson	major Crash Notified		No related asset. Suggest no mapping.					
dbo	InvolvedPerson	teleNotified				IsTeleNotified	Crime	RMS	
dbo	InvolvedPerson	relativeNotified				IsRelativeNotified	Person	RMS	
			None		NULL				
			UnKnown		Unknown				
dbo	InvolvedPerson	status	Admitted		Hospital Admitted				
ubo	involveur erson	516165	Unknown		Unknown				
			Released		Hospital Released				
			N/A		NULL	MedicalStatus	Person	RMS	
					Other remaining attributes				
					Paramedics /emts				
					Refused Medical Aid				
					Tecc Kit Used				
					Will Seek Own Doctor				
					Front	LocationInVehicleRow			
			Driver		Left (usually the motor vehicle or motorcycle driver except for postal vehicles and same foreign vehicles)	LocationInVehicleSeat			
					Front	LocationInVehicleRow	-		
			Front Center Seat		Middle	LocationInVehicleSeat	-		
					Front	LocationInVehicleRow	1		
			Front Passenger Seat		Right	LocationInVehicleSeat			
					Second	LocationInVehicleRow	-		
			Rear Left Seat (behind driver)		Left (usually the motor vehicle or motorcycle driver except for postal vehicles and same foreign vehicles)	LocationInVehicleSeat			
			Rear Center Seat		Second	LocationInVehicleRow			
					Middle	LocationInVehicleSeat			
		item201	Rear Right Seat		Second	LocationInVehicleRow	_		
dbo	InvolvedPerson	(Seat Location Code)			Right	LocationInVehicleSeat			
			SUV / Caravan		Other Row (bus, 15 Passenger van etc.)	LocationInVehicleRow	PersonVehicl e	RMS	
					Other	LocationInVehicleSeat			
			Motorcycle / Moped Passenger		Second	LocationInVehicleRow			
					Other	LocationInVehicleSeat			
			Bus Occupant		Other Row (bus, 15 Passenger van etc.)	LocationInVehicleRow			
					Other	LocationInVehicleSeat			
			Pedestrian	Not Required as Pedestrians and					

				Legacy system - Involv	vedPerson Table Mapping								
		Old Legacy Database	2	Mapping Relation	New Cobalt Database								
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes				
			Bicycle Rider	Bicyclists are mapped to Non-Motorists									
			N/A		Unknown	LocationInVehicleRow							
					Unknown	LocationInVehicleSeat							
			Other: Skateboard, Tricycle, etc.	Not Required as it is mapped to Non- Motorists									
					Other remaining attributes								
					Third	LocationInVehicleRow							
				No related asset.	Fourth								
dbo	InvolvedPerson	item2010ther		Suggest no mapping.									
			Use Unknown		Unknown								
				Not Installed		Not applicable							
			Not Fastened		None used-motor vehicle occupant								
			Belt Failed		None used-motor vehicle occupant								
dbo	InvolvedPerson	item202 (Seat Belt/Safety Code)		Fastened		Shoulder and lap belt used	Restraints						
use			Child Restraint		Child restraint system - unknown								
									Improperly Worn		None used-motor vehicle occupant		
			N/A		Not applicable (non-motorist)								
			Other		Other		PersonVehicl						
			Helmet		Helmet, unknown if DOT - compliant	HelmetUsed	e	RMS					
					Other remaining attributes								
					Booster Seat								
					Child restraint system - rear facing								
					Child restraint system - forward	Restraints							
				facing Lap belt only used									
				Restraint used-type unknown									
					DOT -compliant motorcycle helmet		1						
					No helmet	HelmetUsed							
					Other helmet	nemetoseu							
					Unknown if helmet worn								
dbo	InvolvedPerson	item2020ther		No related asset. Suggest no mapping.									

				Legacy system - Involv	vedPerson Table Mapping					
		Old Legacy Database	e	Mapping Relation		New Cobalt Da	tabase			
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes	
			Unknown		Deployed Unknown					
			Air Bag Installed		Aig Bag Installed					
		item203	Air Bag Deployed		Deployed-combination					
dbo	InvolvedPerson	(Air Bag Code)	Air bag Failed		Not deployed		PersonVehicl			
			Side-Impact Airbags		Deployed-side	AirBagDeployed		RMS		
			N/A		Not applicable	Andagoepioyea	e	TRIVIS		
			Other		Deployed-other (knee, air belt etc.)					
			·		Other remaining attributes					
					Deployed-curtain					
					Deployed-front					
dbo	InvolvedPerson	item2030ther		No related asset. Suggest no mapping.						
			Unknown		Unknown					
	InvolvedPerson		Partial		Ejected, Partially					
dbo		item204	Total		Ejected, Totally	EjectedFromVehicle	PersonVehicl	RMS		
			None		Not ejected		e			
			N/A		Not applicable					
			Other		Unknown					
dbo	InvolvedPerson	item2040ther		No related asset. Suggest no mapping.						
			Unknown		Unknown					Create a new asset
			No Injury		No Injury				"Injury" in the Person	
			Fatal		Fatal				Table and map the legac data to this asset. For the new data too an	
			Disabling Injury		Suspected Serious Injury				algorithm has to be established to map all th	
dbo	InvolvedPerson	item205 (Injury Code)	Non-Disabling Injury		Suspected Minor Injury	Injury	Person	RMS	derived injury code from the PersonInjury Table to	
	involvedi ersori	(See 'Notes' Column)	Complaint of Pain, But No Visible Injury		Possible Injury	n gur y			this asset. In the Present Cobalt System, the injury are collected at a granular level. These details have	
			N/A		NULL				to be combined as show in the <b>Reference Doc 1.</b>	
			Other		NULL				(PersonInjury)	
dbo	InvolvedPerson	item2050ther		No related asset. Suggest no mapping.						

				Legacy system - Involv	edPerson Table Mapping						
		Old Legacy Database		Mapping Relation	New Cobalt Database						
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes		
			Unknown		Unknown						
		F	7		Asleep or fatigued	1					
dbo	InvolvedPerson	item206			III (sick), fainted	1					
400		(Driver/Pedestrian Condition)	Physical Defect		Physically impaired						
		Γ	Asleep		Asleep or fatigued	PERSON_CONDITION	PersonAttrib	RMS			
		F	Normal		Apparently normal	PERSON_CONDITION	ute	RIVIS			
		Γ	Other		Other						
					Other remaining attributes						
					Emotional (depressed, angry,						
					disturbed, etc.)						
					Under the influence of medications / drugs / alcohol						
dbo	InvolvedPerson	item2060ther		No related asset. Suggest no mapping.							
			Unknown		FALSE						
		F	Had not been drinking		FALSE	1					
dbo	InvolvedPerson	item207	Obviously Drunk		TRUE	SuspectedOfConsumingAlcohol	Person	RMS			
		(Impairment)	Ability Impaired		TRUE			_			
		F	Ability not Impaired		FALSE	T					
		F	Other		FALSE	1					
dbo	InvolvedPerson	item2070ther		No related asset. Suggest no mapping.							
			No Test Conducted		NULL						
			Urine		Urine						
dbo	InvolvedPerson	item208	Blood		Blood	TestType	LabTest	RMS			
450	involveur erson	(Type of test conducted)	Breath		Breath	i cotrype	Labrest				
			N/A		NULL						
			Other		Other						
dbo	InvolvedPerson	item2080ther		No related asset. Suggest no mapping.							
dbo	InvolvedPerson	item209 (Blood Alcohol Content)		See Notes (*P1)		TestResult	LabTest	RMS	(*P1) - This primary value to be linked is the item209 from the legacy system. If this value is NULL, then the corresponding testResult value has to be linked to the TestResult attribute in the LabTest Table.		
dbo	InvolvedPerson	item2090ther		No related asset. Suggest no mapping.							
dbo	InvolvedPerson	item210		Mapped in vehicle							
dbo	InvolvedPerson	item210Other		table as this relates to							
dbo	InvolvedPerson	item211		driver							

	Legacy system - InvolvedPerson Table Mapping													
Old Legacy Database				Mapping Relation	lapping Relation New Cobalt Database									
Schema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes					
dbo	InvolvedPerson	item2110ther		unver										
dbo	InvolvedPerson	testResult		See Notes (*P1)		TestResult	LabTest	RMS	See Notes (*P1)					

Reference 1.0 (PersonInjury)					
MPD Injury Classification	MMUCC Classification				
Fatal	Fatal				
Apparent Broken Bones Concussion Loss of Teeth Other Major Injury Severe Laceration Unconsciousness	Suspected Serious Injury	<u>Notes:</u> MPD presently collects injury details of the person in granular details as shown in the Injury Classification to the left. Additional attributes are required			
Abrasions Apparent Minor Injury Bleeding Bruises Minor Cuts Swelling	Suspected Minor Injury	as per new MMUCC and are already entered into GitHub. This framework provides the officer with the best details for accurately assessing the injury severity.			
Discomfort Pain Possible Internal Injury	Possible Injury	<u>Note:</u> DDOT will have to combine the injury classification to derive			
None	No Injury	the MMUCC classification.			
Unknown	Unknown				
Additional Attributes-Suggester	<u>d</u>				
Suspected serious skull, chest or abdominal injury Crush Injuries Significant burns (second and third degree burns over 10% or more of the body) Paralysis	Suspected Serious Injury				
Momentary loss of consciousness					

		Old Legacy Database		Mapping Relation		New Schema         Column Name       Table Name       New Schema         FirstHarmfulEventImpact       Crash       RMS			
hema	Table Name	Column Name	Sub Attributes	(Notes)	Sub Attributes	Column Name	Table Name	New Schema	Notes
			Unknown		Unknown				
			Right Angle		Angle				
			Left Turn Hit Vehicle	Map to - V1	Angle				
			Right Turn Hit Vehicle	Map to - V2	Angle				
			Rear End		Front To Rear				
		item189	Side Swiped		Sideswipe, Same Direction			RMS	
			Head On		Front To Front				
		Additional Mapping Details -	Parked Vehicle		Unknown				
		If the item213 of InvolvedVehicle table in the legacy system is a NULL	Fixed Object		Other				
dbo	TrafficCrashReport		Ran Off Roadway	Map to - V3	Other				
ubo	manicerasinteport	value, this value can be filled	Left Turn Hit Pedestrian	Map to - V1	Angle				
		in from the item189 of TrafficCrashReport table based on the Mappings shown.	Right Turn Hit Pedestrian	Map to - V2	Angle	FirstHarmfulEventImpact	Crash		
			Straight Hit Pedestrian	Map to - V4	Front To Front				
			Backing Hit Moving Vehicle		Rear To Side				
			Backing Hit Parked Vehicle		Rear To Side				
			Backing Hit Pedestrian	Map to - V5	Other				
			Non-Collision Accident		Other				
			Under ride		Other				
			Override		Other				
			Other		Other				
					Other remaining attributes				
					Sideswipe, Opposite Direction				
					Rear To Rear				
		<u>г</u>				[	1		
		–	Unknown		Unknown				
			Backing	V5	Backing				

			Unknown		Unknown				
			Backing	V5	Backing	1			
			Turning Right	V2	Turning Right	1			
			Turning Left	V1	Turning Left	]			
			Stopped / Standing: Traffic Lane		Stopped in traffic	]			
			Parked		Parked	]			
			Entering / Leaving Parked Position		Entering Traffic Lane	]			
		lvedVehicle item213 (Driver Action)	Making "U" Turn		Making U-turn	VehicleAction	Vehicle		
dbo	InvolvedVehicle		Merging		Entering Traffic Lane				
			Ran Off Road	V3	Other			RMS	
			Changing Lanes		Changing Lanes			_	
			Going Straight	V4	Movements Essentially Straight				
				••	Ahead	1			
			Overtaking		Overtaking/passing				
			Slowing / Stopping		Slowing				
			Avoiding		Other				
			N/A		NULL				
			Other		Other	]			
					Other remaining attributes				
					Leaving Traffic Lane				