

Government of Nepal
Ministry of Physical Infrastructure and Transport
National Road Safety Council

Development of Nepal Road Crash Database System (NRCDS)

Final Report Volume 2 Appendices



Submitted jointly by
Partha Parajuli, Road Safety Engineer/ Team Leader (International)
Anthony Eagle, Road Crash Database Specialist (International)
Naresh Shrestha, Road Crash Database Specialist (National)

November 2016

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(NRCDS)**

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Volume 2: Appendices

Table of Contents

APPENDIX 1.....	1
CRASH REPORT FORMS	1
APPENDIX 2.....	19
LIST OF DESCRIPTIVE CRASH CODES.....	19
APPENDIX 3.....	26
LIST OF POLICE STATIONS AND CODES.....	26
APPENDIX 4.....	40
LIST OF DISTRICT POLICE OFFICES AND CODES.....	40
APPENDIX 5.....	42
TEMPLATES OF DESCRIPTIVE CRASH CODES	42
APPENDIX 6.....	44
EXAMPLE OF CRASH DIAGRAM WITH DCC TEMPLATES.....	44
APPENDIX 7.....	46
HOW TO COMPLETE CRASH REPORT FORMS	46
APPENDIX 8.....	49
NRSIMS SYSTEM ARCHITECTURE AND DATA FLOW CHART	49
APPENDIX 9.....	53
NOTES OF WORKSHOPS AND MEETINGS.....	53
APPENDIX 10.....	86
LIST OF PERSONS CONTACTED.....	86
APPENDIX 11.....	90
NRCDS MANAGEMENT MANUAL	90
APPENDIX 12.....	226
NRCDS USERS' MANUAL.....	226

APPENDIX 1

CRASH REPORT FORMS

- A: Existing Nepal Crash Report Form**
- B: Proposed Nepal Crash Report Form with Minimal Changes**
- C: Proposed Nepal Crash Report Form for Pilot Project**
- D: Crash Report Forms from other Countries**

Appendix 1A: Existing Nepal Crash Report Form (Page 1)

TRAFFIC POLICE OF NEPAL ROAD ACCIDENT REPORT						1. Report No.		2. Computer No.															
						3. Police Station			4. District														
5. No. of Vehicles Involved			<input type="text"/>			9. Accident Severity			10. Day 11. Month 12. Year														
6. No. of Driver Casualties			<input type="text"/>			1. Fatal			Date <input type="text"/>														
7. No. of Passenger Casualties			<input type="text"/>			2. Serious			13. Day of Week														
8. No. of Pedestrian Casualties			<input type="text"/>			3. Minor			14. Time (24 hours) Hour Minute														
4. Damage			<input type="text"/>						<input type="text"/>														
15. Junction Type				16. Traffic Control				17. Collision Type				18. Movement											
1. Not at junction				5. Y				1. None				9. Hit Pedestrian				1. 1 Way Street							
2. +				6. C				2. Centreline				10. Hit Animal				2. 2 Way Street							
3. T				7. Other				3. Ped Crossing				11. Other				19. Weather							
4. T								4. Police				5. Overturned Vehicle				1. Fair							
								5. Traffic Signals				6. Hit Object in Road				2. Rain							
								6. Stop Sign				7. Hit Object off Road				3. Fog							
								7. Give Way Sign				8. Hit Parked Vehicle				4. Smoke/Dust							
								8. Other															
20. Light			21. Road Character			22. Surface Type			23. Road Condition			24. Surface Condition			25. Roadworks			26. Hit & Run					
1. Daylight			1. Straight + Flat			1. Asphalt			1. Good			1. Dry			1. Yes			1. Yes					
2. Night (Unlit)			2. Curve only			2. Gravel			2. Damaged			2. Wet			2. No			2. No					
3. Night (Lit)			3. Incline only			3. Earth						3. Muddy											
			4. Curve + Incline									4. Flooded											
			5. Bridge (Name of River)																				
Name of City / Town						Office use		XY Map No.		Route		Node Map											
Location						Urban/ Rural <input type="checkbox"/>		X = <input type="text"/>		Km <input type="text"/>		Node 1 <input type="text"/>											
Location km from towards..... <small>(Town/Village) (Town/Village)</small>						Town/ Village <input type="checkbox"/>		Y = <input type="text"/>		100m <input type="checkbox"/>		Node 2 <input type="text"/>											
Accident Location Sketch						Collision Diagram Sketch																	
Show site in relation to prominent landmarks such as bridges or Km posts. Mark distances to the landmarks.						Mark the position and direction of each vehicle and details of the road layout at the site of the accident.																	
Police description of accident						Witnesses (Name, Age, Address, Signature)																	
Reporting Officer Name						Rank																	
Reviewing Officer Name						Rank																	
Action Taken / Recommendation																							

Appendix 1A: Existing Nepal Crash Report Form (Page 2)

VEHICLE 1		38. Vehicle Registration No. 		DRIVER 1		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
1. Bicycle 7. Mini Bus 2. Rickshaw 8. Bus 3. Motor Cycle 9. Truck 4. Autorickshaw 10. Other 5. Car 6. Pick up		1. Right Turn 7. Overtaking 13. Parked (on) Road 2. Left Turn 8. Going Ahead 3. 'U' Turn 9. Reversing 14. Other 4. Cross Traffic 10. Sudden Start 5. Merging 11. Sudden Stop 6. Diverging 12. Parked (off) Road					
41. Loading		42. Vehicle Defect		48. Driver Sex		49. Age	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		50. Driver Injury 1. Fatal 2. Serious 3. Minor 4. Uninjured	
43. Vehicle Damage		44. Ownership		51. Driver Error		52. Alcohol	
1. None 7. Multiple 2. Front 8. Other 3. Rear 4. Right 5. Left 6. Roof		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army				1. Not Suspected 2. Suspected	
						53. Seat belt/Helmet in use	
						1. Yes 2. No	

VEHICLE 2		38. Vehicle Registration No. 		DRIVER 2		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
1. Bicycle 7. Mini Bus 2. Rickshaw 8. Bus 3. Motor Cycle 9. Truck 4. Autorickshaw 10. Other 5. Car 6. Pick up		1. Right Turn 7. Overtaking 13. Parked (on) Road 2. Left Turn 8. Going Ahead 3. 'U' Turn 9. Reversing 14. Other 4. Cross Traffic 10. Sudden Start 5. Merging 11. Sudden Stop 6. Diverging 12. Parked (off) Road					
41. Loading		42. Vehicle Defect		48. Driver Sex		49. Age	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		50. Driver Injury 1. Fatal 2. Serious 3. Minor 4. Uninjured	
43. Vehicle Damage		44. Ownership		51. Driver Error		52. Alcohol	
1. None 7. Multiple 2. Front 8. Other 3. Rear 4. Right 5. Left 6. Roof		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army				1. Not Suspected 2. Suspected	
						53. Seat belt/Helmet in use	
						1. Yes 2. No	

Passenger Casualties							
Name & Address				Complete tables using codes from bottom panel			
54. Veh. No	55. Sex	56. Age	57. Injury	58. Position	59. Action	60. Belts/Helmets	


Pedestrian Casualties						
Name & Address				61. Sex	62. Age	63. Injury

57/63. Passenger Injury	58. Passenger Position	59. Passenger Action	60. Seat Belt/Helmet In Use	64. Pedestrian Location	65. Pedestrian Action
1. Fatal 2. Serious 3. Minor	1. Front Seat 2. Rear Seat 3. M/cycle Passenger 4. Bus Passenger 5. Outside-Sitting 6. Outside-Standing	1. None 2. Boarding 3. Alighting 4. Falling 5. Other	1. Yes 2. No	1. On Pedestrian Crossing 2. Within 50m Ped. Crossing 3. On Central Refuge 4. In Road Centre not in 1-3 5. On Footpath/Verge	1. None 2. Crossing Road 3. Walking along Road 4. Walking along Edge 5. Playing on Road 6. On Footpath
			66. Alcohol		
			1. Not Suspected 2. Suspected		

(Changes are made in Page 1 Only: Electronic copy shows changes in red)

3

Appendix 1C: Proposed Nepal Crash Report Form for Pilot Project

 NEPAL POLICE CRASH REPORT <small>Page 1 of 4</small>	
How many forms used for this crash <input type="text"/>	
1. Report Number <input type="text"/>	
2. DELID <input type="text"/>	
3. Police Station Number <input type="text"/>	
4. District Number <input type="text"/>	9. Accident Severity <input type="text"/>
5. No. of Vehicles <input type="text"/>	Fatal <input type="text"/>
6. No. Drivers Involved <input type="text"/>	Serious injury <input type="text"/>
7. No. Passenger Casualty <input type="text"/>	Minor injury <input type="text"/>
8. No. Pedestrian Casualty <input type="text"/>	Property <input type="text"/>
10. Year (yyyy) <input type="text"/>	11. Month (mm) <input type="text"/>
12. Day (dd) <input type="text"/>	13. Day (name) <input type="text"/>
14. Time (24 hour) <input type="text"/>	15. Junction Type <input type="text"/>
<input type="checkbox"/> Not a Intersection. A section of road. <input type="checkbox"/> "Y" Intersection <input type="checkbox"/> "T" Intersection <input type="checkbox"/> "T" Intersection <input type="checkbox"/> Offset Intersection	
16. Traffic Control <input type="text"/>	17. Collision type (see notes) <input type="text"/>
Centreline <input type="text"/>	Side Swipes - same direction <input type="text"/>
Police (on duty) <input type="text"/>	Out of Control On/Off Road <input type="text"/>
None <input type="text"/>	Other <input type="text"/>
Pedestrian Crossing <input type="text"/>	Overtaking <input type="text"/>
Operating Traffic Signals <input type="text"/>	At Angle - Intersection <input type="text"/>
Stop Sign <input type="text"/>	Hit Object on road <input type="text"/>
Give Way Sign <input type="text"/>	Passenger. Misc. or other <input type="text"/>
18. Movement <input type="text"/>	19. Weather <input type="text"/>
One Way <input type="text"/>	Fog <input type="text"/>
Two Way <input type="text"/>	Clear / fine <input type="text"/>
	Snowing <input type="text"/>
	Overcast <input type="text"/>
	Smoke <input type="text"/>
	Raining <input type="text"/>
	Dusty <input type="text"/>
20. Light <input type="text"/>	Daylight <input type="text"/>
	Dawn/Dust <input type="text"/>
	Darkness - no lighting <input type="text"/>
	Darkness - Street lighting not working <input type="text"/>
	Darkness - Street lighting working <input type="text"/>
Name and details of the road the crash occurred on <input type="text"/>	
What direction does the road run (South to North or East to West) <input type="text"/>	
Posted Speed <input type="text"/>	How many lanes each direction <input type="text"/>
21. Road Character. Horizontal - <input type="text"/>	Vertical - <input type="text"/>
Facing in Direction (Nth, Sth East or West) <input type="text"/>	Facing in Direction (Nth, Sth East or West) <input type="text"/>
Is the road straight <input type="text"/>	Is the road flat <input type="text"/>
or curved to the left <input type="text"/>	or curved to the left <input type="text"/>
or curved to the right <input type="text"/>	or curved to the right <input type="text"/>
Is the road straight <input type="text"/>	Is the road flat <input type="text"/>
or curved to the left <input type="text"/>	or curved to the left <input type="text"/>
or curved to the right <input type="text"/>	or curved to the right <input type="text"/>
Structure - <input type="text"/>	
If on a Bridge or causeway supply river name. <input type="text"/>	
22. Surface Type <input type="text"/>	24. Temporary Conditions <input type="text"/>
Asphalt <input type="text"/>	Wet <input type="text"/>
Gravel <input type="text"/>	Muddy <input type="text"/>
Earth <input type="text"/>	Flooded <input type="text"/>
23. Surface Condition <input type="text"/>	26. Hit & Run <input type="text"/>
Rutted <input type="text"/>	Icy <input type="text"/>
Good <input type="text"/>	Dry <input type="text"/>
Speed Bump <input type="text"/>	Snow <input type="text"/>
Pot Holed <input type="text"/>	Other <input type="text"/>
Corrugated <input type="text"/>	
Other <input type="text"/>	
25. Road Works <input type="text"/>	
Yes <input type="text"/>	
No <input type="text"/>	
Is the crash within 20 metres of an intersection <input type="text"/>	
Yes <input type="text"/>	No <input type="text"/>
If yes give road names <input type="text"/>	
Name of Intersecting road(s) <input type="text"/>	Rd.No. <input type="text"/>
	Rd.No. <input type="text"/>
	Rd.No. <input type="text"/>
Latitude <input type="text"/>	Longitude <input type="text"/>
Name of City / Town <input type="text"/>	
Location / Area <input type="text"/>	
Location <input type="text"/>	Towards <input type="text"/>
Kilometers from <input type="text"/>	Town / Village <input type="text"/>
Prominent Landmark <input type="text"/>	
What distance is the crash from the landmark <input type="text"/>	direction from the landmark <input type="text"/>

NEPAL POLICE CRASH REPORT Page 2 of 4																																																								
26. Vehicles		1	2	3	4	Vehicle Type	1	2	3	4	27. Driver / Rider / Controller																																													
Travel Direction						Push Cart					1 2 3 4 In Veh. No. <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Injury <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Sex <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Age <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Alcohol <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> License Full <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Provisional <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Probational <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Unlicensed <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Other <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Place Issued <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>																																													
Location						Bicycle					Driver Error Fatigued <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Fall Asleep <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Inattentive <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Too Fast <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Too Close <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> No Signal <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> O/Taking <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Turning <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Other <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Seat Belt Y/N <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table> Helmet Y/N <table border="1"><tr><td></td><td></td><td></td><td></td></tr></table>																																													
Road Section						Rickshaw																																																		
Approaching Int.						Auto Rickshaw																																																		
In Intersection						Electric Scooter																																																		
Leaving Int.						Moped																																																		
20m from Int.						Motor Cycle																																																		
Mid Block						Tempo																																																		
Off Road						Car																																																		
Left of centre						4WD Wagon																																																		
Right of centre						Pick up																																																		
Manoeuvre						Mini Bus																																																		
Going Ahead						Bus																																																		
Right Turn						Truck																																																		
Left Turn						Other																																																		
U' Turn						Defects																																																		
Cross Traffic						None																																																		
Merging						Brakes																																																		
Diverging						Tyres																																																		
Overtaking						Steering																																																		
Sudden Start						Lights																																																		
Sudden Stop						Seat Belts																																																		
Reversing						Helmets																																																		
Driveway						View (<i>obstructed</i>)																																																		
Driving off Path						Other																																																		
Parked On Road						Ownership																																																		
Double Parked						Government																																																		
R/side door open						Corporation																																																		
Parked Off Road						Diplomatic																																																		
Runaway						Private																																																		
Other						Public																																																		
Loading						Police																																																		
Legally Loaded						Army																																																		
Overloaded						Stolen																																																		
Insecure Load						Other																																																		
Protruding Load						Collision Damage																																																		
Improper Load						None																																																		
Load fall off						Front																																																		
Insurance						Rear																																																		
None						Right																																																		
Third Party						Left																																																		
Property						Roof																																																		
Comprehensive						Other																																																		
Year																																																								

NEPAL POLICE CRASH REPORT *Page 3 of 4*

29. Passenger		Action					Location				
	1	2	3	4	5		1	2	3	4	5
In Veh. No.						Alighting					
Injury						Falling					
Sex						Other					
Age						Location					
Alcohol						M/cycle Pass.					
Action						Car Pass.					
None						Bus Pass.					
Boarding						Truck Pass.					
						Front Seat					

Codes	Alcohol	Suspected	1	Not Susp.	2		
Injury	Fatal	1	Serious	2	Minor	3	Uninjured 4
Sex	Male	1	Female	2	Other	3	Unknown 4
Direction	North	1	South	2	East	3	West 4

Crash Diagram

Police Description


NEPAL POLICE CRASH REPORT *Page 4 of 4*

Private Details (This page is for Police Information only.)				
Vehicle 1	Registration No.		Owners Name	
Owners address				
Vehicle 2	Registration No.		Owners Name	
Owners address				
Vehicle 3	Registration No.		Owners Name	
Owners address				
Vehicle 4	Registration No.		Owners Name	
Owners address				
Driver 1	License No.		Owners Name	
Owners address				
Driver 2	License No.		Owners Name	
Owners address				
Driver 3	License No.		Owners Name	
Owners address				
Driver 4	License No.		Owners Name	
Owners address				
Pedestrian 1	Name			
Address				
Pedestrian 2	Name			
Address				
Pedestrian 3	Name			
Address				
Pedestrian 4	Name			
Address				
Pedestrian 5	Name			
Address				
Passenger 1	Name			
Address				
Passenger 2	Name			
Address				
Passenger 3	Name			
Address				
Passenger 4	Name			
Address				
Passenger 5	Name			
Address				
Witness 1	Name/age		sign	
Address				
Witness 2	Name/age		sign	
Address				
Reporting Officer	Rank		sign	
Name				
Reviewing Officer	Rank		sign	
Name				
Action taken / Recommendation				
.....				
.....				
.....				
.....				

Appendix 1D: Crash Report Form from Bangladesh

Additional form(s) will be needed if there are more than 2 vehicles, more than 6 passenger casualties or more than 3 pedestrian casualties. Mark each additional form with the REPORT NUMBER, THANA, DISTRICT/MET. P.O. and YEAR. Fix forms together.											
VEHICLE 1			OWNER'S NAME			DRIVER 1		NAME			
OWNER'S ADDRESS						ADDRESS					
VEHICLE MANUFACTURER		VEHICLE REGISTRATION				DRIVING LICENSE					
		38. DISTRICT		39. NUMBER		46. DISTRICT		47. NUMBER			
40. VALID FITNESS CERTIFICATE			1. Yes 2. No 3. N/A			INSURANCE COVER		1. Third Party 2. Comprehensive			
41. VEHICLE TYPE			42. VEHICLE MANOEUVRE			48. DRIVER SEX		49. DRIVER INJURY			
1. Bicycle 7. Microbus 13. Truck (<3.5t) 2. Rickshaw 8. Minibus 14. Heavy Truck 3. Push Cart 9. Bus 15. Artic. Truck 4. Motor Cycle 10. Car 16. Oil Tanker 5. Baby Taxi 11. Jeep 17. Tractor 6. Tempo 12. Pick Up 18. Animal Drawn 19. Other			1. Left Turn 7. Reversing 2. Right Turn 8. Sudden Start 3. U Turn 9. Sudden Stop 4. Crossing Road 10. Parked 5. Overtaking 11. Other 6. Going Ahead			1. Male 2. Female		F. Fatal G. Grievous S. Simple Injury N. Not Injured			
43. VEHICLE LOADING			44. VEHICLE DEFECT (from MVI report)			45. VEHICLE DAMAGE (Sustained in accident)		51. ALCOHOL			
1. Legal 2. Illegal/Unsafe			1. None 5. Tyres 2. Lights 6. Multiple 3. Brakes 7. Other 4. Steering			1. None 5. Left 2. Front 6. Roof 3. Rear 7. Multiple 4. Right 8. Other		1. Alcohol Suspected 2. Not Suspected			
								52. SEAT BELT/HELMET			
								1. Seat Belt/Helmet Worn 2. Not Worn			
VEHICLE 2			OWNER'S NAME			DRIVER 2		NAME			
OWNER'S ADDRESS						ADDRESS					
VEHICLE MANUFACTURER		VEHICLE REGISTRATION				DRIVING LICENSE					
		38. DISTRICT		39. NUMBER		46. DISTRICT		47. NUMBER			
40. VALID FITNESS CERTIFICATE			1. Yes 2. No 3. N/A			INSURANCE COVER		1. Third Party 2. Comprehensive			
41. VEHICLE TYPE			42. VEHICLE MANOEUVRE			48. DRIVER SEX		49. DRIVER INJURY			
1. Bicycle 7. Microbus 14. Heavy Truck 2. Rickshaw 8. Minibus 15. Artic. Truck 3. Push Cart 9. Bus 16. Oil Tanker 4. Motor Cycle 10. Car 17. Tractor 5. Baby Taxi 11. Jeep 18. Animal Drawn 6. Tempo 12. Pick Up 19. Other			1. Left Turn 7. Reversing 2. Right Turn 8. Sudden Start 3. U Turn 9. Sudden Stop 4. Crossing Road 10. Parked 5. Overtaking 11. Other 6. Going Ahead			1. Male 2. Female		F. Fatal G. Grievous S. Simple Injury N. Not Injured			
43. VEHICLE LOADING			44. VEHICLE DEFECT (from MVI report)			45. VEHICLE DAMAGE (Sustained in accident)		51. ALCOHOL			
1. Legal 2. Illegal/Unsafe			1. None 5. Tyres 2. Lights 6. Multiple 3. Brakes 7. Other 4. Steering			1. None 5. Left 2. Front 6. Roof 3. Rear 7. Multiple 4. Right 8. Other		1. Alcohol Suspected 2. Not Suspected			
								52. SEAT BELT/HELMET			
								1. Seat Belt/Helmet Worn 2. Not Worn			
PASSENGER CASUALTIES								* - See Reference boxes below			
NAME AND ADDRESS					53. VEH. NO	54. SEX	55. AGE	56. INJURY	57. POSITION	58. ACTION	
1.											
2.											
3.											
4.											
5.											
6.											
PEDESTRIAN CASUALTIES								* - See Reference boxes below			
NAME AND ADDRESS					59. VEH. NO	60. SEX	61. AGE	62. INJURY	63. LOCATION	64. ACTION	
1.											
2.											
3.											
FOR REFERENCE ONLY DO NOT CIRCLE	56. PASSENGER INJURY		57. PASSENGER POSITION		58. PASSENGER ACTION		63. PEDESTRIAN LOCATION		64. PEDESTRIAN ACTION		
	F. Fatal G. Grievous Injury S. Simple Injury		1. Inside Vehicle 2. Outside Vehicle 3. On Roof		1. No action 2. Boarding 3. De-boarding 4. Falling off 5. Other		1. On pedestrian crossing 2. Within 50m of ped. crossing 3. Central Island/divider 4. Road centre 5. Footpath 6. Road side 7. Bus stop		1. No action 2. Crossing the road 3. Walking along the road 4. Walking along road side 5. Playing on the road		
CONTRIBUTORY FACTORS		1. Speeding		6. Bad overtaking		11. Road condition		15. Tyre Burst		65. <table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	
		2. Careless driving		7. Bad turning		12. Road Feature		17. Animal Action			66. <table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>
		3. Driver fatigue		8. Drunk driver		13. Weather		18. Other			
		4. Overtaking too close		9. Pedestrian action		14. Vehicle Defect					
		5. Bad driver signals		10. Passenger action		15. Unsafe Loading				67. <table border="1" style="display: inline-table; width: 40px; height: 20px;"></table>	


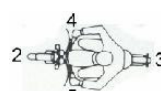
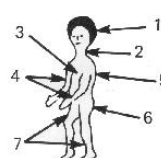
Appendix 1D: Crash Report Form from Kerala, India (Page 1)

KERALA ROAD ACCIDENT REPORT		ACCIDENT ID: <input type="text"/>															
Write number in box.		POLICE FIR No. <input type="text"/>				DISTRICT: KOLLAM				Section OF LAW: <input type="text"/>							
		POLICE STATION: <input type="text"/>				ACCIDENT DATE: <input type="text"/> Day / <input type="text"/> Month / <input type="text"/> Year				ACCIDENT DAY: <input type="text"/> 1. Sunday 2. Monday 3. Tuesday 4. Wednesday 4. Thursday 6. Friday 7. Saturday <input type="text"/>							
NUMBER OF VEHICLES INVOLVED <input type="text"/> NUMBER OF DRIVER CASUALTIES <input type="text"/> NUMBER OF PASSENGER CASUALTIES <input type="text"/> NUMBER OF PEDESTRIAN CASUALTIES <input type="text"/>		ACCIDENT SEVERITY 1. Fatal <input type="checkbox"/> 2. Grievous injury <input type="checkbox"/> 3. Minor injury (Hospitalized) <input type="checkbox"/> 4. Minor injury (Not Hospitalized) <input type="checkbox"/> 5. Vehicle damage only (Non-injury) <input type="checkbox"/>				TIME (24 hour clock) <input type="text"/> : <input type="text"/> hrs											
COLLISION TYPE <input type="text"/> 1. Head on 2. Hit from rear 3. Hit from side 4. Side swipe 5. Ran off road (no collision) 6. Hit object in road 7. Hit object off road 8. Hit parked vehicle 9. Hit pedestrian 10. Hit animal 11. Hit tree 12. Skidding 13. Overturning – collision 14. Overturning – No collision 15. Others		JUNCTION TYPE <input type="text"/> 1. T-junction 2. T-junction 3. T-junction 4. T-junction 5. Junction with more than 4 arms 6. Roundabout 7. Rail crossing manned 8. Rail crossing unmanned 9. Bridge / Fly over 10. None of these				JUNCTION CONTROL <input type="text"/> 1. Not at junction 2. Police officer 3. Traffic signals 4. Flashing signal 5. STOP sign 6. GIVE WAY sign 7. Uncontrolled				ROAD CATEGORY <input type="text"/> 1. Expressway 2. National Highway 3. State Highway 4. MDR 5. ODR 6. VDR				ROAD CONDITION <input type="text"/> 1. Good 2. Poor 3. Muddy 4. Road work in Progress 5. Slippery surface 6. Oily 7. Speed Breaker 8. Rutted / Pot holed 9. Others			
POLICE DESCRIPTION OF ACCIDENT (e.g. V1 heading towards Attingal was overtaking stopped bus when it hit V2 coming in opposite direction)																	
LOCATION: Longitude: <input type="text"/> . <input type="text"/> Latitude: <input type="text"/> . <input type="text"/>																	
ACCIDENT LOCATION AND SITE CONDITION SKETCH Show site in relation to well-known places such as schools, temples, mosques, churches, bridges and road junctions. Mark distances to these places. Always give street names. Show road location features like drainage, culverts, potholes, streetlight. Mark the accident clearly with a cross or arrow.								LANDMARK <input type="text"/> 1. Near school / college 2. Near / inside a village 3. Near factory / industrial area 4. Near religious place 5. Near recreation place / cinema 6. In bazaar 7. Near office complex 8. Near hospital 9. Residential area 10. Open area 11. Near bus stop 12. Near petrol pump 13. At pedestrian crossing 14. Affected by encroachments 15. Narrow bridge or culvert									
								LIGHT CONDITIONS <input type="text"/> 1. Daylight 2. Darkness – no street lights 3. Darkness - with street lights on									
								<input type="text"/> 1. Fine 2. Mist / Fog 3. Cloudy 4. Light rain 5. Heavy rain								<input type="text"/> 7. Smoke / Dust 8. Strong Wind 9. Very Hot 10. Very Cold 11. Other	
								North 									

Appendix 1D: Crash Report Form from Kerala, India (Page 2)

CONTRIBUTORY FACTOR				<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-left: 5px;"></div> </div>		HIT AND RUN	
1. Fault of driver / rider		7. Poor light condition		1. Yes		<div style="border: 1px solid black; width: 30px; height: 30px;"></div>	
2. Fault of Cyclist		8. Defect in road condition		2. No			
3. Fault of driver of another vehicle		9. Bad weather					
4. Fault of pedestrian		10. Falling of boulders					
5. Fault of passenger		11. Neglect of civic bodies					
6. Defect in mechanical condition of vehicle		12. Other cause					
		13. Cause not known					
VEHICLE DETAILS				VEHICLE 1		VEHICLE 2	
Registration number							
Make							
Model							
VEHICLE TYPE							
1. Motor Cycle 2. Scooter 3. Moped 4. Autorikshaw 5. Car 6. Jeep 7. Taxi 8. Bus		9. Mini Bus 10. KSRTC Bus 11. Truck 12. Tempo 13. Articulated vehicle 14. Tractor 15. Light Goods Van 16. Heavy Goods Van		17. Other Vehicles 18. SUV / MUV 19. Bicycle 20. Cycle rickshaw 21. Hand drawn vehicle. 22. Animal drawn 23. Other/ Not Known 24. Other / Known			
VEHICLE MANOEUVRE							
1. Turning right 2. Turning left 3. Making U turn 5. Temporarily held up 6. Parked 7. Sudden stop 8. Sudden start 9. Overtaking from left 10. Starting from near side 11. Starting from off-side		12. Diverging 13. Merging 14. Crossing traffic stream 15. Stationary 16. Going ahead overtaking 17. Going ahead, not overtaking 18. Using private entrance 19. Reversing 20. Parking the vehicles 21. Other / Known 22. Other / Not known					
Vehicle Damage (Write number – refer graphic on last page)*							
DRIVER DETAILS				DRIVER 1		DRIVER 2	
NAME							
AGE							
SEX 1. Male 2. Female							
Driver Injury 1. Fatal 2. Grievous Injury 3. Minor Injury (Hospitalized) 4. Minor Injury (Non hospitalized) 5. Not Injured							
TYPE OF DRIVER INJURY (Write number – refer graphic on last page)**							
DRIVER ERROR							
1. None 2. Consumption of alcohol or drugged 3. Exceeded lawful speed 4. Did not give right of way to pedestrian 5. Followed too closely 6. Overtook on hill 7. Overtook on curve 8. Cut in sharply after overtaking 9. Other improper overtaking 10. On wrong side of the road 11. Failed to give signal 12. Wrong signal 13. Improper turn		14. Disregarded Police officer 15. Disregarded traffic light signal 16. Disregarded STOP sign 17. Starting off carelessly 18. Wrong parking location 19. Asleep or fatigued or sick 20. Lack of attention 21. Bad use of headlights 22. Failed to give way to vehicle 23. Other					
INJURED PASSENGERS Complete tables using codes from bottom panel (Estimate age if not known)							
NAME		AGE	SEX (M / F)	INJURY TYPE**		IN VEHICLE NO. (I.E. V1, OR V2)	
1.							
2.							
3.							
INJURED PEDESTRIANS Complete tables using codes from bottom panel (Estimate age if not known)							
NAME		AGE	SEX (M / F)	INJURY TYPE**		BY VEHICLE NO. (I.E. V1 OR V2)	
1.							
2.							
3.							

Appendix 1D: Crash Report Form from Kerala, India (Page 3)

injury 1. Fatal 2. Grievous 3. Minor (H) 4. Minor (NH) 5. Non-injury <input type="checkbox"/>	PASSENGER POSITION 1. Front seat 2. Rear seat 3. Pillion Rider 4. Bus passenger 5. Back of truck or pickup 6. Other <input type="checkbox"/>	PASSENGER ACTION 1. Sitting 2. Standing 3. Boarding 4. Alighting 5. Falling 6. Other <input type="checkbox"/>	SEAT BELT / HELMET USED 1. Yes 2. 2. No <input type="checkbox"/> Alcohol 1. Not suspected 2. Suspected <input type="checkbox"/>	PEDESTRIAN LOCATION 1. On Pedestrian Crossing 2. Within 50m of Pedestrians Crossing 3. On traffic island 4. In center of road (not 1-3) 5. On footpath 6. On shoulder <input type="checkbox"/> 7. Other	PEDESTRIAN ACTION 1. Standing 2. Crossing road 3. Walking along middle 4. Walking along edge 5. Playing on road 6. Other <input type="checkbox"/>
* VEHICLE DAMAGE <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1. No Damage 7. Multiple Damage 8. No Damage details</p> </div> <div style="text-align: center;">  </div> </div>				** INJURY TYPE 	

Data Entered by:

Sign:.....

Name:.....

Rank No:.....

Last printed 14/04/2016 11:40 PM
Form: RSMS/ARF/2005ARF_ThreePage_Kollam

Form Filled by:

Sign:.....

Name:.....

Rank No:.....

State Of Maine - Crash Reporting Guide				PRE-ACCIDENT ACTIONS - MANEUVERS			
TYPE LOCATION (Box 1) 1 Straight Road 4 Four Leg. Intersection 7 Bridges 2 Curved Road 5 Five Leg. Intersection 8 Interchanges 3 Three Leg. Intersection 6 Driveways 9 Other				BY VEHICLE 1 Following Roadway 2 Wrong Way into Opposing Traffic 3 Right Turn On Red 4 Left Turn On Red 5 Making Right Turn 6 Making Left Turn 7 Making U-Turn 8 Starting From Parked 9 Starting In Traffic 10 Slowing in Traffic 11 Stopped in Traffic 12 Entering Parked Position 13 Parked - Legally 14 Parked - Illegally 15 Avoiding Vehicle, Object, Pedestrian, Animal in Road 16 Slidding 17 Changing Lanes 18 Overtaking, Passing 19 Merging 20 Backing 30 Other Vehicle Action 99 Unknown			
TYPE ACCIDENT (Box 2) 1 Object in Road 7 Ran Off Road 13 Fire 2 Rear End/Sideswipe 8 All Other Animals 14 Submersion 3 Head-On/Sideswipe 9 Bike 15 Rock Thrown 4 Intersection Movement 10 Other 16 Bear 5 Pedestrians 11 Ladder 17 Deer 6 Train 12 Rollover 18 Moose				BY PEDESTRIAN 41 Crossing With Signal 42 Crossing Against Signal 43 Crossing Marked Crosswalk - No Signal 44 Crossing - No Signal or Crosswalk 45 Walking in Road with Traffic 46 Walking in Road Against Traffic 47 Standing in Road 48 Emerging from Behind Parked Car 49 Child Getting On/Off School Bus 50 Getting On/Off Vehicle 51 Pushing or Working on Vehicle 52 Working in Road 53 Playing in Road 54 Not in Road 60 Other Pedestrian Action 99 Unknown BY BICYCLIST 71 Riding with Traffic 72 Riding Against Traffic Unit 1 Box 13 73 Making Right Turn 74 Making Left Turn Unit 2 Box 14 75 Making U-Turn 76 Riding Across Road 77 Slowing, Stopping, Starting in Road 80 Other Bicyclist Action 99 Unknown			
FIXED OBJECT STRUCK (IF APPLICABLE) (Box 3) 1 Construction Barricades 9 Fire Hydrant/Parking Meter 17 Embankment, Ditch, Curb Equipment, etc. 10 Tree - Shrubbery 18 Building, Wall 2 Traffic Signal 11 Crash Cushion 19 Rock Outcrops - Ledge 3 R.R. Crossing Device 12 Median Safety Barrier 20 Other 4 Light Pole 13 Bridge Piers (inc. Protective Guardrail) 5 Utility Pole (Tel./Electrical) 6 Sign Structure Post 14 Other Guardrails 7 Mail Boxes or Posts 15 Fencing (Not Median Barrier) 8 Other Poles, Posts 16 Culvert Headwall Supports				APPARENT CONTRIBUTING FACTORS 1 No Improper Action 16 Pedestrian Violation Error 2 Fail to Yield Right of Way 17 Physical Impairment 3 Illegal, Unsafe Speed 18 Vision Obscured - Windshield Glass 4 Follow Too Close 19 Vision Obscured - Sun, Headlights 5 Disregard Traffic Control Device 20 Other Vision Obscurement 6 Driving Left of Center - Not Passing 30 Other Human Violation Factor 7 Improper Pass - Overtaking 31 Hit and Run 8 Improper, Unsafe Lane change 9 Improper Parking, Start, Stop 10 Improper Turn 11 Unsafe Backing 12 No Signal or Improper Signal 13 Impeding Traffic 14 Driver Inattention - Distraction 15 Driver Inexperience 16 Defective Brakes 17 Defective Tire - Tire Failure 18 Defective Lights 19 Defective Suspension 20 Defective Steering 50 Other Vehicle Defect or Factor 51 Unknown			
OTHER PROPERTY DAMAGE (Box 4) 1 State Property 3 Other (Private) 2 Utilities Property 4 Unknown				PRIMARY Unit 1 Box 15 Unit 2 Box 16 SECONDARY Unit 1 Box 17 Unit 2 Box 18			
TRAFFIC CONTROL DEVICE (Box 5) 1 Traffic Signals (Stop & Go) 6 Yield Sign 11 R.R. Crossing Device 2 Traffic Signals (Flashing) 7 Curve Warning Sign 12 No Passing Zone 3 Overhead Flashers 8 Officer, Flagman, School Patrol 13 None 4 Stop Signs - All Approaching 9 School Bus Stop Arm 14 Other 5 Stop Sign - Other 10 School Zone Sign				ALCOHOL RELATED This crash should be considered alcohol related: 1 Yes 2 No Box 21			
LIGHT (Box 6) 1 Dawn (Morning) 3 Dusk (Evening) 5 Dark (No Street Lights) 7 Other 2 Daylight 4 Dark (Street Lights On) 6 Dark (Street Lights Off)				HAZARDOUS MATERIALS 1 None Involved 2 Involved - Include Type in Description Unit 1 Box 23 Unit 2 Box 24			
WEATHER - ATMOSPHERE (Box 7) 1 Clear 4 Sleet, Hail, Freezing Rain 7 Blowing Sand or Dust 2 Rain 5 Fog, Smog, Smoke 8 Cloudy 3 Snow 6 Severe Cross Winds 9 Other				SAFETY EQUIPMENT USAGE 29 1 Restraint Device Installed - Used 2 Restraint Device Installed - Not Used 3 Restraint Device Not Installed 4 Child Restraint Used 5 Air Bags Deployed 6 Unknown 10 Child Restraint Not Used 11 Child Restraint Used Incorrectly 12 Air Bag Deployed & Seat Belts Used			
ROAD SURFACE (Box 8) 1 Dry 4 Ice, Packed Snow - Sanded 7 Oily 10 Other 2 Wet 5 Muddy 8 Snow, Slush - Not Sanded 3 Snow, Slush - Sanded 6 Debris 9 Ice, Packed Snow - Not Sanded				WHICH VEHICLE OCCUPIED 30 1 Veh. #1 21 Bicyclist 2 Veh. #2 22 Witness 3 Veh. #3 (Etc.) 23 Other 20 Pedestrian 24 Last Known Operator			
ROAD CHARACTER (Box 9) 1 Level Straight 4 On Grade Curved 7 Bottom of Hill Straight 2 Level Curved 5 Top of Hill Straight 8 Bottom of Hill Curved 3 On Grade Straight 6 Top of Hill Curved 9 Other				31 EJECTION FROM VEHICLE 1 Not Ejected 3 Ejected 2 Partially Ejected 4 Trapped - Estricated			
ROAD WORK (Box 10) 1 None 2 Construction Zone 3 Maintenance Area 4 Utility Work Area				POSITION IN VEHICLE STANDARD VEHICLE: MC/BIKE/SNOW MOBILE: 1 Driver 9 Driver 2-7 Passenger 10 Passenger 8 Rides/Hang On Vehicle 11 Sidecar/Sled/Hang On Veh.			
SPEED LIMIT (Box 11) 1 Not Posted - 25 Zone 2 Not Posted - 45 Zone 3 Unknown If Posted- Code Posted Limit				32 Sex: M or F Age:			
EMERGENCY VEHICLE INVOLVED (Box 12) 1 No 3 Ambulance 5 Wrecker (Enroute To or At Scene) 2 Police Vehicle 4 Fire Dept. Veh. 6 Other				INJURY TYPE 28 1 Fatal 2 Incapacitating 3 Non-Incapacitating 4 Possible Injury 5 No Injury			
TYPE INJURY 25 1 Amputation 6 Shock 2 Bleeding 7 Dizziness 3 Broken Bones 8 Abrasion Bruises 4 Burns 9 Complaint of Pain 5 Concussion 10 Other 11 No injury				AREA OF INJURY (MOST SEVERE) 26 1 Face 6 Leg(s) 2 Head 7 Chest Stomach 3 Neck 8 Internal 4 Back 9 Entire Body 5 Arm(s) 10 Other 11 No Injury			
INJURY INFO SOURCE 27 1 Officer Observation 2 Individual Statement 3 Medical - Paramedical Personnel				33 34			
All Persons Involved: Drivers, Passengers, Witnesses, Pedestrians, etc.				25 26 27 28 29 30 31 32 33 34			

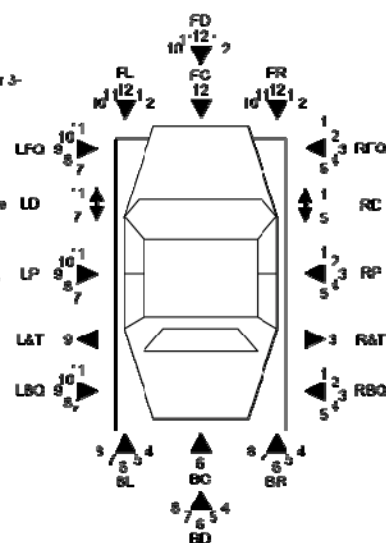
Appendix 1D: Crash Report Form from Texas, USA

Texas Peace Officer's Crash Report - Code Sheet

Numbered Fields on the CR-3 Refer to the Numbered Lists on this Code Sheet. Each list includes the codes that may be entered on the form and the description of each code.

Page 1 of 2
Law Enforcement and TxDOT Use ONLY.
Form CR-300 1/12/10

1. Roadway System IH = Interchange US = US Highway SH = State Highway FM = Farm to Market RR = Ranch Road RM = Ranch to Market BI = Business Interstate BU = Business US RS = Business State BF = Business FM SL = State Loop TL = Toll Road		2. Roadway Part 1 = Main/Primary Lane 2 = Service/Shoulder Road 3 = Entrance/On Ramp 4 = Exit/Off Ramp 5 = Commercial/Plaza 98 = Other (Explain in Narrative)		3. Street Prefix, Direction from Int. or Ref. Marker N = North NE = Northeast E = East SE = Southeast S = South SW = Southwest W = West NW = Northwest		4. Street Suffix RD = Road ST = Street DR = Drive AVE = Avenue BLVD = Boulevard PKWY = Parkway LN = Lane FWY = Freeway HWY = Highway WAY = Way TRL = Trail LOOP = Loop EXPR = Expressway CT = Court CIRCLE = Circle PL = Place PARK = Park CV = Cove	
5. Unit Description 1 = Motor Vehicle 2 = Train 3 = Pedalcyclist 4 = Pedestrian 5 = Motorized Conveyance 6 = Towed Trailer 7 = Non-Contact 98 = Other (Explain in Narrative)		6. Vehicle Color BGE = Beige BLK = Black BLU = Blue BRZ = Bronze BRN = Brown CAM = Camouflage COPR = Copper GLD = Gold GRAY = Gray GRN = Green MAR = Maroon MUL = Multicolored ORG = Orange PINK = Pink PUR = Purple RED = Red SIL = Silver TAN = Tan TEA = Teal (green) TUR = Turquoise (blue) WHI = White YEL = Yellow 98 = Other (Explain in Narrative) 99 = Unknown		7. Body Style P2 = Passenger Car, 2-Door P4 = Passenger Car, 4-Door PK = Pickup AM = Ambulance BU = Bus SB = School Bus FE = Farm Equipment FT = Fire Truck MC = Motorcycle SV = Sport Utility Vehicle PC = Police Car/Truck PM = Police Motorcycle TL = Trailer, Semi-Trailer, or Pole Trailer TR = Truck TT = Truck Tractor VN = Van 98 = Other (Explain in Narrative) 99 = Unknown		8. Driver License/D Type 1 = Driver License 2 = Commercial Driver License 3 = Occupational 4 = ID Card 5 = Unlicensed 98 = Other 99 = Unknown	
9. Driver License Class A = Class A AM = Class A and M B = Class B BM = Class B and M C = Class C CM = Class C and M M = Class M 5 = Unlicensed 98 = Other/Out of State 99 = Unknown		10. Commercial Driver License Endorsements H = Hazardous Materials N = Tank Vehicles P = Passengers S = School Bus T = Double/Trip Trailer X = Tank Vehicle with Hazard 5 = Unlicensed 98 = Other/Out of State 99 = Unknown		11. Driver License Restrictions A = With Corrective Lenses B = LOFS Age 21 or Over C = Daytime Only D = Not to Exceed 45 MPH E = No Expressway Driving F = Must Hold Valid License in M/M/T/H/Y G = TRC 545.424 Applies until M/M/T/H/Y H = Vehicle Not to Exceed 26,000 lbs GVWR I = Motorcycle Not to Exceed 250 CC J = Licensed Motorcycle Operator Age 21 or Over in Sight K = Moped L = Vehicle with Air Brakes M = CDL Intrastate Commerce Only N = Ignition Interlock Required O = Out/Excess Hours DL No CMV See Court Order P = Stated on License Q = LOFS 21 or Over Vehicle Above Class B R = LOFS 21 or Over Vehicle Above Class C S = Outside Rear View Mirror or Hearing Aid		T = Automatic Transmission U = Applicable Prosthetic Devices V = Applicable Vehicle Devices W = Power Steering X = Vehicle Not to Exceed Class C Y = Valid TX Vision or Limb Waiver Req'd. Z = Valid Fed. Vision or Limb Waiver Req'd. 5 = Unlicensed 98 = None 99 = Other/Out of State 99 = Unknown	
12. Person Type 1 = Driver 2 = Passenger/Occupant 3 = Pedalcyclist 4 = Pedestrian 5 = Driver of Motorcycle Type Vehicle 6 = Passenger/Occupant of Motorcycle Type Vehicle 98 = Other (Explain in Narrative) 99 = Unknown		13. Seat Position 1 = Front Left 2 = Front Center 3 = Front Right 4 = Second Seat Left 5 = Second Seat Center 6 = Second Seat Right 7 = Third Seat Left 8 = Third Seat Center 9 = Third Seat Right 10 = Cargo Area 11 = Outside Vehicle 13 = Other in Vehicle 14 = Passenger in Bus 15 = Pedestrian, Pedalcyclist, or Motorized Conveyance 98 = Other (Explain in Narrative) 99 = Unknown		14. Injury Severity A = Incapacitating Injury B = Non-Incapacitating Injury C = Possible Injury K = Killed N = Not Injured 98 = Unknown		15. Ethnicity W = White B = Black H = Hispanic A = Asian I = Amer. Indian/Alaskan Native 98 = Other 99 = Unknown	
16. Restraint Used 1 = Shoulder and Lap Belt 2 = Shoulder Belt Only 3 = Lap Belt Only 4 = Child Seat Facing Forward 5 = Child Seat Facing Rear 6 = Child Seat Unknown 7 = Child Booster Seat 98 = None 99 = Not Applicable 98 = Other (Explain in Narrative) 99 = Unknown		17. Ejected 1 = No 2 = Yes 3 = Yes, Partially 97 = Not Applicable 98 = Unknown		18. Sex 1 = Male 2 = Female 98 = Unknown		19. Airbag 1 = Not Deployed 2 = Deployed, Front 3 = Deployed, Side 4 = Deployed, Rear 5 = Deployed, Multiple 97 = Not Applicable 98 = Unknown	
20. Helmet Use 1 = Not Worn 2 = Worn, Damaged 3 = Worn, Not Damaged 4 = Worn, Jkt. Damage 97 = Not Applicable 98 = Unknown if Worn		21. Solicitation Y = Solicit N = No Solicit		22. Alcohol Specimen Type 1 = Breath 2 = Blood 3 = Urine 4 = Ref. Sec. 98 = None 99 = Other (Explain in Narrative)		23. Drug Specimen Type 2 = Blood 3 = Urine 4 = Saliva 98 = None 99 = Other (Explain in Narrative)	
24. Drug Test Result 1 = Positive 2 = Negative 3 = Not Applicable 98 = Unknown		25. Drug Category 2 = CNS Depressants 3 = CNS Stimulants 4 = Hallucinogens 6 = Narcotic Anesthetics 7 = Inhalants 8 = Cannabinoids 10 = Dissociative Anesthetics 11 = Multiple Drugs (Explain in Narrative) 97 = Not Applicable 98 = Other Drugs (Explain in Narrative) 99 = Unknown		26. Financial Responsibility Type 1 = Liability Insurance Policy 2 = Proof of Liability Insurance 3 = Insurance Bond 4 = Quoted Cash 5 = Certificate of Deposit with Comptroller 6 = Certificate of Deposit with County Judge 7 = Certificate of Self-Insurance		27. Vehicle Damage Rating In most cases, enter in the format XX-ABC-Y, where XX is the Direction of Force (1-12), ABC is the Damage Description 2- or 3-letter code, and Y is the Damage Severity (0-7). In special cases, use: VB- = vehicle burned NOT due to collision VB-7 = vehicle catches fire due to the collision TP-0 = top damage only VX-6 = undercarriage damage only MC-1 = motorcycle, moped, scooter, etc. NA = Not Applicable (Farm Tractor, etc.)	



Appendix 1D: Crash Report Form from Texas, USA

Texas Peace Officer's Crash Report – Code Sheet

Numbered Fields on the CR-3 Refer to the Numbered Lists on this Code Sheet. Each list includes the codes that may be entered on the form and the description of each code.

Page 2 of 2
Law Enforcement and TxDOT Use ONLY.
Form CR-3CS 1/1/2010

COMMERCIAL MOTOR VEHICLE	28. Vehicle Operation 1 = Interstate Commerce 2 = Intrastate Commerce 3 = Not in Commerce 4 = Government 5 = Personal	29. Carrier ID Type 1 = US DOT 2 = TxDOT 3 = ICC/IMC 98 = None 99 = Other (Explain in Narrative)	30. Roadway Access 1 = Full Access Control 2 = Partial Access Control 3 = No Access Control	31. Vehicle Type 1 = Passenger Car 2 = Light Truck 3 = Bus (9-15) 4 = Bus (>15) 5 = Single Unit Truck 2 Axles 6 Tires 6 = Single Unit Truck 3 or More Axles 7 = Truck Trailer 8 = Truck Tractor (Bobtail) 9 = Tractor/Semi Trailer 10 = Tractor/Double Trailer 11 = Tractor/Triples Trailer 98 = Other (Explain in Narrative) 99 = Unknown Heavy Truck	32. Hazardous Material Class Number 1 = Explosives 2 = Gases 3 = Flammable Liquids 4 = Flammable Solids 5 = Oxidizers and Organic Peroxides 6 = Toxic Materials and Infectious Substances 7 = Radioactive Materials 8 = Corrosive Materials 9 = Miscellaneous Dangerous Goods		
	33. Cargo Body Style 1 = Bus (9-15) 2 = Bus (>15) 3 = Van/Enclosed Box 4 = Cargo Tank 5 = Flatbed 6 = Dump 7 = Concrete Mixer	8 = Auto Transporter 9 = Garbage Refuse 10 = Grain Chips Gravel 11 = Pole 13 = Intermodal 14 = Logging	15 = Vehicle Towing Another Vehicle 97 = Not Applicable 98 = Other (Explain in Narrative)	34. Trailer Type 1 = Full Trailer 2 = Semi-Trailer 3 = Pole Trailer			
FACTORS AND CONDITIONS	35. Sequence of Events 1 = Non-Collision: Ran Off Road 2 = Non-Collision: Jackknife 3 = Non-Collision: Overtake Rollover 4 = Non-Collision: Downhill Runaway 5 = Non-Collision: Cargo Loss Or Shift 6 = Non-Collision: Explosion Or Fire 7 = Non-Collision: Separation of Units 8 = Non-Collision: Cross Median/Centerline 9 = Non-Collision: Equipment Failure 10 = Non-Collision: Other 11 = Non-Collision: Unknown 12 = Collision Involving Pedestrian 13 = Collision Involving Motor Vehicle in Transport 14 = Collision Involving Parked Motor Vehicle 15 = Collision Involving Train 16 = Collision Involving Pedalcycle 17 = Collision Involving Animal 18 = Collision Involving Fixed Object 19 = Collision With Work Zone Maintenance Equipment 20 = Collision With Other Movable Object 21 = Collision With Unknown Movable Object 98 = Other (Explain in Narrative)						
	36. Factors and Conditions 1 = Animal on Road - Domestic 2 = Animal on Road - Wild 3 = Backed without Safety 4 = Changed Lane when Unsafe 14 = Disabled in Traffic Lane 15 = Disregard Stop and Go Signal 16 = Disregard Stop Sign or Light 17 = Disregard Turn Marks at Intersection 18 = Disregard Warning Sign at Construction 19 = Distraction in Vehicle 20 = Driver Inattention 21 = Drove Without Headlights 22 = Failed to Control Speed 23 = Failed to Drive in Single Lane 24 = Failed to Give Half of Roadway 25 = Failed to Heed Warning Sign 26 = Failed to Pass to Left Safely 27 = Failed to Pass to Right Safely 28 = Failed to Signal or Gave Wrong Signal 29 = Failed to Stop at Proper Place 30 = Failed to Stop for School Bus 31 = Failed to Stop for Train 32 = Failed to Yield ROW - Emergency Vehicle 33 = Failed to Yield ROW - Open Intersection 34 = Failed to Yield ROW - Private Drive 35 = Failed to Yield ROW - Stop Sign 36 = Failed to Yield ROW - To Pedestrian 37 = Failed to Yield ROW - Turning Left 38 = Failed to Yield ROW - Turn on Red 39 = Failed to Yield ROW - Yield Sign 40 = Fatigued or Asleep 41 = Faulty Evasive Action 42 = Fire in Vehicle 43 = Fleeing or Evading Police 44 = Followed Too Closely 45 = Had Been Drinking 46 = Handicapped Driver (Explain in Narrative) 47 = Ill (Explain in Narrative) 48 = Impaired Visibility (Explain in Narrative) 49 = Improper Start from Parked Position 50 = Load Not Secured 51 = Opened Door Into Traffic Lane 52 = Oversized Vehicle or Load 53 = Overtake and Pass Insufficient Clearance 54 = Parked and Failed to Set Brakes 55 = Parked in Traffic Lane 56 = Parked without Lights 57 = Passed in No Passing Lane 58 = Passed on Right Shoulder 59 = Pedestrian FTYROW to Vehicle 60 = Unsafe Speed 61 = Speeding - (Over Limit) 62 = Taking Medication (Explain in Narrative) 63 = Turned Improperly - Cut Corner on Left 64 = Turned Improperly - Wide Right 65 = Turned Improperly - Wrong Lane 66 = Turned when Unsafe 67 = Under Influence - Alcohol 68 = Under Influence - Drug 69 = Wrong Side - Approach or Intersection 70 = Wrong Side - Not Passing 71 = Wrong Way - One Way Road 72 = Cell/Mobile Phone Use 73 = Road Rage 98 = Other (Explain in Narrative)						
37. Vehicle Defects 5 = Defective or No Headlamps 6 = Defective or No Stop Lamps 7 = Defective or No Tail Lamps 8 = Defective or No Turn Signal Lamps 9 = Defective or No Trailer Brakes 10 = Defective or No Vehicle Brakes 11 = Defective Steering Mechanism 12 = Defective or Slick Tires 13 = Defective Trailer Hitch 98 = Other (Explain in Narrative)	38. Weather Condition 1 = Clear 2 = Cloudy 3 = Rain 4 = Sleet/Hail 5 = Snow 6 = Fog 7 = Blowing Sand/Snow 8 = Severe Crosswinds 98 = Other (Explain in Narrative) 99 = Unknown	39. Light Condition 1 = Daylight 2 = Dark, Not Lighted 3 = Dark, Lighted 4 = Dark, Unknown Lighting 5 = Dawn 6 = Dusk 98 = Other (Explain in Narrative) 99 = Unknown	40. Entering Roads 2 = Three Entering Roads - T 3 = Three Entering Roads - Y 4 = Four Entering Roads 5 = Five Entering Roads 6 = Six Entering Roads 7 = Traffic Circle 8 = Cloverleaf 97 = Not Applicable 98 = Other (Explain in Narrative)	41. Roadway Type 1 = Two-Way, Not Divided 2 = Two-Way, Divided, Unprotected Median 3 = Two-Way, Divided, Protected Median 4 = One-Way 98 = Other (Explain in Narrative)	42. Roadway Alignment 1 = Straight, Level 2 = Straight, Grade 3 = Straight, Hillcrest 4 = Curve, Level 5 = Curve, Grade 6 = Curve, Hillcrest 98 = Other (Explain in Narrative) 99 = Unknown	43. Surface Condition 1 = Dry 2 = Wet 3 = Standing Water 4 = Snow 5 = Slush 6 = Ice 7 = Sand, Mud, Dirt 98 = Other (Explain in Narrative) 99 = Unknown	44. Traffic Control 2 = Inoperative (Explain in Narrative) 3 = Officer 4 = Flagman 5 = Signal Light 6 = Flashing Red Light 7 = Flashing Yellow Light 8 = Stop Sign 9 = Yield Sign 10 = Warning Sign 11 = Center Stripe/Divider 12 = No Passing Zone 13 = RR Gate/Signal 15 = Crosswalk 16 = Bike Lane 17 = Marked Lanes 18 = Signal Light With Red Light Running Camera 98 = None 99 = Other (Explain in Narrative)

**Queensland
Police
Service**

PLEASE COMPLETE AS MUCH AS POSSIBLE AT THE SITE OF INCIDENT

1. Circle one code per section unless otherwise specified.

2. Write details in white areas.

OFFICE USE ONLY

Checked:

Initials:

Date: _____

Reporting Station	No. of forms used	INCIDENT NO.		
Division in which incident occurred		Police vehicles involved?	Yes Y	No N

Reporting Officer			Rank			Reg. No.	
Reporting Officer attended scene? Yes Y No N			AIS/AI investigating? Yes Y NoN			Reg. No.	
Submitted to O/C			Date: / /		Data entered on: / /		Data entered by:

Name	Name
Address	Address
Phone: Interviewed? YesY No N	Phone: Interviewed? YesY No N

Time:	(hrs)	Date:	/	/	Day of week:
At:		(Suburb/Town/Shire/Area)			
On Street/H'way:					
At intersection with:					
No. of metres	OR No. of kilometres		in		(Direction)
From nearest intersecting road/bridge:					
OR indicate nearest house number/light pole number:					

--	--	--

Kilometres per hour

Owner's name:

Address:

Nature of damage:

Estimated value \$

Sections below to be completed for Major Incidents ALWAYS and for Minor Incidents if applicable. then go to next page.

Clear 1 Smoke/Dust 3
Raining 2 ✓ Fog 4

Daylight	1	Darkness-Lighted	3
Dawn/Dusk	2	Darkness-Unlighted	4

PERSON	LIGHTS	SIGN/CROSSING	OTHER
Police 1	Operating traffic lights 4	Stop sign 8	Pedestrian operated lights 13
Road/Railway worker 2	Flashing amber traffic lights ... 5	Give Way 9	LATM device 14
School crossing supervised 3	Railway—lights only 6	Railway crossing sign 10	Other (specify) 97
	Railway—lights & boomgate 7	Pedestrian crossing 11	
		School crossing—flags only ... 12	No traffic control 99

ROAD SURFACE		INTERSECTION		OTHER		Forestry/National			
Sealed – dry	1	Cross	10	Mutiple road	13	Bridge, Causeway	20	Park Road	60
Sealed – wet	2	T-junction	11	Interchange	14	Railway Crossing	30	Bikeway	61
Unsealed – dry	3	Y-junction	12	Roundabout	15	Median Opening	40	Other (specify)	97
Unsealed – wet	4	SURF CODE = '001'				Merge Lane	50	Not applicable	99

Straight	1	Curved,
Curved, view obscured ...	2	view open.....3

Level1 Crest3
Grade2 Dip.....4

(other than by line markings) No. of lanes:
Yes Y No N

Hit parked vehicle	1	Hit object (specify)	6	Hit pedestrian	10
Angle	2	Overtaken	7	Hit animal including ridden	
Rear-end	3	Fall from moving vehicle	8	horse or carriage	11
Head-on	4	Motor/pedal cycle overturn,		Other (specify)	97
Sideswipe	5	fall or drop	9		

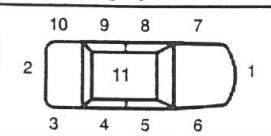
(where incident occurred)

On road 1

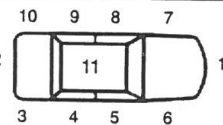
On road-related area 2

Off road 3

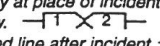



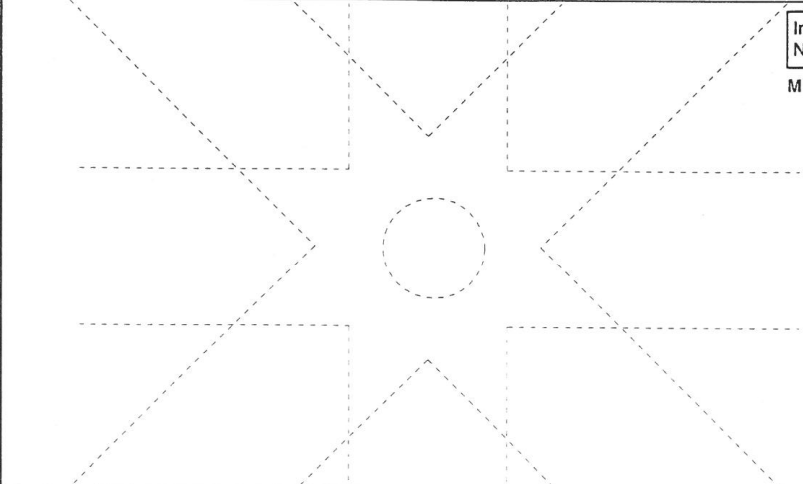
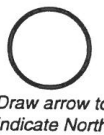
Appendix 1E: Crash Report Form from Queensland, Australia (Page 2)

4. UNIT DETAILS			
a. Number of units involved			
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> b. Unit No. Car, s/wagon 1 Bus/coach 5 Wheeled rec. device ... 11 Ute/panel van 2 Motorcycle 6 Animal, conveyance... 12 4-wheel drive 20 Tractor 7 Animal, stock 13 Rigid truck 3 Towed device 8 Animal, other 14 Artic. truck 4 Bicycle 9 Railway unit 15 Road train/ 40 Pedestrian 10 Other 97 Bdouble/triple 40 </div> <div style="width: 48%;"> c. Communication device Hands-free phone 1 Hand-held phone 2 2-way/CB radio 3 Other 4 Unknown 98 Not applicable 99 </div> <div style="width: 48%;"> d. Window tint Vehicle windows heavily tinted? Yes 1 No 2 Unknown 98 Not applicable 99 </div> </div>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> e. Commercial usage Was vehicle being used for commercial purposes : Yes Y No N Type of business: Name/sign on vehicle: </div> <div style="width: 48%;"> cc. Cruise control Fitted, in use 1 Fitted, not in use 2 Fitted, use unknown 3 Not fitted 4 Unknown 98 Not applicable 99 </div> <div style="width: 48%;"> dd. Bullbar Fitted 1 Not fitted 2 Unknown 98 Not applicable 99 </div> </div>			
f. Driver, rider or pedestrian Name _____ Licence No: _____ State: _____ Racial appearance: _____ Address _____ Phone: _____ D.O.B / / _____ GENDER LICENCE TYPE Male M Open 1 Female F Provisional 2 Unknown ... U Learner 3 Not appropriately licenced (specify) 97 Unknown 99			
<div style="display: flex;"> <div style="width: 45%;"> BLOOD ALCOHOL/DRUG RESULT (if available) OR <div style="border: 1px solid black; width: 100px; height: 20px; margin: 5px;"></div> Waiting result 93 Roadside test – under or Nil 94 Refused test 95 Not required 99 </div> <div style="width: 55%;"> ACTION TAKEN: No further action 1 Breach (specify breach or TON number) 2 </div> </div>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> g. Vehicle make and ownership Registration No. _____ State: _____ Make: _____ Model: _____ Colour: _____ Owner's name: _____ Address: _____ Phone: _____ </div> <div style="width: 48%;"> h. Occupants (circle ALL occupied seating positions) No. of persons in unit <div style="border: 1px solid black; display: inline-block; padding: 2px 5px;"> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">9</div> <div style="border: 1px solid black; padding: 2px;">6</div> <div style="border: 1px solid black; padding: 2px;">3</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 2px;"> <div style="border: 1px solid black; padding: 2px;">8</div> <div style="border: 1px solid black; padding: 2px;">5</div> <div style="border: 1px solid black; padding: 2px;">2</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 2px;"> <div style="border: 1px solid black; padding: 2px;">7</div> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">1</div> </div> Back of ute, s/wagon 10 Towed device 11 Bus seat 12 Unknown 98 Not applicable 99 <small>If more than one person in a seating position, indicate by a count next to number</small> </div> </div>			
Sections below to be completed for Major Incidents ALWAYS and for Minor Incidents if applicable. then go to next page.			
i. Vehicle movement Headed direction: _____ On (Street/Road/H'way): _____ Origin of journey: Town: _____ State: _____			
j. Intended unit action <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> VEHICLE Go straight ahead 1 Overtake 2 Make right turn 3 Make left turn 4 Make U turn 5 Change lanes 6 </div> <div style="width: 48%;"> PEDESTRIAN Slow or stop 7 Start in lane 8 Start from parked 9 Reverse 10 Stay stopped 11 Remain parked 12 </div> <div style="width: 48%;"> Other Walk with traffic 21 Walk against traffic 22 Remain stationary 23 Push or work on vehicle 24 Other working 25 Playing 26 Cross carriageway 27 Other (specify) 97 Not applicable 99 </div> </div>			
k. Was unit engaged in towing? Not towing 0 OR – Number of trailers being towed: For each trailer being towed, please enter its reg. no. AND State of registration: IF Unreg U Trailer type: _____			
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Reg. No. _____ State: _____ Reg. No. _____ State: _____ Reg. No. _____ State: _____ </div> <div style="width: 48%;"> l. Dangerous goods Vehicle carrying dangerous goods? Yes Y Unknown U No N Not applicable X </div> </div>			
m. Damage points (circle all damage points) <div style="display: flex; align-items: center;"> <div style="width: 30%;">  </div> <div style="width: 70%;"> Underneath vehicle 12 Other (specify) 97 Unknown 98 Not applicable 99 </div> </div>			
n. Overall damage Not applicable 99 Nil 1 Major-towed away 5 Minor 2 Extensive, unrepairable 6 Moderate-driveable 3 Odometer reading (specify) Moderate-towed away 4			
o. Contributing circumstances (circle ALL that apply and provide description) OR Not applicable 99 Lighting conditions (specify) .. 10 Road conditions (specify) 30 Vehicle defects (specify) 50 Excessive speed for conditions (specify) 70 Weather conditions (specify) 20 Violation, traffic law (specify) 40 Driver condition (specify) 60 Other (specify) 97			

Appendix 1E: Crash Report Form from Queensland, Australia (Page 3)

4. ADDITIONAL UNIT DETAILS			
b. Unit No.		c. Communication device	
Car, s/wagon 1	Bus/coach 5	Wheeled rec. device ... 11	Hands-free phone 1
Ute/panel van 2	Motorcycle 6	Animal, conveyance... 12	Hand-held phone 2
4-wheel drive 20	Tractor 7	Animal, stock 13	2-way/CB radio 3
Rigid truck 3	Towed device 8	Animal, other 14	Other 4
Artic. truck 4	Bicycle 9	Railway unit 15	Unknown 98
Road train/	Pedestrian 10	Other 97	Not applicable 99
Bdouble/triple 40			
e. Commercial usage		cc. Cruise control	
Was vehicle being used for commercial purposes : Yes Y No N		Fitted, in use 1	
Type of business:		Fitted, not in use 2	
Name/sign on vehicle:		Fitted, use unknown 3	
		Not fitted 4	
		Unknown 98	
		Not applicable 99	
f. Driver, rider or pedestrian		dd. Bullbar	
Name		Fitted 1	
Licence No:		Not fitted 2	
State:		Unknown 98	
Racial appearance:		Not applicable 99	
Address			
GENDER		LICCENCE TYPE	
Male M		Open 1	
Female F		Provisional 2	
Unknown ... U		Learner 3	
D.O.B / /		Not appropriately licenced (specify) 97	
Phone:		Not applicable 99	
BLOOD ALCOHOL/DRUG RESULT (if available) OR		ACTION TAKEN:	
Waiting result 93		No further action 1	
Roadside test – under or Nil 94		Breach (specify breach or TON number) 2	
Refused test 95			
Not required 99			
g. Vehicle make and ownership		h. Occupants (circle ALL occupied seating positions)	
Registration No. State: Make:		No. of persons in unit	
Model: Colour:		Back of ute, s/wagon 10	
Owner's name:		Towed device 11	
Address:		Bus seat 12	
Phone:		Unknown 98	
		Not applicable 99	
Sections below to be completed for Major Incidents ALWAYS and for Minor Incidents if applicable, then go to next page.			
i. Vehicle movement		Headed direction: On (Street/Road/H'way):	
Origin of journey: Town:		State:	
j. Intended unit action			
VEHICLE			
Go straight ahead 1	Slow or stop 7	PEDESTRIAN	
Overtake 2	Start in lane 8	Walk with traffic 21	Playing 26
Make right turn 3	Start from parked 9	Walk against traffic 22	Cross carriageway 27
Make left turn 4	Reverse 10	Remain stationary 23	Other (specify) 97
Make U turn 5	Stay stopped 11	Push or work on vehicle 24	
Change lanes 6	Remain parked 12	Other working 25	Not applicable 99
k. Was unit engaged in towing? Not towing 0 OR – Number of trailers being towed:			
For each trailer being towed, please enter its reg. no. AND State of registration: IF Unreg U Trailer type:			
Reg. No. State:	Reg. No. State:	l. Dangerous goods	
Reg. No. State:	Reg. No. State:	Vehicle carrying dangerous goods?	
Reg. No. State:	Reg. No. State:	Yes Y Unknown U	
		No N Not applicable X	
m. Damage points (circle all damage points)		n. Overall damage	
		Not applicable 99	
Underneath vehicle 12		Nil 1	
Other (specify) 97		Major–towed away 5	
Unknown 98		Minor 2	
Not applicable 99		Extensive, unrepairable 6	
		Moderate–driveable 3	
		Odometer reading (specify)	
		Moderate–towed away 4	
o. Contributing circumstances (circle ALL that apply and provide description) OR Not applicable 99			
Lighting conditions (specify) .. 10	Road conditions (specify) 30	Vehicle defects (specify) 50	Excessive speed for conditions (specify) 70
Weather conditions (specify) 20	Violation, traffic law (specify) 40	Driver condition (specify) 60	Other (specify) 97

Appendix 1E: Crash Report Form from Queensland, Australia (Page 4)

5. INCIDENT DESCRIPTION			
INSTRUCTIONS (Indicate on diagram what happened) 1. Follow dotted lines or draw freehand the outline of roadway at place of incident 2. Number each vehicle and show direction of travel by arrow.  3. Use solid line to show path before incident,  dotted line after incident  4. Show pedestrian by  5. Show railroad by ++++++ 6. Show distance and direction to landmarks. Identify landmarks, sign, streets by name or number.			
			Incident No. <input type="text"/> MUST BE COMPLETED  Draw arrow to indicate North
A copy of this plan must be forwarded forthwith to the Government Statistician's Office - Fax (07) 3224 4236 or PO Box 56 Albert St. 4002			
a. Describe what happened – refer to units by numbers: Unit 1, Unit 2 etc.			
<div style="border: 1px solid black; padding: 5px; float: right;"> Notebook used: Yes...Y No...N No. <input type="text"/> Page <input type="text"/> </div>			
6. PARTICULARS OF PERSONS KILLED OR INJURED			
Name <input type="text"/> Address <input type="text"/> Phone No. <input type="text"/> D.O.B. / / Unit No. <input type="text"/> Seat No. <input type="text"/> Nature of injury <input type="text"/> (Refer 4h) Hospital admitted to <input type="text"/>		Male M Severity code 1 2 3 4 Female F Restraint code 1 2 3 4 98 99 Unknown U Racial appearance <input type="text"/> Helmet code 1 2 98 99 Airbag code 1 2 3 4 98 99	
Name <input type="text"/> Address <input type="text"/> Phone No. <input type="text"/> D.O.B. / / Unit No. <input type="text"/> Seat No. <input type="text"/> Nature of injury <input type="text"/> (Refer 4h) Hospital admitted to <input type="text"/>		Male M Severity code 1 2 3 4 Female F Restraint code 1 2 3 4 98 99 Unknown U Racial appearance <input type="text"/> Helmet code 1 2 98 99 Airbag code 1 2 3 4 98 99	
Name <input type="text"/> Address <input type="text"/> Phone No. <input type="text"/> D.O.B. / / Unit No. <input type="text"/> Seat No. <input type="text"/> Nature of injury <input type="text"/> (Refer 4h) Hospital admitted to <input type="text"/>		Male M Severity code 1 2 3 4 Female F Restraint code 1 2 3 4 98 99 Unknown U Racial appearance <input type="text"/> Helmet code 1 2 98 99 Airbag code 1 2 3 4 98 99	
SEVERITY	RESTRAINT	HELMET	AIRBAGS
1. Dead 2. Admitted to hospital 3. Received med. treatment-not admitted 4. Minor injury-first aid or no treatment	1. Fitted-worn 2. Fitted-not worn 3. Fitted-unknown if worn 4. Not Fitted 98. Unknown 99. Not applicable	1. Worn 2. Not worn 98. Unknown 99. Not applicable	1. Fitted-deployed 2. Fitted-not deployed 3. Fitted-unknown if deployed 4. Not Fitted 98. Unknown 99. Not applicable

APPENDIX 2

LIST OF DESCRIPTIVE CRASH CODES

100	Multi vehicle Crash	
DCC	Short Description	Long Description
110	110 - Thru-Thru - Opposing	110 Vehicles approaching from opposing directions and both are going straight ahead resulting in a head on. (A sideswipe from opposing directions is included in this DCC.)
111	111 - Right-Thru - Opposing	111 Vehicles approaching from opposing directions and one is turning right the other is going straight ahead resulting in a head on.
112	112 - Left-Thru - Opposing	112 Vehicles approaching from opposing directions and one is turning left the other is going straight ahead resulting in a head on.
113	113 - Right-Right - Opposing	113 Vehicles approaching from opposing directions and are both turning right resulting in a head on.
114	114 - Right-Left - Opposing	114 Vehicles approaching from opposing directions and one is turning right the other is turning left resulting in a head on.
115	115 Left-Left Opposing	115 Vehicles approaching from opposing directions and are both going turning left resulting in a head on.
116	116 - U-Turn-Thru - Opposing	116 Vehicles approaching from opposing directions and one is doing a U Turn the other is going straight ahead resulting in a head on.
119	119 - Other - Opposing	119 Vehicles approaching from opposing directions that results in a collision.
130	130 - Thru-Thru - Same Dir.	130 Vehicles approaching from same direction and both are going straight ahead resulting in a rear end crash.
131	131 - Thru-Right - Same Dir	131 Vehicles approaching from same direction and one is going straight ahead and rear ends a vehicle turning right.
132	132 - Thru-Left - Same Dir.	132 Vehicles approaching from same direction and one is going straight ahead and rear ends a vehicle turning left.
136	136 - U-turn-Thru - Same Dir.	133 Vehicles approaching from same direction and one is going straight ahead and has a collision with a vehicle doing a U Turn.
139	139 - Other - Rear End	139 Vehicles approaching from same direction and resulting in a rear end crash.
150	150 - Thru-Thru - At Angle	150 Vehicles approaching at an angle to each other and both are going straight ahead resulting in a collision. (These are intersection crashes.)

DCC	Short Description	Long Description
151	151 - Thru-Right - At Angle	151 Vehicles approaching at an angle to each other and one is going straight ahead the other is turning right, resulting in a collision. (These are intersection crashes.)
152	152 - Thru-Left - At Angle	152 Vehicles approaching at an angle to each other and one is going straight ahead the other is turning left, resulting in a collision. (These are intersection crashes.)
153	153 - Right-Thru - At Angle	153 Vehicles approaching at an angle to each other and one is turning right the other is going straight ahead, resulting in a collision. (These are intersection crashes.)
154	154 - Right-Right - At Angle	154 Vehicles approaching at an angle to each other and are turning right resulting in a collision. (These are intersection crashes.)
155	155 - Left-Right - At Angle	155 Vehicles approaching at an angle to each other and one is turning left and the other turning right, resulting in a collision. (These are intersection crashes.)
156	156 - Left-Thru - At Angle	153 Vehicles approaching at an angle to each other and one is turning left the other is going straight ahead, resulting in a collision. (These are intersection crashes.)
157	157 - Right-Left - At Angle	157 Vehicles approaching at an angle to each other and one is turning right and the other turning left resulting in a collision. (These are intersection crashes.)
158	158 - Left-Left - At Angle	158 Vehicles approaching at an angle to each other and are turning left resulting in a collision. (These are intersection crashes.)
159	159 - Other - At Angle	159 Vehicles approaching at an angle to each other and resulting in a collision. (These are intersection crashes.)
170	170 - Side Swipe - Same Dir.	170 Vehicles approaching from same direction and both are going straight ahead resulting in sideswipe collision.
171	171 - Lane/C Right - Same Dir.	171 Vehicles approaching from same direction and both are going straight ahead when the vehicle in the left lane merges right, side swiping the other vehicle.
173	173 - S/Swipe R/R - Same Dir.	173 Vehicles approaching from same direction and both are turning right when they sideswipe each other.
174	174 - S/Swipe L/L - Same Dir.	174 Vehicles approaching from same direction and both are turning left when they sideswipe each other.
179	179 - Other - Side Swipe	179 Vehicles approaching from same direction and a sideswipe collision occurs.

DCC	Short Description	Long Description
190	190 - O/Take-Thru - Opposing Dir.	190 Vehicles approaching from opposing directions, one is overtaking and has a head on with the other vehicle going straight ahead.
191	191 - O/Take-Thru - Same Dir.	191 Vehicles approaching from same direction and one is going straight ahead and the other is overtaking and rear ends the front vehicle.
192	192 - O/T-O/Take - Same Dir.	192 Vehicles approaching from same direction and both are overtaking, the second vehicle rear-ends the front vehicle.
193	193 - O/T-Cut In - Same Dir.	193 Vehicles approaching from same direction and one is going straight ahead and the other is overtaking, the overtaking vehicle cuts off the other vehicle resulting in a collision.
194	194 - O/T-Right - Same Dir.	194 Vehicles approaching from same direction and one overtakes a vehicle turning right, resulting in a collision.
196	196 - O/T-U-turn - Same Dir.	196 Vehicles approaching from same direction and one overtakes a vehicle performing a U Turn, resulting in a collision.
199	199 - Other - Overtaking	196 Vehicles approaching from same direction and at least one vehicle is overtaking and there is a collision.

200	Single VehicleCrash	
DCC	Short Description	Long Description
210	210 - Overturned - Straight	210 A single vehicle is going straight ahead and loses control and overturns.
211	211 - Overturned - Turning Right	211 A single vehicle is turning right and loses control and overturns.
212	212 - Overturned - Turning Left	212 A single vehicle is turning left and loses control and overturns.
213	213 - Overturned - U-turn	213 A single vehicle is performing a U Turn and loses control and overturns.
214	214 - Overturned - Overtaking	214 A single vehicle is overtaking and loses control and overturns.
230	230 - H/Object On Straight Road	230 A single vehicle is on a straight road and hits object on road.
231	231 - H/Object At Intersection	231 A single vehicle is at an intersection and hits object on road.
232	232 - H/Object On Incline	232 A single vehicle is on an incline and hits object on road.
233	233 - H/Object On Curve	233 A single vehicle is on a curve and hits object on road.
234	234 - H/Object On Curved Incline	234 A single vehicle is on a curved incline and hits object on road.
235	235 - H/Object On Rd Reversing	235 A single vehicle is reversing and hits object on road.
250	250 - H/Object Off Straight Road	250 A single vehicle is on a straight road and hits object off road.
251	251 - H/Object Off Intersection	251 A single vehicle is at an intersection and hits object off road.
252	252 - H/Object Off Incline	252 A single vehicle is on an incline and hits object off road.
DCC	Short Description	Long Description

253	253 - H/Object Off Curve	253 A single vehicle is on a curve and hits object off road.
254	254 - H/Object Off Curved Incline	254 A single vehicle is on a curved incline and hits object off road.
255	255 - H/Object Off Rd Reversing	255 A single vehicle is reversing and hits object off road.
270	270 - Hit Parked Veh On Road	270 A single vehicle hits vehicle parked on the road.
271	271 - Hit Parked Veh Off Road	271 A single vehicle hits vehicle parked off the.
290	290 - Hit Animal	290 A single vehicle hits animal.
299	299 - Other - Overturned	299 A single vehicle loses control and overturns.

300	Pedestrian Crash	
DCC	Short Description	Long Description
310	310 - Hit Pedestrian - Crossing Road	310 A single vehicle hits pedestrian(s) as they are as crossing the road.
311	311 - Hit Pedestrian - Walk Along Rd	311 A single vehicle hits pedestrian(s) as they are walking alone the road.
312	312 - Hit Pedestrian - Walk Along Edge	312 A single vehicle hits pedestrian(s) as they are walking alone edge of the road.
313	313 - Hit Pedestrian - Playing On Rd	313 A single vehicle hits pedestrian(s) as they are playing on the road.
314	314 - Hit Pedestrian - On Footpath	314 A single vehicle hits pedestrian(s) when they are on the footpath.
315	315 - Hit Pedestrian - On Crossing	315 A single vehicle hits pedestrian(s) as they are crossing at a pedestrian crossing.
316	316 - Hit Pedestrian - 50m of Xsing	316 A single vehicle hits pedestrian(s) as they are crossing within 50 metres of a Pedestrian crossing.
317	317 - Hit Pedestrian - Centre Refuge	317 A single vehicle hits pedestrian(s) when they are in a centre refuge.
399	399 - Hit Pedestrian - Other	399 A single vehicle hits a pedestrian(s).
400	Passenger Crash	
DCC	Short Description	Long Description
410	410 - Hit when Boarding	410 A vehicle hits a passenger as they are boarding another vehicle.
411	411 - Hit when Alighting	411 A vehicle hits a passenger as they are alighting from another vehicle.
412	412 - Fall off Motor Cycle	412 A passenger falls of a motorcycle.
413	413 - Sitting Outside - Fall Off	413 A passenger falls of a vehicle while sitting outside of that vehicle.
414	414 - Standing Outside - Fall Off	414 A passenger falls of a vehicle while standing outside of that vehicle.

APPENDIX 3
LIST OF POLICE STATIONS AND CODES

Station No.	Office	Station No.	Office
1001	APO Dobhan	5003	APO Letang
1002	APO Tellok	5004	Apo Letang Morang
1003	DPO Taplejung	5005	APO Nimuwa
2001	APO Ravi	5006	APO Pathari Morang
2002	DPO Panchthar	5007	APO Rangeli
2003	P.P. Charibhangyang 5thar	5008	APO Rani
2004	Pra.Chauki Chari Bhanjyang	5009	APO Sijuwa
3001	A.Pra..Post Chokbajar	5010	APO Urlabari
3002	APO Mangalbare	5011	DPO Morang
3003	APO Pashupatinagar	5012	DTPO Morang
3004	DPO Ilam	5013	Pra. Chauki Bargachhi
3005	Pra.Chau. Phikkal	5014	Pra. Chauki Bahuni
4001	A.P.O.Ghailadubba Jhapa	5015	Pra. Chauki Bakhari
4002	A.P.O.Surunga Jhapa	5016	Pra. Chauki Jhorahat
4003	A.Pra.Post Beldangi	5017	Pra. Chauki Kaleruwa
4004	APO Anarmani	5018	Pra.Chauki Majhare
4005	APO Baniyani Jhapa	5019	Pra.Chauki Motipur
4006	APO Damak	5020	WPO B.N. (Ka)
4007	APO Dhulabari	5021	WPO B.N. (Kha)
4008	APO Gaurigunj	6001	APO Chakkarghatti
4009	APO Jhiljhile	6002	APO Debangunj
4010	APO Kakadbhitta	6003	APO Dewanganj
4011	APO Rajgada Jhapa	6004	APO Dharan
4012	DPO Jhapa	6005	APO Duhabi
4013	DTPO Jhapa	6006	Apo Harinagar
4014	Pra.Chau. Char Aali	6007	APO Itahari
4015	Pra.Chau.Bhadrapur	6008	Apo Laukahi
4016	Pra.Chau.Jalayal Jhapa	6009	APO Mahendranagar
4017	Pra.Chau.Jalayal Jhapa	6010	APO Pakali
4018	Pra.Chau.Kerabari	6011	DPO Sunsari
4019	Pra.Chauki Foolbari Jhapa	6012	DTPO Dharan
4020	Pra.Chauki Shanischare Jhapa	6013	Pra.Chauki Bharoul Sunsari
4021	Si.Pra.Chau.Kachana Jhapa	6014	Pra.Chauki Sigiya Sunsari
4022	Si.Pra.Chau.Prithibi Nagar Jhapa	6015	Pra.Chauki koshi Byarej
4023	TPO Birtamode	6016	RTPO Itahari
4024	TPO Damak	6017	Sa.Pra.Gulm Dharan
4025	Wa.Pra.Ka.Bhadrapur	6018	Traffic Police Office Itahari
5001	APO Belbari	6019	WPO Dharan
5002	Apo Hatkhola (kha)	7001	APO Chhintang
7002	DPO Dhankuta	11012	Pra.Chauki kerung
7003	Pra.Chau.Bhedetar	11013	Pra.Chauki Khumjung
7004	Pra.Chau.Budhabare	11014	Pra.Chauki Nele

Station No.	Office	Station No.	Office
7005	Pra.Chau.Hile	11015	Pra.Chauki Nunthala
7006	Pra.Chau.Leguwa	11016	Pra.Chauki Tamakhani
7007	Pra.Chau.Pakhribas	11017	Pra.Chi. Kharikhola
7008	Pra.Chau.RajaRani	11018	Si.Pra.Chauki Thambuchhe
7009	Pra.Chau.Sidhuwa	12001	APO Baruneshwar
7010	RAO Dhankuta	12002	APO Khijiphalate
8004	APO Aathrai	12003	APO Rampur Thoksila
8005	APO Basantpur	12004	APO Sunderpur
8006	DPO Terhathum	12005	DPO Okhaldunga
9001	A.P.O.Aakhibhui Sankhuwasabha	12006	Pra.Chauki Manebhanjyang
9002	A.P.O.Yafu Sankhuwasabha	13001	APO Aiselukharka
9003	APO Chainpur	13002	APO Khotang
9004	DPO Sankhuwasabha	13003	DPO Khotang
9005	Pra.Chauki Mude Sanischare Sankhuwasabha	14001	A.P.O.Beltar Udayapur
9006	Pra.Chauki Num Sankhuwasabha	14002	APO Jaljale
10001	APO Boyang	14003	APO Katari
10002	APO Dilpa	14004	APO Rampurthokshila
10003	APO Dingla	14005	Apo Sunderpur
10004	Apo Tiwaribhanjyang	14006	DPO Udaypur
10005	DPO Bhojpur	14007	Nagar Police Office Triyuga
10006	Pra.chauki	14008	Pra.Chau.Udayapur Gadhi
10007	Pra.Chauki Jorayotar	14009	Pra.Chauki Hadiya
10008	Pra.Chauki Pyauli	14010	Pra.Chauki Lalpatta
11001	APO Lukla Bajar	15001	A.P.O.Vediya Saptari
11002	APO Nacha Solu	15002	APO Bhardaha Saptari
11003	APO Namchebazar solu	15003	APO Bodebarsain Saptari
11004	APO Sotang Solu	15004	APO Deliya Saptari
11005	DPO Solu	15005	APO Hanuman Nagar Saptari
11006	Pr.Chauki kinja	15006	APO Hanumannagar
11007	Pra.Chauki Beni	15007	APO Kalyanpur
11008	Pra.Chauki Chhaskam	15008	APO Kanchanpur
11009	Pra.Chauki Dorpu	15009	APO Mahuli Saptari
11010	Pra.Chauki Goli	15010	APO Pato Saptari
11011	Pra.Chauki Kangel	15011	APO Rupani
15012	DPO Saptari	17023	Pra.Chauki Janakpurdham
15013	DTPO Saptari	17024	Pra.Chauki Jiromail
15014	Nagar Police Office	17025	Pra.Chauki Kapileshor
16001	A.Na.Pra.Ka.	17026	Pra.Chauki Lalgadha
16002	A.P.O.Bariyarpatti Siraha	17027	Pra.Chauki Laliya
16003	A.P.O.Bishnupurkatti Siraha	17028	Pra.Chauki Mukhiya Patti
16004	A.P.O.Kalyanpur Siraha	17029	Pra.Chauki Portaha

Station No.	Office	Station No.	Office
16005	A.P.O.Maheshbari Siraha	17030	Pra.Chauki Singyahimadan
16006	A.P.O.Sukhipur Siraha	17031	Pra.Chauki Tarapatti
16007	APO Golbazar	17032	Pra.Chauki Tulsiyahi
16008	APO Maheshpur Patari Siraha	17033	Pra.Chauki Bahedabela
16009	APO Mirchaiya	17034	Pra.Chauki Barmahajiya
16010	DPO Siraha	17035	Pra.Chauki Chisapani
16011	DTPO Siraha	17036	Si.Pra.Chauki Lagma
16012	Wa.Pra.Ka.Lagan Siraha	17037	Traffic Police post Mahendranagar
16013	WPO Lahan	17038	Traffic Police post Portaha
17001	Apo Aurahi Dhanusha	17039	Wa.Pra.Ka.Mujeliya
17002	Apo Bharatpur	17040	WPO Mujeliya
17003	APO Dhalkebar	18001	A.Pra.Post Bhattamode
17004	Apo Dhalkebar	18002	APO Bardibas
17005	APO Dhanusadham	18003	APO Gaushala
17006	Apo Falguma	18004	DPO Mohatri
17007	APO Hanuman Nagar	18005	DTPO Mahottari
17008	Apo Khajuri	18006	Pra.Chau Matihani
17009	APO Mahendranagar	18007	Pra.Chauki Itahrawakatti
17010	Apo Mahendranagar	18008	Pra.Chauki Bathnaha
17011	APO Sabaila	18009	Pra.Chauki Halkhori
17012	Apo Suganikas	18010	Pra.Chauki Khayermara
17013	APO Yadukuwa	18011	Pra.Chauki Kisan Nagar
17014	APO Yagyabhumi	19015	A.Pra.Post Malangwa
17015	DPO Dhanusa	19016	APO Barhathawa
17016	DTPO Dhanusa	19017	APO Bhaktipur
17017	Pra.Chauki Thadijhija	19018	APO Gadhhiya
17018	Pra.Chauki Balahagotha	19019	APO Haripur
17019	Pra.Chauki Chorakoyalpur	19020	APO hariwan
17020	Pra.Chauki Gidda	19021	APO Kesharganj
17021	Pra.Chauki Inaruwa	19022	DPO Sarlahi
17022	Pra.Chauki Itaharuwa	19023	DTPO Sarlahi
19024	Pra.Chau.Lalbandi	25001	Bhaisepati Traffic Police
19025	Pra.Chau.Nawalpur	25002	Chapagaun Traffic Police
20001	APO Bhiman	25003	Jawalakhel Traffic Police
20002	APO Khurkot	25004	Ma.Na.Pra. Brit Chapagaun La.Pu.
20003	DPO Sindhuli	25005	Ma.Na.Pra.Brita Satdobato (D.O)
20004	DTPO Sindhuli	25006	Ma.Na.Pra.Pa. Lalitpur
20005	Pra.Chau.Doramba	25007	Ma.Na.Pra.Parisar Lalitpur (D.O.)
21001	APO Choprang	25008	Ma.Na.Pra.Pra.Dhapakhel Lalitpur
21002	APO Dhobidada	25009	Ma.Na.Pra.Pra.Mangalbajar Lalitpur
21003	APO Tokarpur	25010	Ma.Na.Pra.Prabhag Badegau Lalitpur

Station No.	Office	Station No.	Office
21004	DPO Ramechhap	25011	Ma.Na.Pra.Prabhag Lubhu Lalitpur
21005	DTPO Ramechhap	25012	Mangalbazar Traffic Police
21006	Pra.Chau.Doramba	25013	Metro Police Circule Satdobato
22001	A.P.Post Boach	25014	Metro Police Cricle Chapagaun
22002	APO Jiri	25015	Metropolitan Circle Chapagaun Lalitpur
22003	APO Singati	25016	Metropolitan Circle Satdobato Lalitpur
22004	DPO Dolkha	25017	Metropolitan Police Range Lalitpur
22005	DTPO Dolkha	25018	Metropolitan Sector Harisidhi Lalitpur
22006	Pra.Chau.Kharidhunga	25019	Sanepa Traffic Police
22007	Pra.Chau.Satdobato	25020	Sector Badegaun Lalitpur
22008	Pra.Chauki KiratiChhap	25021	Sector Bungmati Lalitpur
22009	Pra.Chauki Kirnetar	25022	Sector Imadol Lalitpur
23001	APO Barhabise	25023	Sector Lubhu Lalitpur
23002	APO Melmchi	25024	Sector Mangalbazar Lalitpur
23003	Apo Nawalpur	25025	Sector Sanepa Lalitpur
23004	DPO Si.Pa.	26001	Kamal Binayak Traffic Police
23005	DTPO Sindhupalchok	26002	Ma.Na.Pra.Brita Jagati Bhaktapur
23006	Pra.Chauki Lamosanghu	26003	Ma.Na.Pra.Chauki Changunarayan
23007	Si.Pra.Chau. Kodari	26004	Ma.Na.Pra.Pa. Bhaktapur (D.A.)
23008	Si.Pra.Chau.Tatopani	26005	Ma.Na.Pra.Pra.Balkot Bhaktapur
23009	Si.Pra.Chauki Kodari	26006	Ma.Na.Pra.Pra.Buddanagar K.T.M.
24001	APO Banepa	26007	Ma.Na.Pra.Pra.Dadhikot Bhaktapur
24002	APO KattikeDeurali	26008	Ma.Na.Pra.Pra.Darbarskwar Bhaktapur
24003	APO Mangaltar	26009	Ma.Na.Pra.Pra.Nagarkot Bhaktapur
24004	APO Panchkhal	26010	Ma.Na.Pra.Pra.Sudal Bhaktapur
24005	DPO Kavre	26011	Ma.Na.Pra.Pra.Sundarijal K.T.M.
24006	DTPO Banepa	26012	Ma.Na.Pra.Prabhag Byasi Bhaktapur
24007	Pra.Chau Panauti	26013	Ma.Na.Pra.Prabhag Katunje Bhaktapur
26014	Ma.Na.Pra.Prabhag kharipati Bhaktapur	27011	Kalimati Traffic Police
26015	Ma.Na.Pra.Prabhag Sudal Bhaktapur	27012	Kamal Pokhari Traffic Police
26016	Metro Circle Thimi,Bhaktapur	27013	Kapan Traffic Police
26017	Metro Police Chauki Nagarkot	27014	Khandaghari Traffic Police
26018	Metro Police Circle Jagati	27015	Koteswor Traffic Police
26019	Metro Police Circle Thimi	27016	Kritipur Traffic Police
26020	Metro Police Post Dudhapati	27017	Ma. Na. Pra. Brita Darbarmarg D.O.
26021	Metro Police Sector Balkot	27018	Ma. Na. Pra. Brita Singhadurar
26022	Metro Police Sector Byasi	27019	Ma. Na. Pra. Brita Soyembhu

Station No.	Office	Station No.	Office
26023	Metro Police Sector Dadikot	27020	Ma. Na. Pra. Mu. Gha. Sa. Karyadal, Ktm
26024	Metro Police Sector Katunje		
26025	Metro Police Sector Kharipati	27021	Ma. Na. Pra. Brita Gausala
26026	Metro Police Sector Nagarkot	27022	Ma. Na. A. Pra. Post Tri. Bi. Sikshyan Aspatal
26027	Metro Police Sector Sano Thimi	27023	Ma. Na. Pra. Bit Kuleshwor Ktm
26028	Metro Police Sector Sudal	27024	Ma. Na. Pra. Circle Maharajgang KTM
26030	Metropolitan Police Range Bhaktapur	27025	Ma. Na. Pra. Prabhag Khasibajar Kathmandu DO
26031	Police Sector Darbar Square	27026	Ma. Na. Pra. Bit Galfutar Kathmandu DO
26032	Traffic Police Range Bhaktapur	27027	Ma. Na. Pra. Bit Mandikatar Kathmandu DO
27001	A. Pra. Post Milanchok Banesor	27028	Ma. Na. Pra. Bit Panchkanya Kathmandu DO
27002	Airport Traffic Police	27029	Metro Politon Police Range Bhaktapur
27003	APO Pharping Kathmandu	27029	Ma. Na. Pra. Bit Sukedhara Kathmandu DO
27004	Balkhu Traffic Police	27030	Ma. Na. Pra. Bit Banasthali Balaju Kathmandu
27005	Baudha Traffic Police	27031	Ma. Na. Pra. Bit Bijeshori Kathmandu DO
27006	Budhanilkhantha Traffic Police	27032	Ma. Na. Pra. Bit Bouda Nayabasti
27007	Durbar Marga Traffic Police	27033	Ma. Na. Pra. Bit Cha: Mati Balaju Kathmandu
27008	Gaushala Traffic Police	27034	Ma. Na. Pra. Bit Halchok Kathmandu DO
27009	Janasewa Traffic Police	27035	Ma. Na. Pra. Bit Milanchok Baneshwar
27010	Kalanki Traffic Police	27036	Ma. Na. Pra. Bit Tinpipe Balaju Kathmandu
27037	Ma. Na. Pra. Brit A. A. Thimi	27065	Ma. Na. Pra. Pra. Hepalihait Kathmandu DO
27038	Ma. Na. Pra. Brit Nayabaneshwar (Ka. Pramuh)	27066	Ma. Na. Pra. Pra. Kadaghari KTM
27039	Ma. Na. Pra. Brit Thankot Ka. Pramukha	27067	Ma. Na. Pra. Pra. Kapan Kathmandu
27040	Ma. Na. Pra. Brit. Balaju	27068	Ma. Na. Pra. Pra. Koteswar
27041	Ma. Na. Pra. Brita kamalpokhari	27069	Ma. Na. Pra. Pra. Machche Gaau KTM
27042	Ma. Na. Pra. Brita Thankot Godam	27070	Ma. Na. Pra. Pra. Mudkhu K. T. M.
27043	Ma. Na. Pra. Brita Baudha	27071	Ma. Na. Pra. Pra. Nanglebhare Kathmandu DO
27044	Ma. Na. Pra. Brita Goushala	27072	Ma. Na. Pra. Pra. Sitapaila K. T. M.

Station No.	Office	Station No.	Office
27045	Ma.Na.Pra.Brita Kalimati	27073	Ma.Na.Pra.Pra.Syuchatar K.T.M.
27046	Ma.Na.Pra.Brita Kamalpokhari	27074	Ma.Na.Pra.Pra.Thali Kathmandu DO
27047	Ma.Na.Pra.Brita Maharajgunj	27075	Ma.Na.Pra.Pra.Tilingetaar Maharajgunj DO
27048	Ma.Na.Pra.Brita Sinhadarwar	27076	Ma.Na.Pra.Pra.Tilingetaar Kathmandu DO
27049	Ma.Na.Pra.Brita Thankot KTM	27077	Ma.Na.Pra.Pra.Tokha KTM
27050	Ma.Na.Pra.Brita.Janasewa Ktm	27078	Ma.Na.Pra.Prabhag Balkhu KTM
27051	Ma.Na.Pra.Brita.Janasewa KTM	27079	Ma.Na.Pra.Prabhag Bandegau
27052	Ma.Na.Pra.Chauki Bhimdhunga K.T.M.	27080	Ma.Na.Pra.Prabhag Kalanki KTM
27053	Ma.Na.Pra.Chauki Jitpur K.T.M.	27081	Ma.Na.Pra.Prabhag Nagdhunga KTM
27054	Ma.Na.Pra.Chauki Matatirtha K.T.M.	27082	Ma.Na.Pra.Prabhag Naikap Kathmandu DO
27055	Ma.Na.Pra.Circle Balaju	27083	Ma.Na.Pra.Prabhag Naikap KTM
27056	Ma.na.Pra.Pra Sundarijal	27084	Ma.Na.Pra.Prabhag Ramkot KTM
27057	Ma.Na.Pra.Pra. Naikap K.T.M.	27085	Ma.Na.Pra.Prabhag Saankhu KTM
27058	Ma.Na.Pra.Pra. Pharping KTM	27086	Ma.Na.Pra.Prabhag Sakhu KTM
27059	Ma.Na.Pra.Pra.Badegau Lalitpur	27087	Ma.Na.Pra.Prabhag Syuchatar Kathmandu DO
27060	Ma.Na.Pra.Pra.Balkhu Kathmandu DO	27088	Mahanagariy Prahari Prabhag Nagdhunga
27061	Ma.Na.Pra.Pra.Darbarmarga Ka.Pramukh	27089	Maharajgunj Traffic Police
27062	Ma.Na.Pra.Pra.Gangabu Nayabuspark	27090	Metro Police Brita Lainchaur KTM
27063	Ma.Na.Pra.Pra.Gokarna K.T.M.	27091	Metro Police Circule Kirtipur
27064	Ma.Na.Pra.Pra.Hatigauda Kathmandu DO	27092	Metro Police Circule Soyembhu
27093	Metro Police Cricle Baudhha KTM	27128	MP Sector Naikap
27094	Metro Police Cricle Nayabaneshwar	27129	MP Sector Sakhu
27095	Metro Police Ranipokhari(D.O.)	27130	MP Sector Sundarijal
27096	Metro Police Reng Kathamandu (D.A.)	27131	MP Sector Thali ASI
27097	Metro Police Sector Budhanilkantha	27132	MP Sector Tilingetar
27098	Metro Politon Police Range Hanumandhoka	27133	Naghdhunga Traffic Police
27099	Metropolitan Traffic Police Division	27134	Naya Bus Park Traffic Police
27100	Metrp police Cricle Kalimati DO	27135	Pharping Traffic Police
27101	MP Circle Balaju	27136	Sankhu Traffic Police
27102	MP Circle Baneshwor	27137	Satdobato Traffic Police
27103	MP Circle Boudha	27138	Singhadarbar Traffic Police
27104	MP Circle Darbarmarg	27139	Sorakhutte Traffic Police

Station No.	Office	Station No.	Office
27105	MP Circle Gaushala	27140	Sukedhara Traffic Police
27106	MP Circle Kalimati	27141	Swoyambhu Traffic Police
27107	MP Circle Khamalpokhari	27142	Thamel Traffic Police
27108	MP Circle Kirtipur	27143	Thankot Traffic Police
27109	MP Circle Lainchaur	27144	Thapathali Traffic Police
27110	MP Circle Maharajgunj	28001	A.Pra.Post Khanepani
27111	MP Circle Sihadarbar	28002	A.Tra.Pra.Post
27112	MP Circle Swaymbhu	28003	APO Choghate
27113	MP Circle Thankot	28004	Apo Kharanitar
27114	MP Range Kathmandu	28005	DPO Nuwakot
27115	MP Range Kathmandu Women Cell Kalimati	28006	DTPO Nuwakot
27116	MP Sector Baspark	28007	Nagar Prahari Kolani Nuwakot
27117	MP Sector Balambu	28008	Pra.Chau Kakani
27118	MP Sector Balkhu	28009	Pra.Chauki Deurali
27119	MP Sector budhanilkhantha	28010	Pra.Chauki Kimtang
27120	MP Sector Farping	28011	Pra.Chauki Taruka
27121	MP Sector Gokarna	28012	Pra.Chauki Chhahare
27122	MP Sector Kadaghari	28013	Pra.Chauki Debighat
27123	MP Sector Kapan	28014	Pra.Chauki Dhikure
27124	MP Sector Koteswor	28015	Pra.Chauki Jhiltung
27125	MP Sector Machhegau	28016	Pra.Chauki Okharpauwa
27126	MP Sector Matatirtha	28017	Pra.Chauki Parti Bhanjyang
27127	MP Sector Nagdhunga	28018	Pra.Chauki Phikuri
28019	Pra.Chauki Samari	33006	APO Simara
28020	Pra.Chauki Tadipul	33007	APO Simrongadh
29001	DPO Rasuwa	33008	DPO Bara
29002	DTPO Rasuwa	33009	DTPO Bara
29003	Pra.Chau Thambuchera	33010	Petrol Pump Pathlaiya
29004	Pra.Chau. Syafrebesi	33011	Pra.Chauki Dakshin Jhitkaiya Bara
30001	APO Fulkharka	33012	Pra.Chauki Jaitapur Bara
30002	APO Gajuri	34001	APO Ektanga
30003	APO Khanikhola	34002	APO Paterwa Sunauli Parsa
30004	APO Salyantar Dhading	34003	APO Pokhariya Parsa
30005	DPO Dhading	34004	APO Pokhriya
30006	DTPO Gajuri	34005	DPO Parsa
30007	Pra.Chau. Gajuri	34006	DTPO Parsa
30008	Pra.Chau.Baireni	34007	Pra.Chau.Bhiswa Parsa
30009	Pra.Chauki Thum Dhading	34008	Sa.Pra.Gulm Birgunj
30010	Pra.Chauki Totke	34009	Wa.Pra.ka. Shreepur Parsa
30011	TPO Khanikhola	34010	Wa.Pra.Ka.Birta Parsa
31001	APO Bhimpheidi	34011	Wa.Pra.Ka.Shripur Parsha

Station No.	Office	Station No.	Office
31002	Apo Faparbari Makawanpur	34012	WPO Birta
31003	APO Manhari	34013	WPO Shreepur
31004	APO Palung	35001	A.P.O.Chanauli Chitwan
31005	APO Pasupatinagar	35002	A.P.O.Dibyanagar Chitwan
31006	DPO Makawanpur	35003	A.P.O.Gitanagar Chitwan
31007	DTPO Makwanpur	35004	A.P.O.Ramnagar Chitwan
31008	Pra.Chauku Padam Pokhari	35005	APO Bhandara
31009	RAO Makawanpur	35006	APO Kaireni Chitwan
31010	Wo.Pra.Ka.Sanopokhara hetauda	35007	Apo Khairahani
31011	WPO Hetauda	35008	Apo Madi
32001	APO Ch.pur	35009	APO Muglin Chitwan
32002	APO Garuda	35010	APO Tandi
32003	DPO Rautahat	35011	DPO Chitwan
32004	Dpo Rautahat Sanchar	35012	DTPO Chitwan
32005	DTPO Rautahat	35013	Pra.Chauki jutpani Chitwan
33001	A.P.O.Kabahi Bara	35014	Pra.Chauki Samjhaut Pipariya Chitwan
33002	A.P.O.Mahendra Aadarsha Bara	35015	TPO Muglin
33003	A.P.O.Sirhauba Bara	35016	WPO Narayangadh
33004	APO Kolbi	36001	A.P.O.Jaubari Gorkha
33005	APO Nijgadh	36002	APO Aarughat
36003	APO Harmi	38008	DTPO Tanahun
36004	APO Takukot	38009	Police Post Bhirkot Tanahun
36005	APO ThakrePokhri	38010	Police Post Chadrabati Tanahun
36006	DPO Gorkha	38011	Police Post Gajarkot Tanahun
36007	DTO Gorkha	38012	Police Post Pokhari Chhap Tanahun
36008	Pra.Chau.Aarkhet	38013	Police Post Rishinga Rani Pokhari Tanahun
36009	Pra.Chau.Bhachek	38014	Police Post Shisaghat Tanahun
36010	Pra.Chau.Bongkot	38015	Police School Belchautara
36011	Pra.Chau.Borlang	38016	Pra.Chau.Bhirkot
36012	Pra.Chau.Chhoprak	38017	Pra.Chau.Rising
36013	Pra.Chau.Ghyalchok	39001	APO Chisapani
36014	Pra.Chau.Ghyampesal	39001	APO Belhiya
36015	Pra.Chau.Kurintar	39002	APO Jaypane
36016	Pra.Chau.Majhwadeurali	39002	APO Butwal
36017	Pra.Chau.Manakamana	39003	APO Ratnapur
36018	Pra.Chau.Manbu	39003	APO Chhapiya
36019	Pra.Chau.Nayasangu	39004	DPO Syangaja
36020	Pra.Chau.Sirdibas	39004	APO Lumbini
36021	Pra.Chau.Tanglichok	39005	DTPO Syangja
36022	Pra.Chauki Bankot	39005	Apo Majhgawa Rupandehi

Station No.	Office	Station No.	Office
36023	Pra.Chauki Gyalchok	39006	Pra.Chau.Arjunchaupari
36024	Pra.Chauki Kokhe Aahale Gorkha	39006	APO Marchbar
36025	Pra.Chauki Kurintar	39007	Pra.Chau.Biruwaarchale
36026	Pra.Chauki Naya Sanghu	39007	APO Ranaura
36027	Si.Pra.Chau.Larke	39008	Pra.Chau.Chapakot
37001	APO Bhodheadhar	39008	APO Saljhandi
37002	APO Bhorletar	39009	Pra.Chau.Chilaunebas
37003	APO Bichaur	39009	Apo Surya Pura
37004	DPO Lamjung	39010	Pra.Chau.Dahthum
37005	DTPO Lamjung	39010	DPO Rupandehi
38001	APO Aabukhaireni	39011	Pra.Chau.Galyang
38002	APO Belchautara	39011	DTPO Rupandehi
38003	APO Bhanu	39012	Pra.Chau.Keware
38004	APO Debighat	39012	Na.Pra.KaButwal
38005	Apo Tanahu	39013	Pra.Chau.Phedikhola
38006	Area Police Office Sarangghat Tanahun	39013	Pra.Chau. badbaliya
38007	DPO Tanahun	39014	Pra.Chau.Pidhikhola
39014	Pra.Chau.Bethari	41005	Si.Pra.Chau.Kyupar
39015	Pra.Chau.Setidobhan	42001	APO Lete
39015	Pra.Chau.Dubethumuwa	42002	APO Muktinath
39016	Pra.Chau.ThumPokhara	42003	DPO Mustang
39016	Pra.Chau.Gulariya	42004	Pra.Chau.Kagbeni
39017	WPO Waling	43001	APO Darbang
39017	Pra.Chau.Kalidaha	43002	APO Ghodepani
39018	Pra.Chau.Khajhana	43003	DPO Myagdi
39019	Pra.Chau.Manglapur	43004	DTPO Myagdi
39020	Pra.Chau.Maryadapur	44001	APO Huwas
39021	Pra.Chau.Mauhuwabari	44002	DPO Parbat
39022	Pra.Chau.Mudila	44003	DTPO Parbat
39023	Pra.Chau.Rudrapur	44004	Pra.Chau.Karkineta
39024	Si.Pra.Chau.Kadamahawa	44005	Pra.Chau.Phalebas
39025	Wa.Pra.Ka.Butwal	44006	Pra.Chau.Setibeni
39026	WPO Bhairahawa	44007	Pra.Chau.Thulipokhari
39027	WPO Butwal	45001	APO Balewa
40001	A.Pra.Post Bindhbasini	45002	APO barengdada
40002	A.Sa.Pra Gulma	45003	APO Buribang
40003	APO Hansapur Kaski	45004	Apo Galkot
40004	DPO Kaski	45005	DPO Baglung
40005	DTPO Kaski	45006	DTPO Baglung
40006	Pra.Chau.Chhorepatan	45007	Nagar Prahari Baglung
40007	Pra.Chau.Dhampus	45008	Pra.Chauki Dhamja

Station No.	Office	Station No.	Office
40008	Pra.Chau.Ghandruk	45009	Pra.Chauki Kusmisera
40009	Pra.Chau.Shishuwa	46001	APO Chandrakot
40010	Pra.Chauki Biredari Kaski	46002	APO Purkotdaha
40011	Pra.Chauki Dhamoush	46003	APO Ridi
40012	Pra.Chauki Gagangauda	46004	DPO Gulmi
40013	Pra.Chauki Naudada	46005	DTPO Gulmi
40014	RAO Pokhara	46006	Pra.Chau.Charpala
40015	WPO Bagar	46007	Pra.Chau.Dhurkotbastu
40016	WPO Baidam	47001	APO Mujhung
40017	WPO Rambazar	47002	APO Rampur
41001	DPO Manang	47003	DPO Palpa
41002	Pra.Chau.Tal	47004	DTPO Palpa
41003	Si.Pra.Chau.Dharapani	47005	Pra.Chau.Burtung
41004	Si.Pra.Chau.Humde	47006	Pra.Chau.Dobhan
47007	Pra.Chau.Hugi	50004	APO Gorusinge
47008	Pra.Chau.Ramdi	50005	APO Kopawa
47009	Pra.Chau.Sardewa	50006	APO Krishnanagar
48001	A.Pra.Post Daune	50007	APO Maharajganj
48002	APO Amaniganj	50008	APO Pakadi
48003	APO Beltari	50009	DPO Kapilbastu
48004	APO Dedhgaun	50010	DTPO Kapilvastu
48005	APO Gaidakot	50011	Pra.Chau.Anchalpur
48006	APO Kawasoti	50012	Pra.Chau.Dhancaura
48007	APO Nawalpur	50013	Pra.Chau.Pipara
48008	APO Nayabelhani	50014	Pra.Chauki Bagahi
48009	APO Rajhar	50015	Pra.Chauki Bagdi
48010	APO Rudrapur	50016	Pra.Chauki Bedami
48011	APO Semri	50017	Pra.Chauki Bhimli
48012	APO Sunwal	50018	Pra.Chauki Bijuwa
48013	DPO NawalParasi	50019	Pra.Chauki Dohani
48014	DTPO Nawalparasi	50020	Pra.Chauki Fadawa Mechakuri
48015	Pra.Chau.arshi	50021	Pra.Chauki Jhadi
48016	Pra.Chau.Bairagnath	50022	Pra.Chauki kusawa Labani
48017	Pra.Chau.Bardaghat	50023	Pra.Chauki Labani
48018	Pra.Chau.Bashiya	50024	Pra.Chauki Maryadpur
48019	Pra.Chau.Bhujhawa	50025	Pra.Chauki Ragapur
48020	Pra.Chau.Bulingtar	50026	Pra.Chauki Sirsiwa
48021	Pra.Chau.Germi	50027	Pra.Chauki Udaypur
48022	Pra.Chau.Gobarhiya	50028	Si.Pra.Chauki Chakar Chauda
48023	Pra.Chau.Guthiprasauni	51001	APO Khan
48024	Pra.Chau.Kolhuwa	51002	APO Thada
48025	Pra.Chau.Kudiya	51003	DPO Argakhanchi

Station No.	Office	Station No.	Office
48026	Pra.Chau.Panchpeda	51004	Dpo Arghakhachhi (A.A.Shakha)
48027	Pra.Chau.Ramnagr	51005	DTPO Argakhachi
48028	Pra.Chau.Sanahi	51006	Pra.Chau.Arghatosh
48029	Pra.Chau.Sunwal	51007	Pra.Chau.Belkot
48030	Pra.Chau.Tamsariya	51008	Pra.Chau.Dhakawang
48031	Pra.Chau.Triveni	51009	Pra.Chau.Dharapani
48032	Pra.Post Susta	52001	APO Lungwahane
50001	APO Bahadurganj	52002	DPO Pyuthan
50002	APO Chandrauta	53001	APO Bodaha
50003	APO Ganeshpur	53002	APO Ghartigaun
53003	APO Holeri	57019	Si.Pra.Chau.Jayespur Bake
53004	APO Pachhabang	57020	Si.Pra.Chauki Suiya Bake
53005	APO Powang	57021	WPO Nepalganj
53006	APO Sulichaur	58001	APO Bagnaha
53007	APO Uwa	58002	APO Baniyabhar
53008	DPO Rolpa	58003	APO Danabhar
54001	APO Aathbiskot	58004	APO Dodari
54002	APO Chaurjahari	58005	APO Jaynagar
54003	DPO Rukum	58006	APO Mainapokhar
55001	APO Luham	58007	APO Motipur
55002	APO Ragechaur	58008	APO Patabhar
55003	APO Tharmare	58009	APO Rajapur
55004	DPO Salyan	58010	DPO Bardiya
56001	APO Amiliya	58011	Pra.Chau. Sanoshree
56002	APO Bhalubang	58012	Pra.Chau.Bhimapur
56003	APO Gadwa	58013	Pra.Chau.Dhanura
56004	APO Khilatpur	58014	Pra.Chau.Manau
56005	APO Lamahi	59001	APO Babiya Chaur
56006	APO Narayanpur	59002	APO Badepipal
56007	APO Tulsipur	59003	APO Chhinchu
56008	DPO Dang	59004	DPO Surkhet
56009	Pra.Chauki. Tulsipur Baluhawa	60001	APO Dullu
56010	Wa.Pra.Ka.Ghorahi Dang	60002	APO Naumule
56011	Wa.Pra.Ka.Lamahi Dang	60003	Apo Rakam Karnali Dailekh
57005	APO Bankatti	60004	DPO Dailekh
57006	APO Bhagwanpur	61001	APO Barekot
57007	APO Chanauli Bake	61002	APO Dalli
57008	APO Chisapani	61003	APO Garkhakot
57009	APO Jamunah Banke	61004	APO Rimna
57010	APO Kohalpur	61005	DPO Jajarkot
57011	APO Kusum Bake	62001	APO Kaigaun
57012	APO Nairanapur Banke	62002	DPO Dolpa

Station No.	Office	Station No.	Office
57013	DPO Banke	63001	DPO Jumla
57014	Pr.Chauki Laxmanpur	64001	APO Kumalgaun
57015	Pra.Chauki Agaiya Bake	64002	APO Thirpu
57016	Pra.Chauki Ganapur Bake	64003	DPO Kalikot
57017	Pra.Chauki Kalafat Bake	64004	DTO Kalikot
57018	Si.Pra.Chau.Jamunaha	64005	Ji.Tra.Pra.Ka.kalikot
64006	Pra.Chauki Haudi	70002	APO Jorayal
65001	DPO Mugu	70003	DPO Doti
66001	DPO Humla	70004	DTPO Doti
67001	DPO Bajura	70005	Pra.Chau.Bipinagar
67002	Pra.Chau.Dogadi	70006	Pra.Chau.Budar
67003	Pra.Chau.Maure	70007	Pra.Chau.Charmachautara
67004	Pra.Chau.Tante	70008	Pra.Chau.Dauda
68001	APO Bungul	70009	Pra.Chau.Ghandal
68002	APO Thalara	70010	Pra.Chau.Ghanteshwar
68003	DPO Bajhang	70011	Pra.Chau.Tiltari
68004	Pra.Chau.Bisaunochaur	70012	Pra.Chau.Wayal
68005	Pra.Chau.Chhanna	71001	APO Bhajani
68006	Pra.Chau.Daulichaur	71002	APO Chaumala
68007	Pra.Chau.Matela	71003	APO Faltude
68008	Pra.Chau.Melbisauna	71004	APO Hasuliya
68009	Pra.Chau.Rayal	71005	APO Lamki
68010	Pra.Chau.Syadi	71006	APO Malakheti
68011	Si.Pra.Chau.Dhuli	71007	APO Pandaun
69001	A.Pra.Post Mangalsen	71008	APO Sukhkhad
69002	APO Bayalpata	73017	Pra.Chau.Syaule
69003	APO Binayak	71009	APO Tikapur
69004	APO Kalekanda	71010	DPO Kailali
69005	APO Safe bagar	71011	DTPO Kailali
69006	DPO Achham	71012	Pra.Chau.Chhotkipaliya
69007	Pra.Chau.Baidhnaj	71013	Pra.Chau.Chisapani
69008	Pra.Chau.Bhairabsthan	71014	Pra.Chau.Ganjawa
69009	Pra.Chau.Chaukhutte	71015	Pra.Chau.Janakpur
69010	Pra.Chau.Dhakari	71016	Pra.Chau.Kalakunda
69011	Pra.Chau.Dhungachalna	71017	Pra.Chau.Kanari
69012	Pra.Chau.Jaygadh	71018	Pra.Chau.Sadakpur
69013	Pra.Chau.Kamalbazar	71019	Pra.Chau.Sati
69014	Pra.Chau.Mallekh	71020	Pra.Chau.Suklipur
69015	Pra.Chau.Rahaf	71021	Pra.Chau.Trinagar
69016	Pra.Chau.Sanfe	71022	Si.Pra.Chau.Bahuliya
69017	Pra.Chau.Santada	71023	Si.Pra.Chau.Prithbipur
69018	Pra.Chau.Siudi	71024	Si.Pra.Chau.Rampur

Station No.	Office	Station No.	Office
69019	WPO Achham	71025	TPO Lamki
70001	APO Dipayal	71026	WPO Dhangadi
72002	A.Pra.Post Pipariya	72001	A.Pra.Post Fataiya
72003	APO .Beldadi	73018	Si.Pra.Chau.Tatopani
72004	APO Belauri	74001	APO Patan Baitadi
72005	APO Dodhara	74002	APO Patanbaitadi
72006	APO Gadda	74003	APO Tashwadehi
72007	APO Gulariya	74004	DPO Baitadi
72008	APO Jhalari	74005	DTPO Baitadi
72009	APO Tribhubanbasti	74006	Pra.Chau.Balara
72010	DPO Kanchanpur	74007	Pra.Chau.Barakot
72011	DTPO Kanchanpur	74008	Pra.Chau.Dehimandau
72012	Pra.Chau.Babathan	74009	Pra.Chau.Ganjari
72013	Pra.Chau.Bagfanta	74010	Pra.Chau.Gokuleswar
72014	Pra.Chau.Bhuda	74011	Pra.Chau.Gurikhola
72015	Pra.Chau.Jhilmila	74012	Pra.Chau.Haldu Binayak
72016	Pra.Chau.Jimuwa	74013	Pra.Chau.Khochlekh
72017	Pra.Chau.Pachui	74014	Pra.Chau.Khodape
72018	Pra.Chau.Prasan	74015	Pra.Chau.Kusmatghat
72019	Pra.Chau.Suda	74016	Pra.Chau.Nagarjun
72020	Pra.Chau.Teduwa	74017	Pra.Chau.Purgaht
72021	Si.Pra.Chau.Brahamadeb	74018	Pra.Chau.Rodidewal
72022	WPO Ma.Na.	74019	Pra.Chau.Sera
73001	A.Pra.Post Anarkholi	74020	Pra.Chau.Simar
73002	A.Pra.Post Bagbazar	74021	Pra.Chau.Thaligada
73003	A.Pra.Post Kurmule	74022	Si.Pra.Chau.Jhulaghat
73004	APO Jogbuda	75001	APO Gokuleswar
73005	DPO Dadeldhura	75002	DPO Darchula
73006	DTPO Dadeldhura	75003	Pra.Chau.Brahamadeb
73007	Pra.Chau.Aalital	75004	Pra.Chau.Dallekh
73008	Pra.Chau.Belapur	75005	Pra.Chau.Dattu
73009	Pra.Chau.Bhatkanda	75006	Pra.Chau.Dhaulakot
73010	Pra.Chau.Dewaldivyapur	75007	Pra.Chau.Huti
73011	Pra.Chau.Gankkhet	75008	Pra.Chau.Khandeshwari
73012	Pra.Chau.Lamikande	75009	Pra.Chau.Latinath
73013	Pra.Chau.Pokhara	75010	Pra.Chau.Malikarjun
73014	Pra.Chau.Rupal	75011	Pra.Chau.Shankarpur
73015	Pra.Chau.Sakayal	75012	Pra.Chau.Sunsera
73016	Pra.Chau.Shirsha	75013	Si.Pra.Chau.Lali

APPENDIX 4

LIST OF DISTRICT POLICE OFFICES AND CODES

District Code List NEPAL

Code	Name	Code	Name	Code	Name
1	Taplejung	26	Bhaktapur	51	Arghakhanchi
2	Panchthar	27	Kathmandu	52	Pyuthan
3	Ilam	28	Nuwakot	53	Rolpa
4	Jhapa	29	Rasuwa	54	Rukum
5	Morang	30	Dhading	55	Salyan
6	Sunsari	31	Makwanpur	56	Dang
7	Dhankuta	32	Rautahat	57	Banke
8	Terhathum	33	Bara	58	Bardiya
9	Sankhuwasabha	34	Parsa	59	Surkhet
10	Bhojpur	35	Chitawan	60	Dailekh
11	Solukhumbu	36	Gorkha	61	Jajarkot
12	Okhaldhunga	37	Lamjung	62	Dolpa
13	Khotang	38	Tanahu	63	Jumla
14	Udayapur	39	Syangja	64	Kalikot
15	Saptari	40	Kaski	65	Mugu
16	Siraha	41	Manang	66	Humla
17	Dhanusa	42	Mustang	67	Bajura
18	Mahottari	43	Myagdi	68	Bajhang
19	Sarlahi	44	Parbat	69	Achham
20	Sindhuli	45	Baglung	70	Doti
21	Ramechhap	46	Gulmi	71	Kailali
22	Dolakha	47	Palpa	72	Kanchanpur
23	Sindhupalchok	48	Nawalparasi	73	Dadeldhura
24	Kavrepalanchok	49	Rupandehi	74	Baitadi
25	Lalitpur	50	Kapilbastu	75	Darchula

APPENDIX 5

TEMPLATES OF DESCRIPTIVE CRASH CODES

Nepal Descriptive Crash Codes (DCC)

	100 Multi Vehicle Crashes						200 Single Vehicle Crashes				300	400
	110 Head On	130 Rear End	150 At Angle	170 Side Swipe	190 Overtake	210 Overtake	230 Hit Object On Road	250 Hit Object Off Road	270 Hit Parked Vehicle	290 Hit Animal	Hit Pedestrian	Passenger
0	 Thru-Thru!" " #!	 Thru-Thru!" #S!	 Thru-Thru!" #S!	 Side Swipe 170!	 O/T-nr/On 190!	 O/Turn Str. 210!	 Hit Obj. On Straight. 230!	 Hit Object Off Straight. 250!	 Hit Park/V 270	 Hit Animal 290	 Crossing Rd 310	 Boarding 410
1	 Right-Thru!" " " #!	 Thru-Right!" " " #!	 Thru-Right!" " " #!	 Lane/C ! " ! #	 O/T-R/End ! " ! #	 O/T Right 211!	 Hit Obj. In Int. 231!	 Off Int. 251!	 Hit Park/V 271		 Walk On Rd 311	 Alighting 411
2	 Left-Thru!" " " #!	 Thru-Left!" #S!	 Thru-Left!" #S!		 O/T-RE/UT ! " #!	 O/T Left 212!	 Hit Object On Incline 232!	 Hit Object Off Incline 252!			 Walk Edge Rd 312	 Fall Off Motor Cycle!" #S!
3	 Right-kight!" " #!		 Right-Thru!" #S	 S/S R-R!" #S!	 O/T-Cut In 193!	 O/T UTurn 213!	 Hit Object On Curve 233!	 Hit Object Off Curve 253!			 Playing On Road 313	 Sitting Outside Falling Off 413!
4	 Right-Left!" " #!		 Right-Right!" #S!	 S/S L-L!" #S!	 O/I-kight 194	 O/T OTake 214!	 Hit Object On Incline/Cve. 234	 Hit Object Off Incline/Cve. 254			 On Path 314	 Sitting Outside Falling Off 413!
5	 Left-Left!" " #!		 Left-Right!" #S!				 Reverse Into Object On Road 235	 Reverse Into Object Off Road 255			 OnPed-Xing 315	
6	 UTurn-Thru!" " #!	 UTurn-Thru!" #S!	 Left-Thru!" #S!		 O/T-u turn 196						 50m Xing 316	
7			 Right-Left!" #S!								 Ctr. Refuge 317	
8			 Left-Left!" #S!									
9	119! Other! Opposing!	139! Other! Rear End!	159! Other! At Angle!	179! Other! Side Swipe!	199! Other! Overtaking!	299! Other! Overtaken!					399! Other! Pedestrian!	499! Other! Passenger!

APPENDIX 6

**EXAMPLE OF CRASH DIAGRAM WITH DCC
TEMPLATES**

DCC Crash Diagram

Location Beams Rd Int. No. 3479
Date Range 01/04/06 to 31/03/09
Prepared 06/12/10

DCC 111 Right-Through Total 15 (56%)
 Turning in face of oncoming
Treatment – Replace filtering with green
 Arrow phase

Fatal	0	0%	
Serious	8	30%	
Minor	12	44%	
Damage	7	26%	Total 27

DCC 171 – Miscellaneous
 04/12/07 – 6pm Clear - Minor - 2 Veh.

DCC 156 – Disobey Give Way Sign
 15/03/07 – 5am Clear - Serious - 2 Veh.
 03/10/08 – 6am Clear - Minor - 2 Veh.

DCC 132 – Follow to close
 11/04/07 – 6pm Clear - Minor - 2 Veh.

DCC 150 – Disobey Red Light
 07/03/08 – 11am Clear - Serious - 2 Veh.

DCC 132 – Undue Care
 02/11/08 – 7pm Clear - Minor - 2 Veh.

DCC 130 – Follow to Close
 22/02/08 – 3pm Clear - Minor - 2 Veh.

DCC 111 – Turn in face of oncoming
 19/09/06 – 8am Clear - Damage - 2 Veh.
 20/10/06 – 3pm Clear - Minor - 2 Veh.
 02/11/06 – 6pm Clear - Serious - 2 Veh.
 11/12/06 – 7am Clear - Minor - 2 Veh.
 28/02/07 – 9am Clear - Minor - 2 Veh.
 06/06/07 – 1pm Clear - Damage - 2 Veh.
 07/12/07 – 1pm Clear - Damage - 2 Veh.
 27/06/08 – 4pm Clear - Damage - 2 Veh.

DCC 150 – Disobey Red Light
 07/03/08 – 11am Clear - Serious - 2 Veh.

DCC 150 – Disobey Red Light
 07/03/08 – 11am Clear - Serious - 2 Veh.

DCC 111 – Turn in face of oncoming
 20/04/06 – 8pm Clear - Serious - 2 Veh.
 31/05/06 – 8pm Clear - Damage - 2 Veh.
 27/01/06 – 8pm Rain - Damage - 2 Veh.
 26/01/07 – 4pm Clear - Serious - 2 Veh.
 03/01/08 – 6pm Rain - Minor - 2 Veh.
 21/11/08 – 11am Clear - Serious - 2 Veh.
 24/11/08 – 6pm Clear - Serious - 2 Veh.

DCC 116 - Improper U Turn
 24/09/07 – 7am Clear - Damage - 2 Veh.

DCC 150 - Disobey Red Light
 09/04/06 - 2pm Clear - Serious - 2 Veh.

DCC 132 - Follow to close
 19/05/06 - 3pm Clear - Minor - 2 Veh.

APPENDIX 7

HOW TO COMPLETE CRASH REPORT FORMS

How to Complete Crash Report Form (HCCRF) Nepal Police

Complete as much detail as possible on the CRF. Use extra forms if details are needed for more passengers, vehicles, drivers or pedestrians.

Strike through the most appropriate response on the CRF. E.g. **23. Road Condition** 1. Good ~~2. Damaged~~

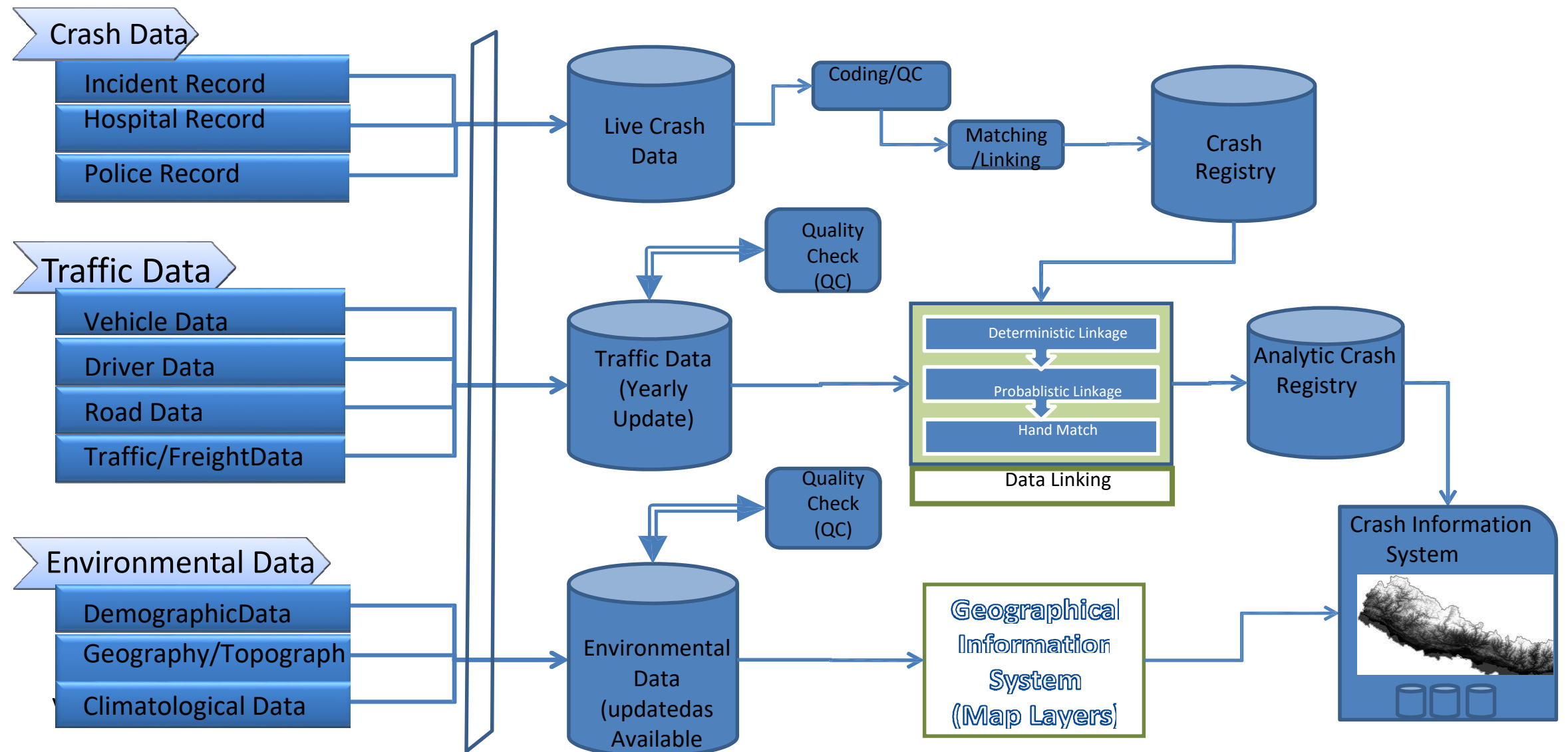
1	Report No.	As per NPS instructions.
2	Computer No.	This is the DELID as per NRCDSMM.
3	Police Station	Police Station Name or Number.
4	District	District Number.
5	No. Of Vehicles Involved	Number of vehicles with drivers. Exclude parked vehicles with no drivers.
6	No. Of Drivers Casualties	Included total number of drivers even uninjured.
7	No. Of Passenger Casualties	Total number of passengers injured.
8	No. Of Pedestrian Casualties	Total number of pedestrians injured.
9	Accident Severity	This is the highest severity of all casualties involved.
10, 11 and 12	Date Day/Month/Year	Use the Gregorian calendar (or Western) internationally accepted civil calendar, as it is suitable for data analysis.
13	Day of week	Monday, Tuesday etc.
14	Time (24 hours)	E.G. Midnight is 00:00 / Midday is 12:00 / 1pm is 13:00
15	Junction Type	Strike through the junction that most closely matches or write short description if no match.
16	Traffic Control	The traffic control must be facing or apply to the vehicles involved. That is not on a side street, which neither vehicle came from.
17	Collision Type	
	1 Head On 2 or more vehicles coming from opposing directions and no pedestrians.	6 or 7 Hit Object in / Off Road Single vehicle and an object on or off the road.
	2 Rear End 2 or more vehicles from same direction one behind the other and no pedestrians.	8 Hit Parked Vehicle Single vehicle hitting at least one parked vehicle. No pedestrians.
	3 Right Angle 2 or more vehicles from adjacent angles at intersection and no pedestrians.	9 Hit Pedestrian Single vehicle and one or more pedestrians.
	4 Side Swipe 2 or more vehicles from same direction travelling side by side and no pedestrians.	10 Hit Animal Single vehicle and animal on or off the road. No pedestrians.
	5 Overturned Vehicle Single vehicle that overturns on the road . No pedestrians.	11 Other Give details.
18, 19, 20, 21, 22, 23, 24, 25, and 26		Strike through the most accurate response.
Name of City / Town		Name of town or city the crash occurred.
Location		Name of Road Crash was on.
Locate how many Kilometers from Town/Village to Town/Village.		
Crash Location Sketch Clearly indicate where the collision occurred in relation to the nearest intersecting road or land marks such as Km posts or bridges. Clearly mark North on sketch.		
Latitude and Longitude		
X =	Use your Smart Phone App. To write the Latitude (6 decimal places).	
Y =	Use your Smart Phone App. To write the Longitude (6 decimal places).	

Collision Diagram Sketch	
1. Clearly identify North.	3.If possible V1 is the vehicle in the wrong or at fault , which is wrong side of road, running up back of vehicle in front, changing lanes, overtaking.
2.Label vehicles as V1, V2 etc and match to details in question 38.	
4. Mark centre of road.	6. Clearly mark direction of travel of pedestrians.
5. Label pedestrians P1 etc.	7. Label roads.
If collision at intersection indicates how far from boundary or curb of the interesting road.	
<p>Example</p>	
8.Use arrows to clearly define where the vehicle came from and where it was in tending to go. Like the example above, V1 was coming out of a side street and intended to turn left where as vehicle two was driving straight. The same applies for pedestrian move ment, an arrow indicating their direction of movement.	
<p>Police Description of Crash</p> <p>Give as much detail as possible that may have not been indicated in the questions. Things like other contributing factors, light conditions like sunset or sunrise effecting visibility, other road conditions Such as potholes, rutting, and corrugation or uneven surface. The road features such as an uphill curve or narrow bridge. Also details about driver behavior or witness comments.</p>	
Witness	As per NPS instructions.
Reporting Officer	As per NPS instructions.
Reviewing Officer	As per NPS instructions.
Action Taken	As per NPS instructions.
Vehicle Details (Complete for each vehicle)	
Complete personal details as requested and “other” details where required.	
39, 40, 41, 42, 43, and 44	Strike thought the most accurate response.
Driver Details (Complete for each Driver)	
Complete personal details as requested and “other” details where required.	
45	License Number.
46	Place License was issued.
47, 50, 51,52, and 53	Strike thought the most accurate response.
48 and 49	Sex – “M” male, “F” female, “O” other or “U” unknown. Age.
Passenger Details (Complete for each Passenger)	
Complete personal details as requested and “other” details where required.	
54	Indicate which vehicle the passenger was in V1, V2 etc.
55 and 56	Sex – “M” male, “F” female, “O” other or “U” unknown. Age.
57, 58, 59 and 60	Use codes located bottom of CRF.
Pedestrians Details (Complete for each Pedestrian)	
Complete personal details as requested and “other” details where required.	
61 and 62	Sex – “M” male, “F” female, “O” other or “U” unknown. Age.
63, 64, 65 and 66	Use codes located bottom of CRF.

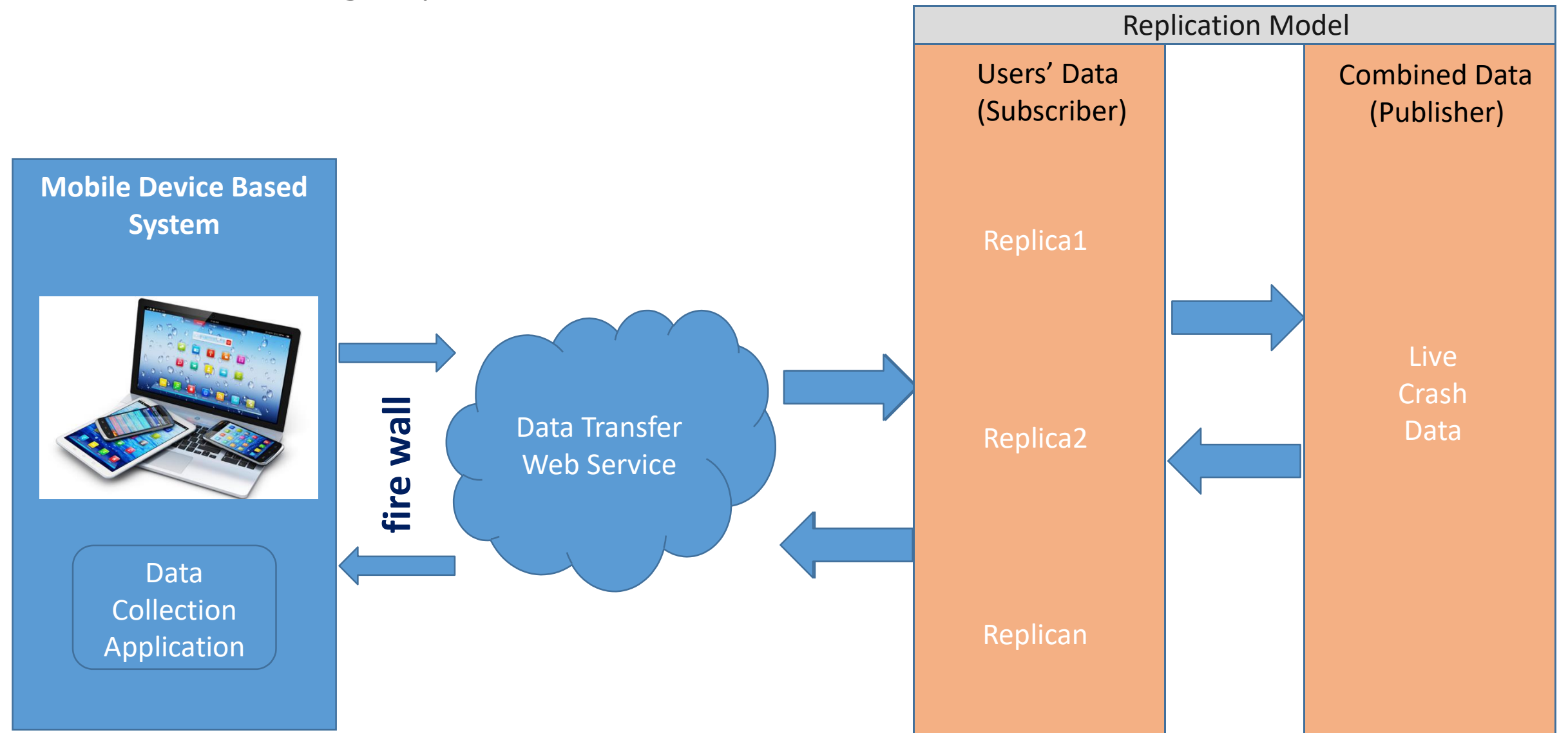
APPENDIX 8

**NRSIMS SYSTEM ARCHITECTURE AND DATA
FLOW CHART**

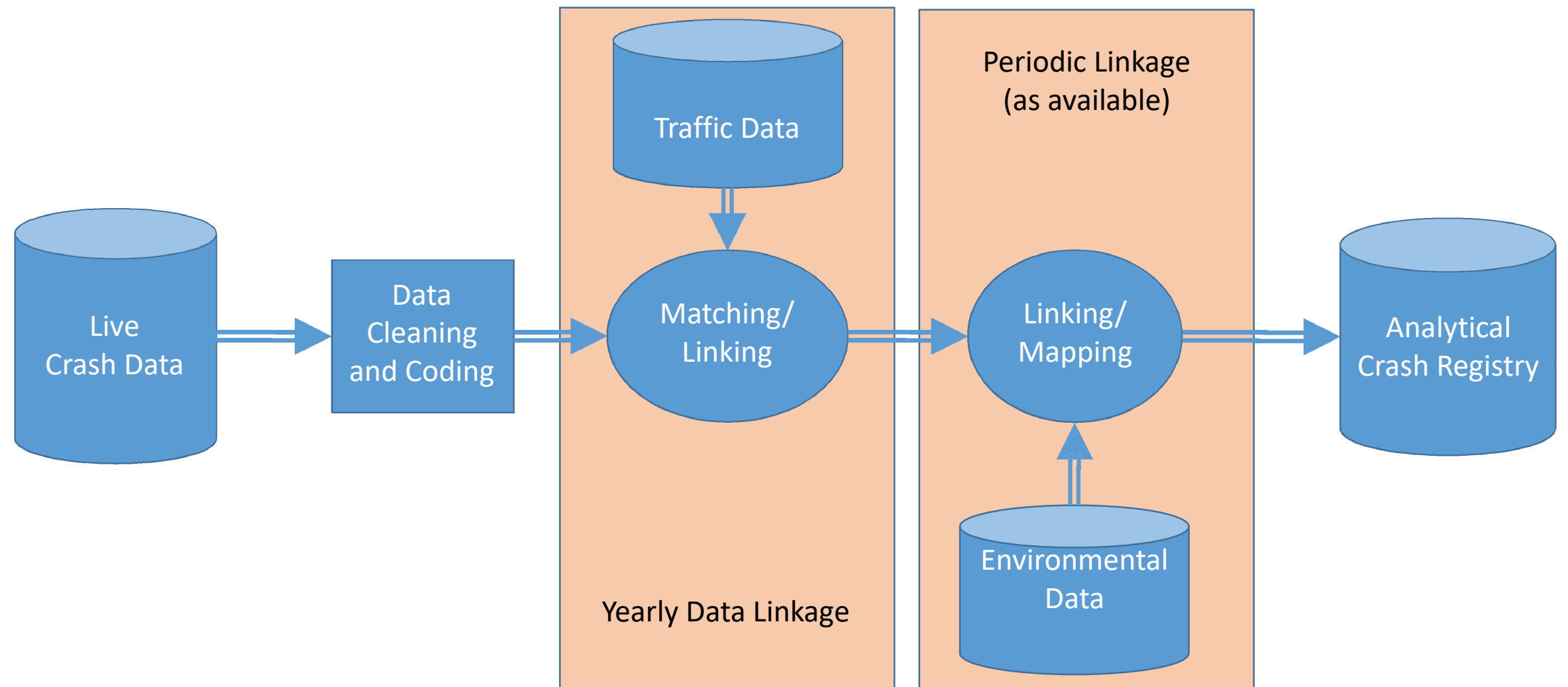
NRSIMS-Architectural Overview



NRSIMS-Live Registry Data Flow



NRSIMS-Analytical Registry Data Flow



APPENDIX 9

NOTES OF WORKSHOPS AND MEETINGS

Appendix 9A: Project Management Meeting with MOPIT

Attendance:

Mr. Umesh Jha, Joint Secretary/MOPIT

Mr. Niraj Sharma, Senior Divisional Engineer/ MOPIT

Mr. Krishna Khadka, Engineer/ MOPIT

Mr. Partha Parajuli, TL (Int'l)/NRCDS Team

Mr. Anthony Eagle, CDBS (Int'l)/ NRCDS Team

Date:

11 May 2016

Time:

11:00AM -12:15PM

Venue:

Joint Secretary's Room/MOPIT

Notes:

1. Presentation of Draft Report and Payment against the Submission of Draft Report:

- PP/TL presented the draft report relating TOR's requirement to the content of Draft Report and suggested there is one to relationship between the TOR and Contents of Draft Report
- PP/TL suggested that there port contain shall the elements required by TOR except Training but requires some minor up dates and editorial works to develop in to draft final report for distribution to all stakeholders
- On the job training to the data base operator(s) will be provided once nominated by MOPIT by Naresh Shrestha, local data base specialist of NRCDS Team in house
- AE/ICDS presented to NS and KK the coding matrix and further explained how the data entry interface will be very user friendly and self explanatory.

- AE/ICDS demonstrated how the raw data appears after being entered and how the coding formula will group crashes of similar types and allow for analysis of crash sites.

Decision:

- Agreed that the submitted draft report is adequate and complete in all respects with the exception of minor editing, improvement in presentation (formatting, clarity etc) and generally satisfies the requirements of ToR
- Agreed that Niraj Sharma and Krishna Khadka will provide comments within a week on behalf of MOPIT
- Agreed that NRCDS Team will incorporate all comments, fine tune the report and deliver Draft Final Report as soon as possible but not later than June 15, 2016.
- Agreed that 60% payment will be released to them members of the NRCDS Team against the submission of draft report as requested by them ASAP
- Noted that the payment is to be released against the submission of draft report and not the acceptance of the draft report and that MOPIT can take time for comment but the comments will not be unreasonably withheld.

2. Mode of Payment

- MOPIT advised that it would be more expedient to release requested payment if it can be done in NPR.
- International members of the team suggested that while payment in USD is the spirit of the Contract and remains preferred mode of payment, they would be happy to receive payment in NPR if it helps MOPIT to realize payments easily
- MOPIT suggested that it will explore the option for payment in USD further
- NRCDS Team International Members suggested that their 60% payment be made in NPR without delay to cover their cost of fooding, lodging and other local costs

Decision:

- Agreed that MOPIT will release 60% payment in NPR to the consultant team members immediately while exploring option to pay in USD for remaining 30% payment against the submission of final report.

3. Request Letter to NPS for providing Accident Report Forms

- PP/TL expressed concern that the Team has not been able to secure more accident forms from Traffic Police to populate Crash Database and demonstrate validation. In the meeting with DIG/MTPD of 10 May 2016, MTPD expressed reservation (See below) on providing additional forms for Valley Roads
 - PP/TL requested UJ/MOPIT to issue a request letter to Traffic Police Directorate to provide forms to NRCDS Team members for additional roads outside Valley

Decision:

- Agreed that MOPIT will write a request letter to NPS, Traffic Directorate Naxal and NRCDS Team will follow up to secure form and send report to MOPIT of the outcomes although it was acknowledged that the task of collecting forms outside the scope of work of the NRCDS Team

4. Provision of Engaging Traffic Police Officer in entering crash data in the Database System and Training

- In the meeting dated 10 May 2016, DIG/MTPD expressed its commitment to NRCDS Team to be engaged in having training in entering crash data and offered that MTPD would like to depute one officer for on the job training. This was communicated in the meeting.
- UJ/MOPIT suggested he welcomes the idea and will be happy to make provision to engage traffic officers in entering data in the computer installed at NRSC Secretariat/MOPIT.

Decision:

- Agreed that NRCDS Team in the process of further consultation with MTPD will convey the willingness of MOPIT to work together with MTPD for entering crash data.
- Agreed that MOPIT SDE Niraj Sharma will attend further meetings with MTPD and Traffic Directorate /NPSHQ Naxal organized by NRCDS Team
- Agreed that this arrangement will help build working relationship between NRSC/MOPIT and NPS better and would be in the best interest of the NRCDS Project and for ongoing job of populating crash database.

5. Ownership of NRCDS

- PP/TL/NRCDS conveyed the desire of NPS (MTPD) to have the ownership of NRCDS created under this Project based on the meeting of 10 May 2016 with MTPD
- PP/TL/NRCDS also conveyed its impression that MTPD/NPS would be interested to take the ownership of the NRCDS as NPS is the responsible agency to collect data and that it makes sense to get its ownership. The chain of command within the Police Service would be helpful to get missing information in the crash report form which is not possible if NRSC would take the responsibility of entering data and managing NRCDS
- PP/TL suggested that a model similar to the one used in Queensland Australia may be considered to resolve this issue. The model involves that NPS as well as NRSC will maintain NRCDS separately. NRCDS with NPS will have personalized information which cannot be disclosed to the member of public or to other road safety related agencies while the NRCDS with MOPIT can have the same database without those sensitive information which are of no interest to road agencies and for road safety analysis

Decision:

- Agreed that MOPIT will convene the meeting of NRSCAd-hoc Committee to resolve the issue where NRCDS Team would be invited to explain the technical details and dual ownership model of NRCDS management.
- Agreed that TL/NRCDS will attend such meetings when organized before June 15, 2016

Appendix 9B: Response to Comments on Early Draft Report

S.No	Comments	Response
1	Finishing, formatting, uniformity, consistency and quality of Report	This is acknowledged and early version of draft report was submitted just to get Payment for subsistence of the int'l team members. The mode of payment was requested to change at the time of contract negotiation but it was resolved to retain as per TOR with due provision to change the word from draft final report to draft report.
a	Very very poor formatting	It has been addressed in the Draft Final Report
b	Size, sequence, placement care of properly arranged.	It has been addressed in the Draft Final Report
c	Recommended formatting	Upper Case non-bold Times Roman Font size 14 for Chapter Number and Upper case bold 16 font size for Chapter Heading are adopted as per comments
	Heading size: 14(Times New Roman)/ Bold	Done as suggested
	Sub-heading: 12(Times New Roman)/ Bold	Done as suggested
	Body Text: 12 (Times New Roman)/ Non-Bold	Done as suggested
	Before & after point spacing: 6pt.	Not sure what does this mean. It is hoped as anon- issue
	Vertical spacing :1.5 lines	Done as suggested but it has taken more pages with no reprinting benefits
	Page number: bottom-centre aligned	OK as suggested but consideration on presenting report could have been left to the consultants for maintaining corporate style.
d	Please rearrange the Sequence of chapter	Done as suggested
e	Executive Summary, Acronyms etc. must be before main chapters.	Done as suggested
f	Executive Summary must be at most 2/3 pages only	It was brought down to 3 pages with fonts and spacing used in the report, but has gone up to 5 pages with the font type, size and line spacing recommended by MOPIT. The size of the Executive Summary largely depends on the complexity, nature, findings and recommendations of the study to be highlighted in the report. It also depends on the preference of the consultants to present study reports. There is no hard and fast rule on this issue. The team leader has seen reports with over 10 pages of Executive Summary accepted by GON. Furthermore, ToR does not limit the number of pages for Executive Summary. There is no need to be overly restrictive on this issue.
g	Please add list of tables & figures after table of contents	Done as suggested
h	Table must be aligned left & figure at centre	This is not specified in ToR and it is just matter of individual' preference. Let us not be to prescriptive in the presentation of reports while it was left free in the ToR.
2	Avoid unnecessary tables, list, text as marked in report using black pen	Done as suggested
3	Add methodology chapter & elaborate it with sub headings & details	Methodology Chapter added
4	Please find the short coming sin existing Nepal Road Accident Report Form and propose new one in corpora ting the required in formations for further engineering analysis	Chapter 4 is all about short comings in the existing CRF and recommendations for improvements. The design of new form is out of scope, but minor changes that can be implemented without training to NPS have been suggested in the interim. Introduction of new CRF is resource intensive and it is not advisable to develop new format this stage.
5	Add Methodology of crash coding	Please see Chapter 9 of the Report, which describes the development of DCCs and Management Manual which describes how to code crashes

	(a)Should mention details of each elements of DCC	Please see Chapter 9 of the Report, which describes the development of DCCs and Management Manual which describe show to code crashes
	(b)Should mention method of desired data retrieval from data base like	This issue is out of scope. Please see Section 10.8 of the Report which describes data dissemination issue for explanation
	No. of Head on collision in desired time duration/ span/ Location.	This issue is out of scope. Please Section10.8of the Report which describes data dissemination issue for explanation
	No. of Over loading accidents in desired time duration/span/location.	This issue is out of scope. Please see Section 10.8 of the Report which describes data dissemination issue for explanation
	No. of Overtaking accidents in desired time duration/span/location.	This issue is out of scope. Please see Section 10.8 of the Report which describes data dissemination issue for explanation
	No. of accidents due to parking in desired time duration/ span/ location.	This issue is out of scope. Please see Section 10.8 of the Report which describes data dissemination issue for explanation
	No..of accidents due to pedestrian fault in desired time duration/span/location.	This issue is out of scope. Please see Section 10.8 of the Report which describes data dissemination issue for explanation
	Such matters are key desired output or objectives of this project/ ToR so that theblackspots can be identified & subsequently required engineering counter measures will be recommended. So, please add a chapter on report regarding inclusion of above issues	This issue is out of scope. Please see Section10.8 of the Report which describes data dissemination issue for explanation
6	Please clearly state the process of entering manual accident data from police for mandit's linkage with DCC. i.e linkage between the police crash form, entry format and	Chapter 10: Management Manual provides detailed process of entering data from manual CRF. The linkage between the police crash report form and data entry screen was demonstrated in the workshop of June 10, 2016. The process is automated.
7	Please add chapter Validation: Description, methodology, conformance etc should be included. If possible, please validate the database for different roads of Nepal	Please see Chapter 13 for database development, testing and validation and methodology/process. Validating the data base for different roads is neither possible nor required. There are no data available at this disaggregated level. If MOPIT can supply CRFs, these could be done as part of on-the job training but in spite of our all efforts CRFs are not available. It is MOPIT's responsibility to supply completed CRFs.
8	Please maintain referencing/ citation in report and also bibliography should be of standard international format	Done as commented
9	Please prepare separate guidelines for database as stated in ToR	Chapter 6 provides guidelines for database as stated in the ToR
10	Please prepare separate crash database manual/ tool kit to developers/ user manual	Chapter 10: Management Manual, Chapter 11: Users' Manual, which also contain "How to complete CRF", provide manuals/toolkits to developers and users of the database. These are also the toolkits for entering, validating and testing the accuracy of the entered results.
11	Please prepare separate Template/ Preparation of template as stated in ToR	A Table of DCC Template for Nepal DCC System is given in Appendix 5. The whole Chapter 9 explains DCC Coding System. DCC system is new concept in the region and it appears to be hard nut to crack, but we are getting there!

12	Please prepare separate Training manual/ Training strategy/ Training preparation to operators (schedule, methodology) as stated in ToR	Management Manual is itself the training manual. No separate training manual is necessary, nor required by ToR. Preparation of training strategy is not required by ToR. Please note, this is not a formal training program button-the-job training for entering crash data. MOPIT needs to nominate computers, trainees, venues for which advice is being awaited.
13	Please submit soft copy of excel data entry format to enter paper based data as stated in ToR	The software shall be uploaded in the computer, once informed by MOPIT that the computer as specified is available. The computer will also be used for on-the-job training to database operators. We are waiting for MOPIT's advice on the work space, computer and nominees for training.
14	Please provide Excel Database as stated in ToR	The software shall be uploaded in the computer, once informed by MOPIT that the computer as specified is available. The computer will also be used for on-the-job training to database operators. We are waiting for MOPIT's advice on the workspace, computer and nominees for training.
15	Please exclude ToR in Report	The inclusion of ToR assists to demonstrate how the report addresses the ToR and it is a good reference for the readers of the report to see if the submitted report addresses issues related to ToR. It also helps explain why a particular item or items of ToR could not be addressed. This is an accepted international practice but can be removed if MOPIT wants this way. We can show examples of reports submitted by prominent international consultants with TOR attached in Appendix and accepted by government agencies.
16	Name Annexes appropriately	Done as suggested
17	Avoid the tool on gtext based annexes. If required please place on literature review or previous study chapter	Done as suggested
18	Avoid the participants name list from report	It is a good practice to include the name of the persons or parties consulted during the process so funder taking the study. Inclusion of the names provide good reference for future on who to contact in connection with the issues raised and it is not uncommon. But, if MOPIT would like to exclude the names, it can be removed.
19	Please go through the checked report provided by MoPIT and correct as stated in the report	Many of these comments are of editorial and presentation related and these have been fully addressed in the final draft version of the report. Some of the comments, for example, no need to include ToR in the Appendix, is a matter of choice. There are many reports prepared by the international consultants which include ToR in the Appendix. The inclusion demonstrates how the report addresses the ToR and it is a good reference for the readers of ToR if the Report addresses issues related to ToR and explanation why a particular item or items of ToR could not be addressed. This is an accepted international practice but can be removed if MOPIT wants this way.
20	Please add appropriately the strategy to incorporate the NRCDS provision on Road safety act regulations that it will be legally formalized	Chapter 6 and Chapter 15 suggest strategies and recommendations for making relevant agencies responsible for establishing, operating, managing and maintaining NRCDS through NTSP, VTMA, VTMR, RSA, RSR, PRA and PRR all of which are either under review or in the process of making.

Appendix 9C: Notes of Consultation Meetings with Various Police Officers

Date	Department / Office	Name of Officer (s)s	Summary of Consultation Outcomes
27/01/2016	MTPR, Bhaktapur	Inspector: Madan Thapa Constable: Suman Mani Paudyal	<p>Questions:</p> <ul style="list-style-type: none"> • Do all CRFs come with crash sketch or for only serious and fatal crashes? • How do they sketch (procedure and distance measurement)? • What is the reporting system and how often do they report? • Why you are doing crash reports? Is it compulsory given mandate? • Is it your duty or you are “forced” to do? <p>Answers:</p> <ul style="list-style-type: none"> • Only major (serious and fatal) crash cases are sketched out to keep in record for use in case of court case. They make 3 copies (using carbon paper): one for court, second for civil police where the case is filed and the third for office copy to keep at Police Station. • During sketches they find landmark and indicate distance from then arrest land mark using measuring tape. Road description and road width are given and other essential measurements are taken. • The process described by Satdobato Traffic Police Station resembles with the process as Bhaktapur Police Station. The process will be verified further in the meeting with the senior police officer (IP) at 11:00AM of May 28, 2016. • There were sketches of crash scenes in local police stations. Sketches seen at local police stations visited were found to be different than those seen in MTPD. is bit different than we saw last time in Metropolitan Traffic Police Division.
27/02/16	MTP, Koteswore	Sub Inspector Manoj Neupane	<ul style="list-style-type: none"> • Koteswore Traffic Police has different version regarding crash reporting system, according to officer serious and fatal case sketch send to Civil Police where the case is file and they are not sending any sketch to Metropolitan Traffic Police Head Quarter, according to them not all major

			crash data goes to Traffic Head quarters so we need to explore in Civil Police Station to find out fatal and serious crash sketch and report
28/02/16	MTPR, Satdobato	Inspector Sita Ram Hachethu	<ul style="list-style-type: none"> Traffic Police Range (TPR) Satdobato was also asked the same question. The reply was that all serious and fatal crashes are reported to MTPD as these happen in the Range. It is considered that the preparation of crash scene diagrams is a traffic police's job and it is mandatory for serious and fatal within their range or sector.
31/01/16	MTPD, Singha Durbar	ASI Jeet Bahadur KC	<ul style="list-style-type: none"> Discussion was focus sed mainly about crash dataflow from one range to the other traffic range and section within the Valley. It was told that not all crash data comes to MTPD. Only very serious and fatal crash sites are sketched out. If a traffic section arrange office would not be able to handle the crash scenes or not able to sketch out, then TPD Squad attend the site for preparing sketching. Serious and fatal sketches come from traffic sector and rangeminor and damage sketches remain in section traffic police office. Not all crash are sketched out. Even serious crashes are not made if two parties agree to pay and receive compensation. It was also mentioned that each and everydaythereare20 to 24 crashes in the Valley and not all are recorded and not all are sketched. If party argue and try to debate on who is at fault then a sketch is prepared as the case might be settled by the court. Sketches of all fatal cases are considered to be mandatory. The preparation of sketches is the duty of the police officer. Responsible police officer make sketches at crash sites, and is the duty of the responsible civil police officer closer to the court where the case is filed to handle the court case Traffic police officers do not handle court cases. They do nothing after submitting the sketch to civil police officers.
01/02/16	MTPD, Singha Durbar	DIGPJaya Bahadur Chand DSP Balaji Raymajhi. ASI Jeet Bahadur KC	<ul style="list-style-type: none"> Flow of crash reports to Metropolitan Traffic Division from other sectors and range. Sketch and Record Keeping period Rapport Building and Crash Sketch Store and report of Crash Data What types of data are available in the office? It was found that individual CRFs are not usually sent by sectors orange to MTPD unless specifically requested. The investigation department was able to show crash data in terms of total crashes, total fatalities, total serious injuries and total minorin juries aggregated annually, monthly, daily and so on.

			<ul style="list-style-type: none"> Available data were up dated in the black board as new information are received from sector or range. It was obvious that crash data in the current state of data collection and storage system by the Police are not available by location, sections and even byroad as a whole).
01/02/16	MTPD, Singha Durbar	DIGP Jaya Bahadur Chand; DSP Balaji Raymajhi.	<ul style="list-style-type: none"> All ranges and sectors report to the Metropolitan City Office if any incident or crash happens in the Valley; Usually, collected crash data are kept for two years. Settlement of any crash cases by the Court usually done within two years. After two years all crash record sareabandoned.
01/02/16	MTPD	Asst. Sub Inspector Jeet Bahadur KC	<ul style="list-style-type: none"> Discussion was again focused on the crash data flow from other traffic crange and sections within the Valley second time It was confirmed that not all crash data come to MTPD. CRFs (sketches) of very serious and fatal crashes only are sent. If any traffic section orange officers are not able to handle or able to complete CRFs (sketches), then MTPD squad go to crash sites and help them to complete sketches and complete CRFs. Serious and fatal CRFs (sketches)come from traffic sector and range minor and damage sketch remain in section of traffic police office. Not all crashes recorded in CRFs or sketches made. If two parties agree to pay and receive compensation, these crashes are just not recorded. It was also mentioned there are 20 to 25 crashes each day and not all are recorded and sketched. If parties involved are in debate and not resolved regarding who is at fault, those crashes only are recorded and a sketch made. It was also stressed again that there is a clear command from up on line to complete CRFs for all fatal crashes and it is the duty and responsibility of police officers to do so.
01/02/16		Balaji Raymajhi, DSP	<ul style="list-style-type: none"> What is the data collection channel and reporting system? What mandates police officers to complete CRFs? Is there any guide on how to complete CRFs? Communications mainly by phone and walky-talky radio They receive crash report, but they do not receive CRFs (sketches)from all station Serious and fatal cases are handled by civil police or area police and they do have a copy of CRF

			<p>(sketch) for the crash site</p> <ul style="list-style-type: none"> • A lot of inconsistencies in the CRFs completed. Each and every police station has their own way of completing CRFs (sketches) • There are also gaps in the communication channel, therefore each station has different quality CRFs completed. • Vehicle and Transport Management Act, Vehicle and Transport Management Rule, Police Rule and Job Description (which are described in the Police rule) mandate them to complete CRFs (sketches) for at least fatal and serious ac sketch the serious crash point • There are no guides /guidelines, manual et con how to complete CRFs
01/02/16	TD/PHQ/ Naxal	DIGP Vijay Kumar Bhatta,	<ul style="list-style-type: none"> • Does TD/PHQ, Naxal collect crash sketch (CRFs) from all 72 districts? No • How does TD/PHQ keep crash record? No set procedure • Can NRCDS Team get CRFs (including crash sketches) for Birgunj-Kathmandu corridor? No • Traffic Police Directorate (TD) does not receive any CRFs and any sketches. • It receives overall total figures on crash statistics (no of people or driver involved in crash, no of people injured, minor injuries, date, time, location etc.) • Either traffic police sector or range keep records for minor crash or damages of vehicles for serious cases • Fatal crash cases are handled by civil (general) police service. It keeps record in Diary Number 10 where all kinds of incidents are recorded. One column is assigned in this Diary for road crashes. • There is no process
22/02/16	Patan Hospital	ASI Posan Thapa Cons. Basant KC	<ul style="list-style-type: none"> • It was understood that one or two police officers (small police squad) are always on duty in every major hospital in order to keep track of any types of unwarranted cases such as death or serious injury from road crashes • Question was asked about whom does such a police officer report cases of hospitalization or death that came to the hospital • Do you report cases to General (Civil) Police or Traffic Police? • Any Traffic crash related cases that come to hospital are reported to local police station and not to the traffic police • They have to note down information and treatment starts. • A nearest police station (civil) or area police station (civil) is informed by the hospital

			management if a person dies some days later
22/02/16	MTPD	SI Bidur Mani Bhattarai; Constable: Brajesh Kumar Sah	<ul style="list-style-type: none"> • If a seriously injured person in a road crash (or any other cause) dies in the hospital, the hospital police squad reports to the nearest General (Civil) Police Station. • General police officer and not the traffic police is to enter the record in column 10 where the traffic related incidents are recorded • CRF (crash sketches) related to this road crash is not updated
23/02/16	MTPD	DIGP: Prakash Aryal DSP: Pakhrin SIBidur Mani Bhattarai Constable: Brajesh Sah	<ul style="list-style-type: none"> • Case Investigation Section of MTPD was visited for further query with a view to understand the relationship between hospital agencies and Traffic Police • The response as been consistent across several officers in that all details including crash sketches (CRFs) are sent to Civil Police if a seriously injured person admitted in the hospital dies within a certain time period (not known) • Hospital management informs to Civil Police (not Traffic Police). They record the case as road crash fatality but they do not are sketch, update CRF or put comments on the same sketch (CRF) • There is no established procedure and there is no requirement for updating CRFs.
24/02/16	MPD Jawalakhel, Lalitpur	SP Sunil Kumar Yadav,	<ul style="list-style-type: none"> • How does the information update (injury to death) on road crash flows from hospitals, to Traffic Police and Civil Police? Is there any established procedure agreed among these three parties? • If the crash is serious then the person is taken to hospital and the record is mentioned in the hospital as well as in civil police and traffic police. • If a person dies after few days or months the nearest police station (civil police) keeps the record in Diary Number10 where all types of crimes are recorded. • Police officers do not update information on change (serious injury to death) of status in the sketch (CRF)again • So a fatality could easily continue to be reported as serious injury leading to under reporting of fatalities.
25/02/16	Metropolitan Police Circle, Satdobato	Inspector Shyam Lal Subba	<ul style="list-style-type: none"> • How do you update/ include death if an injured victim dies in the hospital within a specified period of time? • Are CRFs updated? • How the death report from the hospital to traffic police officers of NPS is circulated?

			<ul style="list-style-type: none"> • If the injury is serious then the person is taken to the hospital • The admission case is recorded by the hospital as well as by the police officer and by traffic police officer. • If a person dies after a few days or month the nearer police station (civil police) keeps the record and updates information in Diary No 10 manually where all types of crimes are recorded. • The change of severity from serious injury to death is not made in CRFs. • A fatality remains unrecorded in the Road Crash Reporting System. • It was opined that there is a need to collect crash records from traffic police, civil police and hospital sources if to make less error in the reported data.
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Appendix 9D: Consultation Meetings with TD/NPS

Attendance:

Mr. Pankaj Shrestha, DIGP/ TD Mr. Ganesh Gurung, SSP/TD

Mr Niraj Sharma, Senior Divisional Engineer/ MOPIT Mr Partha Parajuli, TL Int'l)/NRCDS Team

Mr Anthony Eagle, CDBS (Int'l)/ NRCDS Team

Mr Naresh Shrestha, DBS (National)/ NRCDS Team

Date:

25 May2016

Time:

11:00AM -12:15PM

Venue:

DIGP's Office Room/ NPS Traffic Directorate (TD)/ Naxal

Notes:

1. Traffic Accident Report Forms:

- NS/MOPIT briefly outlined the objectives, scope, progress on the NRCDS Project, project management process, role of NPS in the Project and future works being considered for the development of NRCDS
- PP/TL explained that NRCDS Team has not be enable to test and validate NRCDS in reasonable depth due to the lack of traffic accident report forms from NPS
- PP/TL handed over request letter from MOPIT to provide these forms to NRCDS Team and mentioned the reason to focus on the roads that were mentioned in the MOPIT's request letter and advised that the time is critical to ensure NRCDS is validated with as much forms as available with the Police

- PS/NPS contacted during the meeting itself is colleagues and instructed to copy/ scan all available forms from the beginning of financial year to the end of this calendar year.

Decisions/ Actions:

- TD/NPS shall collect forms for the requested roads from its District or Regional Office and inform NRCDS Team (Naresh Shrestha as soon as these are received)
- NS/NRCDS Team shall collect forms from TD/NPS/Naxal and enter data in the under development NRCDS
- TD/NPS/ Naxal shall endeavour to handover these forms to NRCDS Team within 2-3 days.
- PP/TL thanked PS/DIGP/NPS for his kind assistance

2. Roles and Responsibilities of NPS and MOPIT in NRCDS's development, maintenance and operation

- PP/TL highlighted on the multi-stakeholder nature of the NRCDS and advised that it would be more expedient to clarify and agree the roles and responsibilities of TD/NPS and NRSC/MOPIT (being two major stakeholders a part from Hospitals/ Health) in the development, maintenance and operation of NRCDS
- Issues such as sharing of data, privacy issues, sensitive nature of data, interface at users (DOR, DOLIDAR, Court, other road safety related agencies and members of public) and owner of NRCDS need to be resolved
- One key issues out of the above to be resolved immediately is the agreement on the agency responsible for data entry in the computer in which accident data will be stored and the agency responsible to own, operate, maintain and manage NRCDS so that NRCDS Team will be able to provide training to the data base operators (NPS or MOPIT) to enter the data and to use NRCDS before the NRCDS Team disperses.

Decision/ Actions:

- NRCDS Team to demonstrate NRCDS to TD/NPS and NRSC/MOPIT jointly in one session
- TD/NPS will be responsible to enter data in the computer
- Training of Trainers shall be provided to Police Officers nominated by TD/NPS and NRSC/ MOPIT to enter data from Traffic "Accident" Report Form.

- TD/NPS and MOPIT shall decide other institutional arrangements required to operate, maintain and manage NRCDS including the ownership of NRCDS. AE/NRCDS Team advised that owning data severally is possible. TD/NPS can maintain its own database (NPRRCDS or NPRIME) including all personal information not to be disclosed to public. MOPIT can maintain, operate and manage NRCDS which will receive same information minus the personal information from the same data entry process. IT Interface needs to be developed by MOPIT's IT Specialist including data filtering features.
- NRCDS Team to advice of the date for the demonstration of Data Entry and Database features to NPS (by email and phone), MOPIT and WB consultants and TD/NPS and MOPIT to advise NRCDS of the venue.

3. Resources

- PP/TL raised the issue about ongoing resourcing from TD/NPS and NRSC/MOPIT sides to make NRCDS sustainable. Issues such as who to provide resources (paper form, tablets, computer, maintenance and/or replacement of tablets issued to Police officers at site, training (initial and ongoing) logistics to keep police officers and MOPIT's NRCDS related officers updated on how to fill up the form, how to use tablets, how to enter the crash data from the form to the computer, how to maintain, manage and operate.
- PS/TD advised training be included in the Project
- NS/MOPIT suggested this is an next phase project and will be discussed with all concerned.
- PS/TD pointed out that the maintenance and replacement of tablets could be an issue
- PS asked where the computer that is used to enter and store data will be installed. It should be in the IT Department/ Naxal
- How can this database be integrated with NPS's network?
- PP/NRCDS Team suggested the NRCDS is a standalone system and that MOPIT's IT Specialist would be able to integrate this system in the network.
- PP/TL suggested that MOPIT and NPS discuss and agree resource issues and that NRCDS Team is just to hand over the system

- PS requested NS to create an environment (in future road safety projects) to provide all crash data collection and storage related facilities to NPS by MOPIT as NPS does not have budget

Decisions/Actions:

- Agreed that this would be a separate project and that MOPIT and TD/NPS will meet on regular basis and discuss to resolve these issues.
- Agreed that this will be soon started after the NRCDS Team hands over the NRCDS to MOPIT at the end of its assignment
- NRCDS will offer TOT to Data entry operators nominated by TD/NPS and NRSC/MOPIT
- MOPIT to organize training

4. Relationship between Traffic Police and Nepal Police Services

- PP/TL mentioned that NRCDS should receive crash data entry forms and crash data from all police officers attending crash scenes
- There are only 107 traffic police stations but 1016 police stations who would attend crash scenes and complete crash report forms.
- PP/TL wanted to know how the interface between NPS and TPS works and how this impacts on crash data collection and target group for training to complete the form and enter the data from the form
- PS/TD suggested that command from TPS is accepted by NPS stations and that there would be no problem in the chain of command

Decision/ Actions:

- TD/Naxal to nominate police officers for Demo session and data entry operators training program who will then train police officers who are likely to attend crash scenes and complete crash forms as well as officers to enter data in to the NRCDS
- MOPIT to nominate their officers for demo session and Data Entry TOT sessions.
- NRCDS Team to demonstrate the functioning of DES and DCSS and to present other aspects of Project in a workshop with the police officers so they can provide feedback on CRFs, DES, DEL, DSS (developed by the Team) to improve them to be organised at the venue suggested by TD/NPS (to be advised).

Appendix 9E: Consultation Meetings with DOTM

Attendance:

Padma Bahadur Shahi, Technical Adviser/ NIRTTP/DOTM;

Partha Parajuli, TL(Int'l)/NRCDS Team

Anthony Eagle, CDBS(Int'l)/ NRCDS Team

Date:

21 January 2016

Time:

11.00 AM -12:30 PM

Venue:

NIRTTP/ DOTM Office Room, New Baneshwore

Notes:

1. NIRTTP Background

Dr Shahi provided NIRTTP project background:

- A current World Bank funded Nepal India Regional Trade and Transit Project (NIRTTP) commenced a study, which envisages among others, the development of web based road crash data collection and management system.
- It is understood that the study is nearing completion. The Study includes the following activities:
 - Review of existing practices on crash reporting and recording;
 - On the basis of practical experiences and lessons learned from the past, develop concept for road crash data management system (web based) including an efficient and effective mechanism to collect the road crash data including the roles and responsibilities for each stakeholder.

- In case if a new system is to be developed to suite the local requirements, prepared draft Terms of Reference for developing the necessary software and implement the computerized road crash database including the trainings for the related stakeholders,
- Develop standard procedures for recording road crashes including investigating the contributing factors of crashes;
- Develop standard procedure for calculating the road crash costs;
- Review and recommend on provisions of compensation for victims of crashes.

2. Scope of NRCDS Project

Mr Parajuli provided an overview on the scope of NRCDS/RSSP

- Review and summaries key findings and recommendations of previous studies
- Develop Policy Document for Road Crash Database
- Develop Crash Data Coding System
- Undertake consultation with stakeholders
- Develop Nepal Road Crash Database System (NRCDS)
- Test and validate NRCDS
- Create template of crash code
- Identify gaps in the collected data and suggest improvements
- Train data base operators for entering crash data on ongoing basis and in managing the created database

3. What is NIRTT Project?

- NIRTT Project primary concerns with freight transport, over loading and road safety
- The road safety component include, among others, activities related to the development of a crash data collection system
- The Crash Data Collection System will be web based
- Nepal Police Traffic Branch (NPTB) will have Tablets to enter details at site
- Looking at basing the data collection on the current form used by NPTB
- This form was introduced in the 1990's to enter data on MAAP5 Software. MAAP5 is a software of British origin

- The project pilot will be the Kathmandu Valley and the Birgunj-Kathmandu corridor. This is the major freight route. Birgung Transit carries 70% of all freight that enters in to Nepal
- There are 36 Police Stations in Kathmandu Valley and as yet the numbers of tablet units have-not been decided
- At present the Incident form is kept at the local Police stations and summary data only is sent to Central Office
- At present no coding is done
- This project is a imedat placing the Incident Form on the Tablet and then this is directly sent to a central server
- Language and system as yet not decided for this server
- This team has already identified that ongoing funding, maintenance and ownership are the issues
- Road Board Nepal (RBN) could be involved in providing fund for up keeping, maintenance and data entry
- NRSC can take owner ship as it has a separate budget line item for road safety

4. Other Points discussed at Meeting

- The NIRTTP is primarily concerned with the uniform, efficient, accurate collection of data and the long-term sustainability of doing this. This team has already done a lot of work on what is current practice.
- The NRCDS is primarily concerned with what data is collected, the coding of this data, the storage of this data and the suitability for end uses especially inrelationto improving road safety. As well as the ongoing sustainability of data collection.
- NIRTTP has not yet started on the Server software specifications and the only requirement from NRCDS would be that this server could supply data in EXCEL format for the intended data storage system.
- NIRTTP has not yet started work on software specifications on the Tablets but intends o follow the currently used Incident forms (originally introduced by DFID funded Road Maintenance Project in mid 1990'sasatemplate for data collection.

5. Meeting conclusions

It was agreed that as NRCDS project progresses over the next few months, it will work closely with NIRTTP to avoid overlap and to assist in the data collection guides as the end product would be of benefit to all users.

6. Action Points

- NIRTTP will send an electronic copy of the current Police Incident Report to Anthony Eagle
- NRCDSP will compare the form with the best practice data collection method and make necessary changes so that the data will be most useful in the analysis of Road Crash Data for safety analysis.

On completion of the meeting NIRTTP Technical Advisor introduced NRCDS Team to Chandra Man Shrestha, DG/DOTM who directed NRCDS Team to work closely, with support from NIRTTP Technical Advisor, with SDE Mr Khadga Lal Shrestha Technical Director/ DOTM who also looks after road safety issues in addition to KSUTP matters.

Appendix 9F: Notes of Workshop 1 with Stakeholders

Date:

- 21 March, 2016

Venue:

- Conference Hall, Indreni

Agenda:

- Welcome by Joint Secretary, MOPIT -Umesh Jha
- Address by Task Team Leader, World Bank -Farhad Ahmed
- Address by DIGP/MTPD- Prakash Aryal
- Address by AIGP, MCO- Pratap Singh Thapa
- How did we come thus far?
- Why this workshop?
- Address by Chief Guest
- Presentation on RSSP- Dhruva Regmi, Consultant, World Bank
- Crash database policy guidelines
- Sustainability frame work
- Crash Report Form
- Descriptive Crash Codes
- Discussion
- Closing Remarks

Attendance:

- Anil Marsani
- Anthony Eagle
- Arjun Kumar Thapa (Representing DG/DOTM)
- ArmendraPrasad Singh
- Aryal, Prakash
- Balaji Rayamajhi
- Bholu Regmi
- Bijaya Mahato
- Damber Kumar Tamang
- DharmendraJha
- Dhruba Raj Regmi
- Dr Ashok Ratna Bajracharya
- Dr Padma Bahadur Shahi
- Durga Devi Khatiwada
- Farhad Ahmed
- Gokul Prasad Burlakoti
- Khadga Raj Rai
- Krishna Bahadur Khadka
- Krishna Kumar Karki
- Laxman KC
- Madan Gopal Maleku
- Maheswor Ghimire
- MalaTamang
- Milan Basnet
- Naresh Shrestha
- Nijjal Shrestha
- Nisha Thakur
- Partha Parajuli
- Prakash Aryal
- Pratap Singh Thapa
- Rajendra Prasad Bhatta
- Ram Chandra Shrestha
- Ramesh Pokhrel
- Ramesh Shrestha
- Rod Stickland
- Sabin Pradhan
- SagarGyawali
- Santosh Karna
- Sapana Adhikari
- Sapana Thapa
- Sarala Neupane
- Saroj Khanal
- Subhash Dhungel
- Surendra Shah
- Surya Acharya
- Sushma Shrestha
- Umesh Jha

Introduction

The Workshop was organized following the submission of Inception Report in order to seek comments from stakeholders. Other objectives of the workshop included:

- Understanding the importance of crash data;
- Many stakeholders in managing road crash database and dissemination of data;
- Many users of crash data
- Many issues to resolve
- Seek agreement on who do what?
- Presentation of working papers prepared thus far
- Introducing sustainability frame work: technical, institutional, legal and funding
- Presenting policy guidelines and seek feedbacks

Presentation:

Dr. Partha Mani Parajuli, Team Leader/ Road Safety Engineer, introduced the Project. His presentation included:

- Project background
- Importance of the Project in managing road safety
- Scope of the Project
- Tasks and deliverables
- Timeline

Dr Parajuli then continued with his presentation which covered the following:

- Sustainability Frame work (technical, legal, institutional, funding, technical)
- Draft Crash Database Policy Guideline
- Where to from here?
- Way forward

Mr. Anthony Eagle, Crash Database Specialist, explained Crash Database System developed under the Project. His presentation, among others, included:

- Types of crashes
- Descriptive Crash Coding System
- Crash Report Form: Its strength and opportunities for improvement

Discussion:

Some of the key points raised included:

- Use of technology to collect data;
- Identifying overloading issues;
- Situation of under reporting of victims;
- Quality of data collected and existing CRF;
- Ownership of data;
- Extra work for NPS as "slave" to other agencies

The last point implies that NPS would prefer to own the system over to contribute to create the system.

Other issues discussed in the workshop were on following:

- How to address underreporting of crash data;
- What reporting connections should be established between NPS and Hospitals and NPS and MOPIT;
- Who should own the data;
- Who should provide fund for ongoing collection of data;
- How to introduce web usage in the crash data collection?
- How to introduce Tablets or Smart Phones in the collection and transmission of crash data
- Cloud based storage of data
- Web based data distribution

Many of these issues raised by stakeholders were outside of the scope of the NRCDS Project. It was clarified that the NRCDS Project's scope included identification of gaps in the existing system of collection (e.g., Ways for addressing under reporting of crash data, gaps in CRF), retention and use of data and make recommendations on the basis of this. The NRCDS Team expressed the view that a separate project needs to be implemented for these additional issues which can be planned for future following the completion of the background works envisaged in this Project.

It was emphasized by the Crash Database Specialist that all these issues are important but cannot be completed in a simple and short NRCDS Project. It was suggested that the NRCDS would make series of recommendations starting from additional data items that need to be collected in the CRF and changes to be made in the existing Form to improve the data collected but the development, testing and validation of the new CRF were not included in the scope of the Project.

It was apparent that many participants had not been exposed to the topic of survey design, crash types, validation of crash data and coding system. While the main objective of the workshop was to seek feedbacks on the sustainability frame work, policy guidelines to finalise the types of crashes and codes for them that are to be additionally included in the local context, none of these issues came prominent in the discussion (Owner ship issue excepted) leading to the recommendation to the Government for its consideration. Some of the participants were even confused with factors contributing to crash (e.g., overloading, speeding) with the types of crashes. The afternoon sessions needed to concentrate on this topic and therefore not many much discussions were held on the presented policy guidelines and DCC codes, and only a few inputs were able to be collected.

Major Decisions:

The fundamental questions regarding the sustainability of the system remained unresolved (got no direction). Workshop ended with the recommendations on future directions the created database system should take. In particular, it was suggested that the NRCDS being developed under the Project should ultimately be

- web based
- capable of incorporating hospital data (to address under reporting)
- able to have multi-user accessibility
- cloud based

Following the discussion on these matters and clarification from NRCDS Project Team on the scope of the Project, it was decided that a separate project would be created by MOPIT to build these capabilities into the NRCDS. The Project Team advised that building these features is fully possible in the proposed database system and that the works could be efficiently completed if the timing of the new assignment would coincide with the timing of the ongoing Project.

Workshop concluded with the understanding that:

- NRCDS Project would continue with the current scope as summing the suggested types would capture most of the crashes in Nepal. More types can be added if many crashes would not be coded and dumped into others.;
- there commended policy guidelines form an aging crash database system would be considered by the Government overtime;
- the NRCDS would be commenced with the DCC system presented in the workshop but would have the capacity to include more in future.
- post workshop consultation with NPS would continue to understand the dynamics of crash data collection and storage better.
- NRCDS Teams suggested that new crash types can be added in future along with the annual review of the Policy guidelines

Appendix 9G: Notes of Workshop 2 with Nepal Police Service

Date:

- 10 June, 2016 (28/2/20730)

Venue:

- Conference Hall, MTPD, Singha Durbar

Agenda:

- Introduction to Project and Work Progress
- Review of Nepal Crash Report Form
- Demonstration on how Data Entry Screen works and code crashes from the information on Crash Report Form
- Discussion / Feedback from Participants

Attendance:

- | | |
|---------------------------|---------------------------|
| • Adhikari, Nabin | • Khadka, Krishna Bahadur |
| • Aryal, Prakash | • Malla, Prashant |
| • Basnet, Milan | • Medhasi, Durga Prasad |
| • Bhatta, Bhola Kumar | • Parajuli, Partha |
| • Bhatta, Krishna Datta | • Sapkota, Manish Raj |
| • Bhatta, Rajendra Prasad | • Shrestha, Naresh Kumar |
| • Bohara, Sagar | • Shrestha, Pankaj |
| • Dangi, Lila Raj | • Shrestha, Prabin |
| • Deo, Ramesh Kumar | • Silwal, Madhu Sudan |
| • Eagle, Anthony | • Singh, Ritesh |
| • Gurung, Ganesh | • Thapa, Rupa |
| • Jha, Umesh | |
| • KC, Laxman | |

Introduction

The Workshop was specifically organized (in addition to the Inception Workshop scheduled in the Project Scope) in order to demonstrate how Data Entry Screen (DES) and Data Checking and Saving Screen (DCSS) works, where the data from the Crash Report Forms completed by the officers attending crash scenes its in the Data Storage System (DSS) to seek input/ feedback on these essential features of NRCDS from the senior officers of Nepal Police Service to improve these features if needed.

Presentation:

Dr. Partha Mani Parajuli, Team Leader/ RoadSafety Engineer, introduced the Project. His presentation included:

- Project background
- Importance of the Project in managing road safety
- Scope of the Project
- Tasks and deliverables
- Timeline

Mr. Anthony Eagle, Crash Database Specialist, explained Crash Database System developed under the Project. His presentation, among others, included:

- Types of crashes
- Descriptive Crash Coding System
- Crash record procedure
- Error finding method
- Demonstration of Data Entry Screen and its functionality
- Step by step process involved in entering crash data from Crash Report Form to get DCC Codes

Mr Naresh Kumar Shrestha, Database Specialist, demonstrated the entry of the information contained in the completed CRF using DES emphasizing on the importance of completing CRFs correctly and completely. Since the current form does not have geo-codes an direction of travel fields, these information should be extracted from the crash diagram completed in the Form, he mentioned.

Discussion:

Following the presentation by the consultant, there was a few questions of clarifying nature from the floor on these system components of NRCDS. Questions were related to Descriptive Crash Coding DCC System, responsibility of determining types of crashes and assigning codes to crashes, suitability of the existing CRF, Data Entry Locations (DELs), ownership of crash data, sharing of data related to personal information, ability of EXCEL to store and manage data and soon. Question was also raised from the floor on how to capture missing crashes in the system. Potential options such as implementation of improved Health Services and NPS communication process in terms of reporting deaths and injury types during the post crash scene period (within 30 days)

Concerns were also raised in terms of the availability of resources to equip NPS with the additional resources such as required for storing data (computer servers), for entering crash data at designated DELs (generally DPOs), for printing CRFs, for training police officers to complete CRFs (current and modified), access to an uninterrupted power supply, access to internet and soon. This requires additional fund on the top of NPS's regular budget and without the additional budget the system would not be sustained. Transfer of officers from traffic police service to civil police service on regular basis require that all police officers and not just traffic police officers be trained. Training to computer operators, crash database officer and system analyst is also critically important.

Resourcing computers and internet network and trained personnel needed for crash data collection within the Valley might be possible. But this would be of big issue for other parts outside of the valley, especially for remote locations. Question was asked how the data could be collected and sent to the computer server located at Naxal Head quarter by the police officers at remote police stations in this situation. Doubt was also expressed from the floor that, if District Police Offices are not connected with the net work, then the Project will most likely fail.

In response, Dr Parajuli and Mr Eagle suggested as follows:

- DCC is nothing but just a system that is used internationally in countries with best practice road safety management to classify crashes in to similar types having similar contributing factors that can be treated with similar remedial measures.
- DES and DCSS are used to determine type of crashes, assign appropriate codes and check and save crash data in the DSS. These automatically define type of crashes and assigns appropriate code in most cases, given a CRF is completed correctly.
- Responsibility of determining types of crashes and assigning codes does not lie on the police officers at local police stations and also not on the officers at DELS. Random manual checking/verification of appropriateness of coding crash data and determining and assigning codes to crashes resulting from incorrect information or complexity of crashes or other un defined reasons lies on the system analyst of NRSC/ MOPIT yet to be nominated).
- Police officers attending crash scenes are not required to use DES or DCSS. They are required only to complete CRFs correctly (unless a station is not classified as DEL by NPS).
- The existing CRF is very much suitable and its use can be continued as the data requested for collection in the CRF would be able to code most of the crashes and will be sufficient for safety analysis. A few min or additions would only be required to improve it (incorporation of additional questions on geo-codes of crash location and direction of travel of vehicles or other units involved in crashes). Further improvements are possible but may be implemented gradually over medium to long term basis once all basis frame work for sustained operation are in place and further improvement opportunities are sought by road safety stakeholders.
- Data entry locations are those offices of NPS where there is an access to computer to enter data from CRFs to DSS, reliable internet connection to send email to Traffic Directorate, Naxal Headquarter. DELS are nominated by NPS through its internal management process.

- The DSS is currently designed in such a way that crash data is owned by NPS and NRS/ MOPIT. NPS will own and manage DSS containing complete information as entered through DES and further checked through DCSS. NRSC/ MOPIT would own and manage DSS containing all information except those related to privacy and those having sensitive nature. In order to differentiate between the DSS managed by NPS and MOPIT, the first DSS is named in the Project as NPRCDS and the later is named as NRCDS.
- EXCEL was used based on the project scope and consultant believes the current system can store and manage data generated in the country for at least an other five years. It is proposed to gradually transition the system in to other more powerful plat form as the data storage grows and data transfer from EXCEL to any other data base plat form can be implemented easily.
- It was advised that the under reporting of crashes and fatalities is identified as one of the key issues and this ph as been confirmed by the study but developing a process was considered as a separate task beyond NRCDS Project activities.
- The Project has developed sustainability framework for NRCDS, asset of policy guide lines to be adopted by the Government and a number of recommendations for implementing created NPRCDS and NRCDS sustainable. The implementation modality, budget, staff resources and so on are the matters for the two key government agencies to discuss and decide.

Following the clarifications on these major and other issues raised in the floor, the discussion mainly focused on how to make NRCDS sustainable. Mr Prakash Aryal, DIGP/ MTPD and Mr Pankaj Shrestha, DIGP/TD/NPS and Mr Umesh Jha, US/NRSC/ MOPIT provided valuable comments on various aspects of the Project nd issues involved in the implementation of NRCDS on sustained basis. NPS Head Quarter IT Division Inspector expressed his view that the concept presented and all issues raised in the workshop are valid but its implementation on an ongoing basis need huge investment. There should be a system that includes robust network and data sharing arrangement among NPS, DoR, DoLIDAR, DOTM, CBS and possibly with DOH (Hospitals). These agencies should be able to share road data, hospital data, transport management related data such as vehicle registration data, driver licence data), population data etc so the system could work properly.

Major Decisions:

Following decisions were made:

- The project on creating NRCDS is very important for investigating crashes and collecting crash data for road safety management in the country. The problem is how to make the system sustainable.
- It was agreed that resourcing NPS for completing CRFs is essential for systemic and for sustained collection of crash data and maintenance of NRCDS. This issue will be discussed in MOPIT. MOPIT and NPS will be communicating about the future developments on resourcing issues. Additional resources required for managing NRCDS include:
 - Computers/Lap tops
 - Printers
 - Tablets

- GPS Recorders
 - Access to Internet
 - Electricity/ Solar back up to recharge tablets and to power computers
- It was discussed and resolved that training to NPS and MOPIT in the use of CRFs, DES, DCSS and managing NPRCDS and NRCDS is critical. NPS personnel are rotating between Traffic Service and General Civil Service and therefore training on using these tools correctly and in managing NRCDS should be delivered on regular country wide basis. Delivery of training is resource intensive. Fund for implementing training programmes such as
 - Training on how to complete CRF
 - Training on how to use DES and DCSS
 - Training on how to manage NRCDS
 - Training on how to extract data from NRCDS in accordance with users' needs
- NPS is committed to NRCDS process. It realizes that crash data are important for improving road safety and to save lives. However, it does not have resources to carry out these additional activities on behalf of NRSC/MOPIT.
- Regarding the request made by MOPIT, NPS agreed to nominate two personnel to participate in the on-the-job training to be delivered at MOPIT by the Project. The ongoing training issues will be discussed between NPS and MOPIT and options explored and agreed between the two government agencies on as needed basis.

APPENDIX 10
LIST OF PERSONS CONTACTED

Appendix 10: List of Persons Contacted

S. No.	Surname	Other Names	Affiliation	Position
1	Acharya	Surya Raj	National Transport Sector Policy Review	Team Leader
2	Adhikhari	Nabin	Metropolitan Traffic Police Division, Ramshapath	Inspector
3	Adhikhari	Sapana	Ministry of Physical Infrastructure and Transport	Account Officer
4	Ahmed	Farhad	World Bank	Seniour Transport Consultant
5	Aryal	Prakash	Metropolitan Traffic Police Division, Ramshapath	DIGP
6	Bade	Bisnu Om	Ministry of Physical Infrastructure and Transport	Joint-Secretary
7	Bajracharya	Dr Ashok Ratna	National Trauma Centre Bir Hospital	Seniour Orthopedic Surgeon
8	Basnet	Milan	Metropolitan Traffic Police Division, Ramshapath	SSP
9	Basnet	Milan	Metropolitan Traffic Police Division, Ramshapath	Inspector
10	Bhatta	Rajendra Prasad	Metropolitan Traffic Police Division, Ramshapath	DSP
11	Bhatta	Krishna Dutta	Metropolitan Traffic Police Division, Ramshapath	Inspector
12	Bhatta	Bela Kumar	Metropolitan Traffic Police Division, Ramshapath	Inspector
13	Bhatta	Vijay Kumar	Traffic Directorate, Police Head Quarter, Naxal	DIGP
14	Bhatta	Rajendra Prasad	Metropolitan Traffic Police Division, Ramshapath	DSP
15	Bhattarai	Bidurmani	Metropolitan Traffic Police Division, Ramshapath	Sub Inspector
16	Bohara	Sagar	Metropolitan Traffic Police Division, Ramshapath	Inspector
17	Burlakoti	Gokul Prasad	MVTMA/MVTMR Review	Legal Expert
18	Chand	Jaya Bahadur	Metropolitan Traffic Police Division, Ramshapath	DIGP
19	Dangi	Lila Raj	Metropolitan Traffic Police Division, Ramshapath	Inspector
20	Deo	Ramesh Kumar	Metropolitan Traffic Police Division, Ramshapath	Inspector
21	Dhungel	Subhas	Freelancer	Road Safety Specialist
22	Eagle	Anthony	Nepal Road Crash Database System Project	Crash Database Specialist-
23	Ghimire	Maheshwor	Department of Local Infrastructure and Agricultural Roads	SDE
24	Ghimire	Maheswor	Department of Local Infrastructure and Agricultural Roads	SDE
25	Gurung	Ganesh	Traffic Directorate, Police Head Quarter, Naxal	SSP
26	Gyawali	Sagar	Road Board Nepal	Technical Director
27	Hachethu	Sitaram	Metropolitan Traffic Police Circle, Satdobato	Inspector of
28	Jha	Umesh	Ministry of Physical Infrastructure and Transport	Joint-Secretary
29	Jha	Daya Kant	Department of Roads	Deputy Director General
30	Jha	Pravat Kumar	Ministry of Physical Infrastructure and Transport	SDE

31	Jha	Dharmendra	Department of Roads	SDE
32	KC	Jeet Bahadur	Metropolitan Traffic Police Division, Ramshapath	Asstt Sub Inspector
33	Karki	Krishna Kumar	Ministry of Physical Infrastructure and Transport	Under Secretary
34	Karki	Dambar Prasad	Metropolitan Traffic Police Division, Ramshapath	DSP
35	Karna	Santosh	Department of Roads	SDE
36	KC	Laxman	World Bank	Road Safty Consultant
37	Khadka	Krishna Bahadur	Ministry of Physical Infrastructure and Transport	Engineer
38	Khanal	Saroj	Road Safety Society of Nepal	Secretary
39	Khatriwada	Durga Devi	Ministry of Physical Infrastructure and Transport	Account Officer
40	Maleku	Madan Gopal	MVTMA/MVTMR Review	Team Leader
41	Malla	Prashant	Freelancer	Consultant
42	Marasini	Anil	Institute of Engineering, Pulchowk	Seniour Lecturer
43	Medhasi	Durga Bahadur	Metropolitan Traffic Police Division, Ramshapath	Inspector
44	Neupane	Manoj	Metropolitan Traffic Police Circle, Koteshwor	Sub Inspector
45	Neupane	Sarala	Ministry of Physical Infrastructure and Transport	Engineer
46	Parajuli	Partha	Nepal Road Crash Database System Project	Team Leader, NRCDS
47	Paudyal	Suman Mani	Metropolitan Traffic Police Range, Bhaktapur	Constable
48	Paudyal	Sunil Kumar	Frelancer	Consultant
49	Pokharel	Ramesh	National Transport Sector Policy Review	Individual Consultant
50	Pradhan	Saroj	Department of Roads	Supentendent Engineer
51	Pradhan	Sabin	Metropolitan Traffic Police Division, Ramshapath	DSP
52	Rai	Khadga Raj	National Planning Commission	Planning Officer
53	Raymajhi	Balaji	Metropolitan Traffic Police Division, Ramshapath	DSP
54	Regmi	Bhola	Ministry of Physical Infrastructure and Transport	Accountant
55	Regmi	Dhurba Raj	World Bank	Seniour Transport Consultant & ICT
56	Sapkota	Manish Raj	Computer Section, Traffic Directorate, Police Head Quarter	Inspector
57	Sapkota	Ram Krishna	Department of Local Infrastructure and Agricultural Roads	Director General
58	Shah	Brajesh Kumar	Metropolitan Traffic Police Division, Ramshapath	Constable
59	Shahi	Dr Padma Bdr	NIRTTP/DOTM	Road Safty Expert
60	Sharma	Niraj	Ministry of Physical Infrastructure and Transport	Senior Divisional Engineer
61	Shrestha	Pankaj	Traffic Directorate, Police Head Quarter, Naxal	DIGP
62	Shrestha	Naresh Kumar	Nepal Road Crash Database System Project	Crash Database Specialist-National
63	Shrestha	Prabin	Freelancer	Consultant
64	Shrestha	Chandra Man	Department of Transport Management	Director General

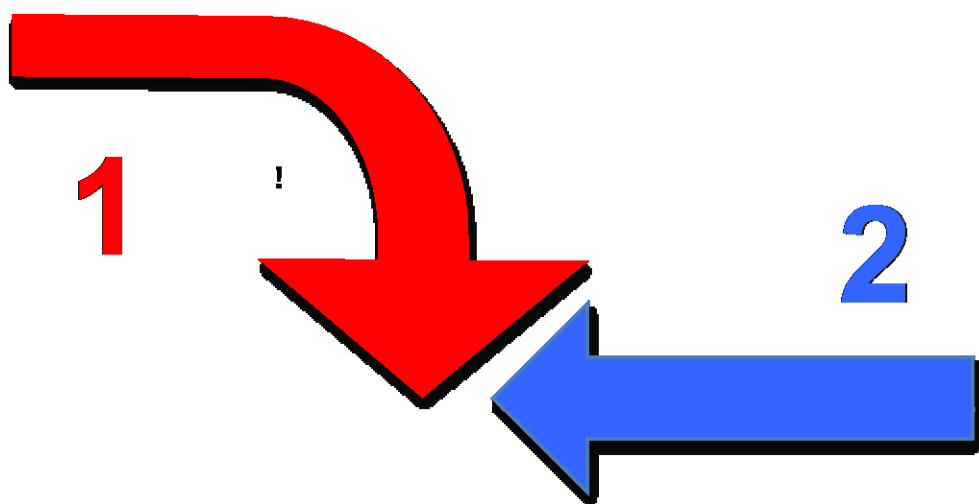
65	Shrestha	Susma	Ministry of Physical Infrastructure and Transport	Engineer
66	Shrestha	Nijjal	Ministry of Physical Infrastructure and Transport	Engineer
67	Shrestha	Ramesh	Ministry of Physical Infrastructure and Transport	Section Officer
68	Shrestha	Ram Chandra	Department of Local Infrastructure and Agricultural Roads	Deputy Director General
69	Shrestha	Surendra	For Nepal.....	Individual Consultant
70	Silwal	Madhusudan	Metropolitan Traffic Police Division, Ramshapath	Inspector
71	Singh	Ritesh	Computer Section, Traffic Directorate, Police Head Quarter	SI
72	Singh	Armendra Prasad	Metropolitan Traffic Police Division, Ramshapath	Inspector
73	Stickland	Rod	Frelancer	Transport Conssultant
74	Subba	Shyam Lal	Metropolitan Police Circle, Satdobato	Inspector
75	Tamang	Mala	Ministry of Physical Infrastructure and Transport	Kharidar
76	Thakur	Nisa	Ministry of Physical Infrastructure and Transport	Engineer
77	Thapa	Rupa	Metropolitan Traffic Police Division, Ramshapath	Inspector
78	Thapa	Mahesh	Metropolitan Traffic Police Range, Bhaktapur	Inspector
79	Thapa	Pratap Singh	Metropolitan Commissioner Police Office, Ranipokhari	AIGP
80	Thapa	Kumar	Alka Hospital, Jawalakhel	Chairperson
81	Thapa	Posan Kumar	Patan Hospital	Assitant Sub Inspector
82	Thapa	Sapana	Ministry of Physical Infrastructure and Transport	Computer Operator
83	Thapa	Arjun Kumar	Department of Transport Management	For Director General
84	Yadav	Sunil Kumar	Metropolitan Police Range Lalitpur	SP

APPENDIX 11
NRCDS MANAGEMENT MANUAL

NRCDSMM

June2016V1

Nepal Road Crash Database System Management Manual



Right-Thru!" " "

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Table of Contents

1	Introduction.....	1
2	Data Collection.....	3
2.1	Data Collection	3
2.2	Current Report Form (CRF).....	3
2.3	How to Complete Crash Report Form.....	3
3	Data Entry In Nepal.....	4
3.1	Data Entry Locations (DEL).....	4
3.2	Data Entry Locations Identification (DELID).....	4
3.3	Data Entry Screen (DES).....	4
3.4	Data Entry Procedures.....	5
3.4.1	Tools Required for Data Entry.....	5
3.4.2	Setup DES.....	5
3.4.3	Steps to Data Entry.....	6
3.4.4	Local Data Backup.....	7
3.5	Step-by-Step Data Entry.....	8
3.5.1	Read CRF.....	8
3.5.2	CIN (Crash Identification Number).....	8
3.5.3	More than one entry record in DES.....	8
3.5.4	Identifying multiple records for one crash.....	9
3.6	Step-by-step Table Instructions.....	10
4	Data Forwarding.....	20
4.1	DELs to TD/NPS.....	20
4.2	Sending Follow up Data.....	20
4.2.1	How to send this information.....	21
4.2.2	Up date NPRCD.....	21
4.3	Sub Set Data TD/NPS to NRSC.....	21
4.3.1	Batch EXCEL File Each 2Months.....	21
4.3.2	Batch File Name.....	22
4.3.3	CDS Scans forwarded to NRSC.....	22
4.3.4	CIN updates post 2 months of crash.....	22
5	Data Checking and Storage.....	23
5.1	Tools Required for Data Checking& Storage.....	23
5.2	Filing Emails.....	23
5.3	Management Reports.....	24
5.4	Data Checking and Storage.....	24
5.4.1	Selecting data record.....	24
5.4.2	Checking for duplication.....	24
5.4.3	Checking duplication data record.....	25
5.4.4	Checking DCC to CDS.....	26
5.4.5	Location (Latitude and Longitude).....	26
5.4.6	Error Messages from DES.....	26
5.4.7	One or more Events.....	27
5.4.8	Saving to the NRCD.....	27
5.5	Reviewing.....	27
5.5.1	Advice from experienced operators.....	27
5.5.2	Requesting extra information from NPS.....	27
5.6	Receiving and entering updated data.....	28
6	Updating Information Lists with in DES.....	29
6.1	Police List.....	29
6.1.1	Instruction on adding new Police Station List	29

6.2 Roads List.....	29
6.2.1 Instruction on adding new Road List.....	30
6.3 Updating all DES sat DELs.....	30
7 Schedule of Functions.....	31
7.1 Daily	31
7.1.1 Management Excel.....	31
7.1.2 Backup Day's Files.....	31
7.2 Weekly.....	31
7.2.1 Backup Week's Files.....	31
7.2.2 External Backup of Files.....	31
7.3 Monthly.....	31
7.3.1 Monthly Report.....	31
7.4 Per Six Months.....	32
7.4.1 Check Information Lists in DES.....	32
7.5 Annual Report of Database Operation.....	32
7.5.1 Under reporting trends.....	32
7.5.2 Annual Operation of Database.....	32
7.5.3 Annual Operation Issues.....	33
7.5.4 DCC Monitoring.....	33
8 Data Dissemination.....	34
9 GIS.....	35
9.1 Latitude and Longitude.....	35
9.2 Cluster maps.....	36
9.3 Definition Crash Clusters.....	36
9.4 Definition Black Spot.....	36
10 Definitions.....	37
10.1 Road and Road Related Area.....	37
10.1.1 Road.....	37
10.1.2 Road Related Area.....	37
10.1.3 Special Types of Roads.....	38
10.1.4 Standard Roads and Related Areas.....	38
10.1.5 'Non Standard' Road & Road Related Areas	38
10.2 Vehicle.....	39
10.2.1 Motorcycle.....	39
10.2.2 Bicycle.....	39
10.2.3 Wheeled Recreational Device.....	40
10.2.4 Wheeled Toy.....	40
10.2.5 Other Vehicle.....	41
10.3 Road User Classes.....	42
10.3.1 Occupant of a Vehicle.....	42
10.3.2 Pedestrian.....	43
10.4 Object.....	44
10.5 Road Crash.....	45
10.5.1 Road Crash Exclusions.....	46
10.6 Vehicle Motion.....	50
10.6.1 Vehicle'In Transit'.....	50
10.6.2 Vehicle' Stationary-In-Transit'	50
10.6.3 Parked Vehicle.....	50
10.7 Crash Location	51
10.7.1 On Road.....	51
10.7.2 On Road Related Area.....	51
10.7.3 Off Road.....	51
10.8 Crash Type.....	52
10.8.1 Collision.....	52

10.8.2	Non-collision.....	52
10.9	Casualty.....	55
10.9.1	Casualty Crash.....	55
10.9.2	Casualty Severity.....	55
10.9.3	Property Damage Only Crash.....	56
10.10	Road Features.....	57
10.10.1	Intersection.....	57
10.10.2	Divided Road.....	57
10.10.3	Lane.....	57
10.10.4	LATM Device.....	57
10.10.5	Link.....	58
10.10.6	Median Strip.....	58
11	Crash Types.....	59
11.1	Introduction.....	59
11.2	Crash Events.....	59
11.2.1	Multiple Event Crash.....	59
11.2.2	Independent Impacts with in a Crash.....	60
11.2.3	Convention of Vehicle1 & Vehicle2.....	60
12	Descriptive Crash Code Template.....	62
12.1	Introduction.....	62
12.2	DCC three digit code.....	62
12.3	DCC Group.....	63
12.3.1	100 – Multi vehicle Crashes.....	63
12.3.2	200 – Single Vehicle Crashes.....	64
12.3.3	300 – Hit Pedestrian Crashes.....	65
12.3.4	400 – Passenger Crashes.....	66
12.4	DCC Sub-groups.....	67
12.4.1	100 – Multi Vehicle Crashes.....	67
12.4.2	200 – Single Vehicle Crash.....	69
12.4.3	300 – Hit Pedestrian Crash.....	71
12.4.4	400 – Passenger Crash.....	71
12.5	Descriptive Crash Code.....	72
12.5.1	100 – Multi Vehicle Crashes.....	72
12.5.2	200 – Single Vehicle Crashes.....	78
12.5.3	300 – Hit Pedestrian.....	81
12.5.4	400 – Passenger.....	83
12.5.5	Monitoring of DCC.....	84
12.6	DCC Diagram Template.....	84
13	Related Documents and Reference Material.....	85
14	Appendices.....	86

ABBREVIATIONS AND ACRONYMS

CDS	Collision Diagram Sketch
CIN	Crash Identification Number
CRF	Crash Report Form
DCC	Descriptive Crash Code
DCN	Data Collection Network
DCSS	Data Checking and Saving Screen
DEL	Data Entry Location
DELID	Data Entry Location Identification
DES	Data Entry Screen
DOLIDAR	Department of Local Infrastructure Development & Agricultural Roads
DOR	Department of Roads
DOTM	Department of Transport Management
EXCEL	MS Office Spread sheet Programme
GIDC	Government Integrated DataCentre
GIS	Geographic Information System
GON	Government of Nepal
HCCRF	How to Complete Crash Report Form
ID	Identification
IT	Information Technology
KISS	Keep It Simple and Sustainable
LATM	Local Area Traffic Management
MAAP	Micro-computer Accident Analysis Program
MOPIT	Ministry of Physical Infrastructure and Transport
NPS	Nepal Police Service
NPTB	Nepal Police Traffic Branch
NRCD	Nepal Road Crash Data

NPRCD	Nepal Police Road Crash Database
NRCDS	Nepal Road Crash Data System
NRCDSMM	Nepal Road Crash Database System Management Manual
NRCDSP	Nepal Road Crash Database System Project
NRCDSUM	Nepal Road Crash Database System Users Manual
NRSAP	Nepal Road Safety Action Plan
NRSC	National Road Safety Council (Nepal)
NRSIMS	Nepal Road Safety Information Management System
NRSMS	Nepal Road Safety Management System
PC	Personal Computer
RCD	Road Crash Data
TD/NPS	Traffic Directorate/ Nepal Police Services
TOR	Terms of Reference
TOT	Training of Trainers
TPN	Traffic Police of Nepal
UN	United Nations
WHO	World Health Organization

1 Introduction

The Nepal Road Crash Database System Management Manual (NRCDSMM) covers all topics from the collection of data to the dissemination of data. This is not a stand-alone document, as it requires information from other components of the Nepal Road Crash Database System (NRCDS) such as Crash Report Form (CRF), "How to Complete Crash Report Form (HCCRF)", Data Entry Screen (DES), Data Checking and Storage System (DCSS) and Nepal Road Crash Database Users' Manual (NRCDSUM).

One of the primary uses of data collected about road crashes is to provide information to decision makers who can decide on realistic treatments or counter measures for particular crash types, road user groups, vehicle types or road characteristics. It is a prerequisite that accurate and consistently compiled data is available and part of that process is the need to apply definitions and guidelines to the collection and processing of the crash data.

To meet this goal this manual steps out recommended procedures to be followed. Supplied with this manual are the NRCDS Report and two EXCEL entry systems: one Data Entry Screen (DES) and the second Data Checking & Storage Screen (DCSS), which support the police officers and data entry teams to enter, validate code and store crash data.

The NRCDSMM is developed under the Nepal Road Crash Data base System Project (NRCDSP). It follows best practice examples from other countries but predominantly from Australia.

NRCDSMM is presented in 13 Sections and ten Appendices. It contains many subsections. Bullet forms are used mostly to be precise. This is expected to offer clarity to the users of the manual.

NRCDSMM is a critical document for ensuring sustainability of the NRCDS and significant efforts have been placed to develop this. In a country like Nepal where staff turnover is quite high and frequent both in Ministry of Physical Infrastructure and Transport (MOPIT) and Nepal Police Services (NPS), the retention of the Management Manual in the custody of agencies responsible to manage database is critical, as proper handover of the knowledge and skill does not take place usually when the staff movement occurs and regular training programs are not implemented.

Sections 2 to 4 cover the steps involved in data entry and forwarding data to other computers with National Road Safety Council (NRSC) and other agencies responsible for managing road

Safety, who wish to have their own data base system. Primary source of all these data would be the server with NPS, which is responsible to enter data collected by it in the first instance.

Section 5 covers checking, reviewing and updating data, then adding data to the data base for safe storage. Remaining sections deals with various other database management issues as follows:

- 6 –Updating information lists on DES
- 7 –Schedule of functions
- 8 –Data dissemination
- 9 –Compatibility with GIS
- 10 –Basic Definitions
- 11 -Crash Types
- 12 – Descriptive Crash Codes (DCC)
- 13 -Related documents and reference materials
- 14 -Appendices to NRCDSMM

2 Data Collection

2.1 Data Collection

In Nepal, data are collected by the NPS at either the location of the crash or reported at the 'front' counter of a police station. Details concerning the crash (i.e. location and nature of the crash, prevailing weather, road conditions, contributing circumstances, number and type of vehicles involved and any death, injury or property damage) are recorded on the CRF.

Collection of Road Crash Data (RCD) by police is consistent with “best practice” in countries such as Australia, America, United Kingdom, New Zealand, Canada, France, Germany, Italy, Sweden, Holland and many more.

It is the commendation of this manual that this practice is continued and the NPS are the owners of the “Raw Data” that is collected, as this contains personal information as well as information only relevant to police requirements. It is requested of the Traffic Directorate/ Nepal Police Services (TD/NPS) to forward a “Sub Set of Data” to the NRSC or an agency delegated by them, for example the MOPIT, to assist then in establishing the Nepal Road Crash Database (NRCD) that will help in the reduction of crashes and severity of crashes on Nepal’s roads.

2.2 Current Report Form (CRF)

Data relevant to road safety are collected every day in most countries, but for the data to be useful for informing road safety practitioners, sufficient data must be collected, coded, validated and stored safely in a computerised data base system.

An example current CRF use by the NPS is located in Appendix 1.

In the NRCDS Project Report, Chapter 8 covers the CRF in detail and Chapter 7 covers gaps in data in detail. Issues mentioned in both Chapters 7 and 8 need to be addressed in future projects.

2.3 How to Complete Crash Report Form

A guide on “How to Complete Crash Report Form” (HCCRF) has been developed to assist Nepal Police with completing details on the CRF. The CRF was introduced in 1996 and is still being used by NPS. Unfortunately all support documentation has not survived and police lack support in completing this task. It is hoped that the HCCRF will be of some assistance to police. (Appendix 2)

3 Data Entry in Nepal

3.1 Data Entry Locations (DEL)

As not all police stations are currently equipped with desktop computers or access to the Internet the police services will need to establish “Data Entry Locations” (DEL), that is police stations that have the facilities to enter the data. These locations will be in a direct line of command to the smaller stations and thus be able to work closely with all officers to collect RCD.

Cooperation between NPS, MOPIT and the NRSC is required to setup good lines of communication so forms, emails, instructions and support flows smoothly. The cooperation and support between these stakeholders and many others is fundamental in helping to save lives.

Once a set of DEL has been established this needs to be communicated to NRSC and MOPIT so as they know what police stations are in the Data Collection Network (DCN).

3.2 Data Entry Locations Identification (DELID)

It is recommended that each DEL have a unique identification number (DELID). The formatting of this is up to NPS but as a recommendation the first two digits would be best as the District, so 01 to 75. This request for an identification number helps with the movement of information. Appendix 3 has a list of the current District numbers.

Also each DEL requires an email address and this list needs to be supplied to NRSC or their agents for example MOPIT. This will allow for follow-up questions or communications or even improvements to the DES to be sent out.

3.3 Data Entry Screen (DES)

DES has been developed under NRC DSP 2016 and will be supplied to all DEL for their data entry responsibilities and use. This manual will also be electronically provided so as all data entry staff has access to procedures, steps and supporting information.

DES is designed to aid the data entry officer. Most instructions are on the screen itself the steps here are the administrative steps to be complete along with those on the screen. Section 3.4 gives further step-by-step support when using DES and 3.5 is a step-by-step table.

Appendix 4 has sample screen shots and instructions on how to navigate the screen.

DES for ease of use follows the order of questions on the CRF.

As the data entry officer enters data from the CRF in to DES, error messages, conflicts and instructions will be on the screen. In most cases the officer will be able to solve these by looking at the CRF and the Collision Diagram Sketch (CDS) on the CRF. It is not police responsibility to code the crash, but it is highly recommended that the data entry officer familiarize themselves with crash types and coding definitions as this will assist in the collection of good quality and consistent Road Crash Data (RCD). These definitions are in Section 12 under DCC Template.

As the NPS are entering the data the advantages of this cannot be underestimated. Firstly a fundamental role of police is to ask questions and to reason if the answers make sense. It is understood that it will be the Traffic Police of Nepal (TPN) who will undertake the data entry activity. These officers already have an underlying understanding of what happens on Nepal's roads. Ye sat first getting use to DES and reading about crash types and definitions will pose a steep learning curve, but as with any task it becomes easier each time you perform it. The NRCDS project team have no misgivings, we believe the dedication to solve issues on Nepal's roads we have seen by the Traffic Police during our short project, will see them perform this task in a responsible, professional and dedicated way. It is the responsibility of other stakeholders to give as much assistance and support as possible to the NPS.

3.4 Data Entry Procedures

3.4.1 Tools Required for Data Entry

1. Desktop PC with the DES EXCEL loaded.
2. Electronic copy of this manual (NRCDSMM)
3. Scanner to scan in the CDS on the CRF
4. Access to the Internet

3.4.2 Setup DES

Two files will be sent to each DEL these need to be placed on the PC desktop.

1. DES. (Data Entry Screen).

DES has instruction on the screen as you enter data and there are step-by-step instructions in the Management Manual

2. NRCDSMM (Nepal Road Crash Data base System Management Manual)

NRCDSMM contains all the information needed to help any data entry officers to perform the data entry tasks.

3. Each DEL will need to **set up two folders** on their desktop to look after scanned CSD;

- a. “Scans This Session”
- b. “All Scans”

DES is now setup for data entry sessions on this PC at this DEL.

3.4.3 Steps to Data Entry

1. **Collect** the CRFs that are required to be entered.
 - a. It is recommended to do this as a daily task. In smaller DELs this may only involve a few CRFs and it is far easier to follow up with a reporting officer the same day or the next day if information is missing on the CRF.
 - b. Larger DELs like the Kathmandu Valley, it is estimated from consultation with NPS that they may have 25 to 35 to complete each day. This may require a dedicated resource, but it must be noted that the DES is also collecting all the total crash numbers that NPS currently do manually, so it is hoped that it will not be an extra strain on staff resources.
2. **Open** DES on your Desk Top
3. **The “Welcome Screen”** steps you through your data entry process. The Step-by-step table in NRCDSMM will also assist (Section 3.5).
4. **Follow** instructions on DES with the aid of the Step-by-step instructions in Section
5. **When** all possible at has been entered and all possible messages on screen have been answered **write the CIN** (Crash Identification Number –located top right of DES) on to the top of the CRF on the side that the CDS is located.
6. **Scan the CDS** side of the CRF and file the scanned image to folder on the desktop called “Scans This Session” and use the CIN as the file name for each scan.
 - a. **Note:** These scans are needed by NRSC to complete the data validation and coding process. Only the CDS and location information is required.
 - b. ***TD/NPS may put in place a system to also scan the other side to the CRF so as electronic storage of the CRF is achieved and the paper CRF need not be filed. These procedures are at the instruction of NPS line of command to the DEL.***

-
7. **Follow** the screen instructions in DES to save the CRF just entered and reset for the next CRF.
 8. **Continue** this process until all CRFs required to be entered, in this session, have been completed.

Note it may not always be possible to remove all error messages, as some times there will be missing information that for some reason the police just cannot obtain. The only request is that police complete the CRF as best as possible and as much data as possible is entered.

3.4.4 Local Data Backup

Each CRFs, which were entered in this session, have been saved to a local backup file in DES. This work sheet with in DES will hold all crash records entered on this work book. This session crash records are also in a work sheet Email File in DES.

DES will take you back to the welcome screen and give you steps to create an EXCEL for emailing of data to TD/NPS.

3.5 Step-by-Step Data Entry

3.5.1 Read CRF

The first thing the data entry officer should do is familiarize themselves with the CRF they are about to enter. Read the police description, look at the two diagrams on the CRF and check the number of vehicles, drivers, passengers and pedestrians.

Being familiar with the CRF will help when entering data from the questions.

3.5.2 CIN (Crash Identification Number)

This number automatically generates on DES from information entered in relation to this crash event. It is 16 (numeric) characters in length. The first 10 characters are taken from date and time recorded on the Crash Form. They start at midnight on 1 January.

This CIN is the unique identifier for each crash record. It allows for the matching of scanned CDS with the line of crash data information in the EXCEL. When information has to be updated it allows for identification and matching the information to the correct crash record. Finally it helps prevent duplication of data within the NRCD.

The 16 Digits are:

- 1st and 2nd - last two digits from year. E.g. 2016 would be 16.
- 3rd and 4th – are the month. E.g. May would be 05.
- 5th and 6th – are the day. E.g. First of the month would be 01.
- 7th and 8th – are the hour (note 24 hr. clock). E.g. 1 pm would be, 13.

-
- 9th and 10th – are the minutes. E.g. 1.30 pm would be 30.
 - 11th and 12th – Police District. E.g. Lalitpur is 25.
 - 13th – The Severity. E.g. Fatal would be 1.
 - 14th and 15th – Number of records to enter all details. E.g. 1 record would be 01.
 - 16th – Is default a 0 and is used only if a duplicate CIN occurs and it is not a duplication.

(See Section 5.4.3)

The CIN from this example would be **1605011330251010**

3.5.3 More than one entry record in DES

There will be rare crash events that involve more than 5 vehicles or pedestrians, not as rare will be crashes that involve multiple passenger injuries, such as crashes involving buses. The CRF has limited capacity to enter all the details and NPS may use more than one form to capture all the details. DES has a capacity for each record entry of up to 5 vehicles, passengers or pedestrians. The data entry officer enters the totals of all involved vehicles, drivers, passengers and pedestrians and DES will calculate the number of data records required to capture all details and return this value on line 6 of DES. (This value rounds up.)

Steps for entering extra details on multiply data records:

1. **Complete all other sections of first entry record**—Complete this entry with all the information on the CRF and details for the first 5 vehicles, drivers, passengers or pedestrians details and save the record.
2. **Start second entry record**—Only enter details down to question 14 “Time” online 39, this has set the CIN and thus is linked to the first data record with all crash details.
3. **Enter extra details**—go to details sections using the navigation buttons and enter the extra details for vehicles, drivers, passengers or pedestrians.
4. **Repeat process until all details are entered**—Repeat the process until all details of the vehicles, drivers, passengers or pedestrians have been captured.

By not filling in all details on each data record a “Record number” has been generated by DES and is displayed in the first column of the data output as “Record”. This will either be the value “1” or “0”.

“1” indicates this is the first data record for this crash and contains all the crash details, whereas “0” indicates that this is a data record that contains extra details. Note the CIN will be identical and is how these records may be connected during analysis.

3.5.4 Identifying multiple records for one crash

In the preceding section line 6 on the DES screen was changed to accommodate the need to enter extra details in relation to one crash, that is the number of records to capture all details for one crash. Line 6 relates to the 14th and 15th digit in the CIN. So the CIN can identify multiple records for one crash, this is important when analysis on the data is performed. When analysis is performed on the data base it will be important to understand the importance of the record value.

That is the total number of records in the data base will be greater than the total number of crashes.

So to indicate the total number of crashes and then break these down to type, the data records with a record value of “0” would need to be removed. Where as if the analysis was on total injuries, vehicles and soon, all records would be included in the analysis.

3.6 Step-by-step Table Instructions

The following table has four columns and takes the data entry officer line by line through DES.

<ol style="list-style-type: none"> 1. This is the “Line” number located at the far left of the DES screen in Blue. 2. This is the question number and coincides with the question number on the CRF and is located to the left of the DES screen. 3. This is the question or data required, located left of centre on the DES screen. 4. These are the instructions for each question or line. 			
1	2	3	4
		CIN	Crash Identification Number. See Section 3.5.2 This is auto-generated by DES from information in the first 14 questions.
1		DCC & DCC short Description	No action required as this is generated by the Coding Matrix in DES
2		DCC Full Description	No action required as this is generated by the Coding Matrix in DES
5		Navigation Buttons	See Appendix 4 for instructions on use.
6		Number of data records Capturing all the details of this crash.	See Section 3.5.3 above.
8	1	Report Number	This field a Nepal Police field and used for their Internal processes it is not transferred to NRCDS. Follow NPS instruction.
10	2	Computer Number	Enter the DEL ID number here see Section 3.2
12	3	Police Station	DES has “Click Here For Police Detail”. This will Take the operator to a list of Stations provided by NPS. Select and Copy the police station indicated on the CRF and click on the “Return” button. Police Station name has been auto filled.
15	4	District	District and Regional details will be auto filled from Police Station selection.
19	5	Number of Vehicles Involved	Type in number indicated on CRF. Note if you have already noticed that there are more or less vehicles in the police description or in the collision diagram the correct number may be entered at this point. If more than 5 vehicle see Section 3.5.3
21	6	Number of Driver Casualties (Involved)	This field is titled “Driver Casualties” but should be “Drivers Involved”. Note that under Driver Details Question 50 Driver Injury, one of the options is Uninjured. The police need to collect details of all drivers involved in the event, regardless of the injuries. The only time the number of drivers may be less than the number of vehicles is when a parked vehicle is

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1	2	3	4
			<p>Involved.</p> <p>An error message will appear if there are fewer drivers than vehicles.</p> <p>If in the case the second vehicle is a parked car this message may be ignored.</p> <p>If it is a Hit & Run do enter the number of drivers counting the Hit & Run driver.</p> <p>On line 412 Question 45 there is an “Unknown” option if the police have no details of the driver</p>
23	7	Number of Passenger Casualties	<p>Enter the total number of Passenger Casualties involved.</p> <p>If more than 5 passengers see Section 3.5.3</p>
25	8	Number of Pedestrian Casualties	<p>Enter the total number of Pedestrian Casualties involved.</p> <p>If more than 5 pedestrians see Section 3.5.3</p>
27	9	Crash Severity	<p>This field represents the four levels of sever it that a Crash event may have, the highest being Fatal, than Serious, Minor and Damage.</p> <p>The full definitions of these are given in Section 10.9 Casualty.</p> <p>This field is to record the highest level of casualty for the crash event.</p>
33	10	Date	<p>Questions 10, 11, 12 & 13 on CRF are for the date and day. The format is -</p> <p style="text-align: center;">dd mm yyyy Day</p> <p>This is the real crash date (i.e. the date on which the crash actually happened).</p> <p>NOTE</p> <p>The Gregorian calendar (or Western) is today's Internationally accepted civil calendar.</p> <p>There as on for its use is its consistency from one year to the next.</p> <p>This must be the date format.</p>
36		Enter date (again)	<p>Then the operator is asked to enter the date again, this Generates day automatically, this will highlight if an error has been made in the translation of the date from Nepali to Western by the days being different.</p>
39	14	Time (24 hours)	<p>Time is entered in a 24- hour format and done via Dropdown selections to help a void errors. As a guide Midnight is 00:00 hours & minutes and Mid day is 12:00 hours & minutes. Each hour after mid day increases by 1, so 1pm in the afternoon is 13:00 hours & minutes and so on till 23:00 hours & minutes, which is 11 pm. Note there is no 24:00</p>

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1	2	3	4
			Hours 7 minutes, for as the clock reaches 23:59 hours & minutes, its next reading is 00:00, that is Midnight.
41	15	Junction Type	Select the Junction type indicated by the police officer. Not check the collision diagram to make sure it matches the diagrams on the DES. Note if the diagram indicates the collision is more than 20 meters from the inter section this selection should be “1” “Nota Junction” because it is on the section of road between junctions. If “Other” has been indicated and the diagram does not match any of the diagrams on the DES make sure a description is written in the Police Description Box on the DES line 90
The CIN atop of DES can now be written on to your CRF on the CDS side of the form. Make it clear so when the CRF is scanned it will be easy to see. See Section 3.4 (5)			
43	16	Traffic Control	The question relates to what type of traffic control That was present at the crash location. Note the traffic control must apply to the vehicles for example it is a Rear End collision on a road but the Stop Sign is on the intersecting road not facing either of the drivers; therefore the traffic control does not apply to this crash. Select what is indicated on CRF or in Collision Diagram.
45	17	Collision Type	Collision type is important in the correct coding of the crash. It will not be un common that the incorrect “collision type” has been ticked on the CRF. By looking at the number of vehicle, and the attached diagrams and definitions and comparing to the collision diagram on the CRF the data entry officer will be able to pick the correct collision type. There will be some occasions where there is not sufficient information. In this situation NRSC officers will find a “Best Fit”. As mention in the manual it is not the function of NPS to code, just to complete as much information as possible. See Section 11 &12 form or details and Appendix 6.
47	18	Movement	This is a selection of One Way or Two Way. If not Indicated a simple look at the website on line106 may allow the operator to fill in the blank.
49	19	Weather	Select from the drop down that matches the CRF
51	20	Light	Select from the drop down that matches the CRF DES will give a conflict message if the time entered in question 14 is in conflict with this answer.
58		Web site definition of	The website may give an indication of if there has

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1	2	3	4
		light	Been an error for the time of year or it may be sunrise Or sunset. This information is important when trying to identify issues on roads that run east west.
62	21	Road Character	Select from the drop down that matches the CRF
64		River Name	This question will only appear if Bridge has been selected in question 21. Type in the River name.
66	22	Surface	Select from the drop down that matches the CRF
68	23	Road Condition	Select from the drop down that matches the CRF
70	24	Surface Condition	Select from the drop down that matches the CRF. Note if Rain was indicated in question 19 and the road is not wet a conflict message will appear.
72	25	Road Works	Select from the dropdown that matches the CRF. This is yes no and may be left blank.
74	26	Hit &Run	Select from the dropdown that matches the CRF. This is yes no and may be left blank. It is for Police purposes. It will also be used if there are missing details about drivers or vehicles on the DES because they were not available.
Then extsection requires the data entry officer to examine the police description, collision diagram and also other reference material as a local office may know about the road or the are a where the crash occurred.			
85		Location Sketch	Indicate if the item is present Yes/No.
86		Collision Diagram Sketch	Indicate if the item is present Yes/No.
87		Police Description	Indicate if the item is present Yes/No.
90		Police Description Box	Type the police description in to this cell on DES. Note do not type personal details. Refer to drivers as Dri.1 and Dri.2 same as vehicles, Veh.1 and Veh.2.Looking at the personal details section of the CRF will allow the data entry officer to establishwho is Dri.1 orVeh.1 and soon.
107		Enter Latitude	On the HCCR Fit will be recommended in the interim to enter Latitude as the X in the Map reference.
109		Enter Longitude	On the HCCRF it will be recommended in the interim to enter Longitude as the Y in the Map reference.
111		Location Information	Lines111to126-These fields on DES correspond With fields on the CRF. Transfer any information that has been supplied. The officer may have written some of this information on the location sketch or the collision diagram sketch, collect and enter this information here.

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1	2	3	4
128		Name of Road Crash was on.	The officer may have written some of this Information on the location sketch or the collision diagram sketch, collect and enter this information here. The “Road Details Button” will allow for all the information that has been supplied by DOR or DOLIDAR is transferred to the fields that relate to this road. Find, select and copy the road number.
138		Road Name not in list	If the road name could not be found in the supplied list complete as much details as possible in this cell.
140		What direction does the Road the crash was on run?	The officer may have indicated north on the collision diagram, confirm this is correct by referring to the website recommended online 105. Select the road direction either North-South or East-West
144		Isthecrashwithin20 meters of intersection?	Check the CDS to confirm the location of the Collision in relation to any intersection that may be in the diagrams.
148			Intersection diagrams
152		What does the intersection look like	This question will appear if it has been confirmed that the collision was within 20 meters of an intersection. Select the type of intersection. Note: if you select “Not an Intersection” an error message will appear.
154		IdentifyVehicle1and Vehicle2	GenerallyVehicle1isthevehicleinthewrongbut this is not the rule. Section 11.2.1 covers this in detail. The data entry operator has to establish which set of details are vehicle 1 and which are vehicle 2. As the police officer may have written the min the incorrect order for coding. For example in a rear end type collision vehicle 1 runs in to the back of vehicle 2. The operator needs to look at the CDS to establish vehicle number than alter the CRF numbering if needed.
156		Direction vehicles or pedestrians travelling	After establishing the numbering of vehicles now Enter from the diagram the direction being traveled by each involved in the collision. Note: Coding only applies to the first 2 vehicles and the first pedestrian.
160		In relation to centre of road	Again by examining the CDS establish where each Vehicle is in relation to their direction of travel and the centre of the road.
163		In relation to the intersection	Again by examining the CDS establish where each Vehicle is in relation to their direction of travel and the intersection.

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1	2	3	4
173		1 st . Intersecting road	This field will appear if an intersection has been confirmed. There is provision to enter up to 3 intersecting road sat a junction. At least 1 intersecting road must be names. Click the road Details button and follow the instructions to auto fill the fields.
185		In name not on list	If name not on list manually type in the details here That has been supplied on the CRF.
188		2 nd . Intersecting road	Repeat instructions 1 st . Intersecting road
200		3 rd . Intersecting road	Repeat instructions 1 st . Intersecting road
212		Was a pedestrian Injured	The operator is examining the CDS and if there is a pedestrian it will be indicated. Note: If there is a conflict with earlier information there will be a conflict message.
214		Was the injury as a result of previous crash	This question only appears if a pedestrian is involved. It is to help NRSC operators to change coding if needed.
219		Confirm only One Vehicle	This is to check for conflicts with earlier information.
219		Did the vehicle hit an object	This question only appears if there is on evehicle. Simple yes no question.
221		What Object was hit	This question only appears if previous question was Answered Yes. Take time to select object if it has been identified in the diagram or the police description. Note: The object can be on or off the road.
223		Did the vehicle go off the road	This question will help with coding.
226		Speed Limit	This field is for future use. Speed management policy had not been developed at the time of this manual.
227		How many lanes going East or North	The previous question on road direction line140 will determine if this question refers to East or North. To supply the information it may be indicated on the diagram, in the police description, local knowledge or on the web site in line106. Note: There has to be at least one lane between this answer and the next answer. If it is a one-way road place the lane(s) in the correct direction of travel field. If it is a two-way road but only one lane it does not mater which field has the value of one.
229		How many lanes going West or South	The previous question on road direct in line140 will Determine if this question refers to West or South. To

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1	2	3	4
			<p>Supply the information it may be indicated on the diagram, in the police description, local knowledge or on the web site in line106.</p> <p>Note: There has to be at least one lane between this answer and the next answer. If it is a one-way road place the lane(s) in the correct direction of travel field. If it is a two-way road but only one lane it does not matter which field has the value of one.</p>
223		Check lanes	The operator is asked to check the lane configuration as a validation step.
227		Potholes	<p>Definition of pothole: a deep, round hole in a road or Some other surface.</p> <p>This may be indicated in the diagram or description.</p>
229		Rutted	<p>Definition of rutted: a groove or track in the ground or road</p> <p>This may be indicated in the diagram or description.</p>
231		Corrugated	<p>Definition of corrugated: definition, alternate furrows and ridges.</p> <p>This may be indicated in the diagram or description.</p>
233		Uneven	<p>Definition of uneven: it's bumpy and rough.</p> <p>This may be indicated in the diagram or description.</p>
235		Speed Bump	<p>Definition of Speed Bump: an artificial ridge set Cross wise in to the surface of a road.</p> <p>This may be indicated in the diagram or description.</p>
<p>This next set of question relate to Horizontal and Vertical aspects of the road. In future projects these questions may be on the CRF. It is unlikely that this information will have been captured on the current CRF. If it has been mentioned in the police description or there is some local knowledge about the road where the collision occurred add it in these fields.</p>			
240		Horizontal looking East or North	Select the best-fit description if one is available.
242		Horizontal looking West or South	Select the best-fit description if one is available.
244		Vertical looking East Or North	Select the best-fit description if one is available.
246		Vertical looking West Or South	Select the best-fit description if one is available.
247		Police Detail	Lines 249 to 259 are the transfer of information Directly from the CRF. This information is only for police purposes and will not be transferred to NRSC.
<p>Vehicle Details. As noted before, Veh.1and Veh.2 were identified from the CDS and DCC diagrams. So note if the vehicle numbering needs to be changed enter detail under the appropriate vehicle number.</p>			
272		Number of vehicles	The number of vehicles that was indicated in

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1	2	3	4
		Details required.	Question 5 will be displayed here. This will also place “Veh.1” to “Veh.5” headings above fields that need to be entered if the information
274	38	Vehicle Details	Lines 274 to 292 are the transfer of information Directly from the CRF. This information is only for police purposes and will not be transferred to NRSC.
296		Owners Town/Village/Country	Just copy this part of information from the fields above. This information is of assistance to some forms of analyses
300		Owners Insurance	On the CRF it is just a question about Third party Insurance. In future CRF this question may be expanded.
304		Vehicle Make	The CRF may indicate this information. Transfer the information.
308		Year of Manufacture	Future CRFs may ask this question.
312		Colour	Future CRFs may ask this question.
314		Direction Travelling	These fields are auto filled from previous questions.
318		Relation to Centre of road	These fields are auto filled from previous questions.
322		Relation to Intersection	These fields are auto filled from previous questions.
326		Run off road	This is checking previous answers for conflict.
332	39	Vehicle Type	Select from the drop down that matches the CRF
336	40	Vehicle Maneuver	Select from the drop down that matches the CRF (note: check diagram for consistency.)
340	41	Loading	Select from the drop down that matches the CRF
342	42	Vehicle Defects	Select from the drop down that matches the CRF. Possible multiply entries.
354	43	Vehicle Damage	Select from the drop down that matches the CRF
376	44	Vehicle Ownership	Select from the drop down that matches the CRF
388		Number of driver details required.	The number of drivers that was indicated in question 6 will be displayed here. This will also place “Dri.1” to “Dri.5” headings above fields that need to be entered if the information is available.
390	45	Driver Details	Lines 390 to 408 are the transfer of information Directly from the CRF. This information is only for police purposes and will not be transferred to NRSC

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1	2	3	4
412		Vehicle driver in	Be careful to marry the driver to the correct vehicle if Vehicle was changed in line154.
414	46	Place of issue	Type in information from CRF
418	47	License Type	Select from the drop down that matches the CRF
422	48	Driver Sex	Select from the drop down that matches the CRF
426	49	Age	Type in information from CRF
430	50	Injury	Select from the drop down that matches the CRF. Note: No injury may be entered on the CRF, in this case select uninjured for the driver.
434	51	Driver Error	Select from the drop down that matches the CRF. Possible Multiple entries
440	52	Alcohol	Select from the drop down that matches the CRF
444	53	Seat belt / Helmet use	Select from the drop down that matches the CRF
459		Number of passenger details required.	The number of passengers that was indicated in question 7 will be displayed here. This will also place “Pass.1” to “Pass.5” headings above fields that need to be entered if the information is available.
466		Passenger Details	Lines 466 to 479 are the transfer of information Directly from the CRF. This information is only for police purposes and will not be transferred to NRSC
482	54	Vehicle Number	Select from the dropdown that matches the CRF. Be Careful if vehicle number was changed earlier in line 154
486	55	Sex	Select from the drop down that matches the CRF
490	56	Age	Type in information from CRF
494	57	Injury	Select from the drop down that matches the CRF.
498	58	Position	Select from the drop down that matches the CRF.
502	59	Action	Select from the drop down that matches the CRF.
506	60	Seat belt / Helmet in Use	Select from the drop down that matches the CRF.
510		Alcohol	This may be a question in future CRF. Select from the drop down that matches the CRF.
520		Number of pedestrian details required.	The number of pedestrians that was indicated in question 8 will be displayed here. Thiswillalsoplace“Pass.1”to“Pass.5”headings above fields that need to be entered if the information

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1	2	3	4
			is available.
529		Pedestrian Details	Lines 529 to 542 are the transfer of information Directly from the CRF. This information is only for police purposes and will not be transferred to NRSC
545		Direction pedestrian walking	Direction pedestrian is walking is auto filled by previous questions
547	61	Sex	Type in information from CRF
551	62	Age	Select from the drop down that matches the CRF.
555	63	Injury	Select from the drop down that matches the CRF.
559	64	Location	Select from the drop down that matches the CRF.
563	65	Action	Select from the drop down that matches the CRF.
567	66	Alcohol	Select from the drop down that matches the CRF.
All data from each CRF has been entered. Follow instructions on the screen to save files.			

4 Data Forwarding

DES gave instructions on how to prepare crash records in to an EXCEL file ready for mailing after each data entry session.

4.1 DELstoTD/NPS

TD/NPS will have provided instructions on sending data files from DELs.

The EXCEL File will have a file name that is the date and the DEL ID or DELID. The format of the file name would be yyyy mm dd DEL ID. This will make EXCEL files unique only if there is only one email from each DEL each day. So larger DELs, which may do more than one data entry session each day may need to add a further identifier on their file name.

TD/NPS's IT section will refine these steps for data transfer from DELs to the NPRCD.

- 1. Attach the Email File EXCEL** to an email
- 2. Attach** all the **scanned CDSs** that relate to the email. *(These are located in the folder "Scans this Session")*.
- 3. Cut** scans of CDSs from "Scans this Session" folder
- 4. Paste** scans of CDSs to "All Scans" Folder.*(Note because each scan is named with CIN it will be easy to match to crash record.)*
- 5. Email Subject line** use the File Name, similar to this example yyy mm dd DELID. E.g.
2016 05 17750175 01.0000
- 6. Send** the email
- 7. File sent files.** Once you have sent the email and file in your email folders.
- 8. Close.** This data entry session is complete and the DES Folder may be closed.

The data entry session is complete and data has been sent to TD/NPS

4.2 Sending Follow up Data

There will be occasions when extra information will become available and the original entry needs to be updated examples of these are:

- A casualty who was Serious at the time of the crash and admitted to hospital has past away within 30 days of the crash. This information needs to be updated on the record so as crash severity data is accurate.

-
- Hit & Run situations where the police now have the details of the vehicle or driver who had left the scene of the crash. Information is needed to update the crash record. (*Note do not send private information such as name address or license number.*)
 - Police may have found out details about a casualty, which were not earlier available, and these need to be added to the original crash record.

4.2.1 How to send this information

1. **Type** the information into an email.
2. **Subject Line** number of the original **CIN & New Data**
3. **Send** the email to the email supplied by **TD/NPS**

4.2.2 Update NPRCD

The updated information received from the DELs will need to be updated with in the NPRCD where the original data record identified by its CIN has been stored.

The procedure for this will be designed by TD/NPS IT section. The DCSS used by NRSC may be used for this purpose.

If a subset of data has already been supplied to NRSC, which contained a CIN that has now been updated, the new updated CIN will need to be forwarded to NRSC.

4.3 Sub Set Data TD/NPS to NRSC

The IT section of the TD/NPS will create a Sub Set of Road Crash Data to be sent to NRSC. This subset is the removal of personal information and information only related to police responsibility.

4.3.1 Batch EXCEL File Each 2 Months

It is proposed that this is done on a time line of each 2 months. That is the latest crash record in the batch occurred 2 months previous to this batch date. The earliest crash record would have occurred 4 months previous to this batch date.

The reasoning for this is that the crash records that were originally sent by the DELs will now have had time to have addition new information added. For example the change of status from Serious to Fatal, which happens within the first 30 days post crash. Updating of information relating to Hit & Run situations where vehicle and driver information is now available.

By having this 2-month lag before sending a batch of records will reduce operation sin transferring of information and updating databases.

4.3.2 Batch File Name

The file name will be “From–To dates” of the 2 month period covered in the batch of crash records. (Example 20160201 to 20160331)

4.3.3 CDS Scans forwarded to NRSC

A file containing all the scanned CDSs received from the DELs needs to be included with each 2-month batch of data. These scans are important in the final process of checking coding and may also help in future analysis. As they were given the CIN as their file names they are easily matched to the crash record.

4.3.4 CIN updates post 2 months of crash

Any updates that have been sent by DELs post two months of the crash will have not been in the last EXCEL batch file sent to NRSC. These individual emails will need to be forwarded to NRSC so as the NRDC may be updated and kept in line with the NPRCD.

5 Data Checking and Storage

Data checking and storage relates to the set of data received from TD/NPS and a final screen of that data before it is stored in the Nepal Road Crash Database (NRCD).

NPS staff have followed due diligence and provided data entered from the original CRFs and also supplied scanned copies of the CDS on those CRFs. As mentioned earlier it is not NPS responsibility to code the data, DES will have automatically coded most crash records as they were entered. DES will have also helped to avoid as much as possible any conflicting data from being entered.

Every 2 months TD/NPSIT section will send a batch file EXCEL to NRSC to add to the NRCD. The latest crash record will be 2 months ago and the earliest crash record will be 4 months ago. This lag will mean less individual updates will be received from TD/NPS.

There will still be some final coding steps and validating steps before the crash record is placed in the Nepal Road Crash Database.

5.1 Tools Required for Data Checking & Storage

1. Desk Top PC with the DCSS loaded.
2. Electronic copy of the NRCDSMM
3. Electronic copy of the NRCDSUM
4. Access to the Internet
5. External Hard Drive
6. Printer

5.2 Filing Emails

Each 2 months a Batch File will be received from TD/NPS, a file containing the related CDS scans and occasionally there will be update information for an all ready filed or waiting for review data record.

1. The batch file from TD/NPS is an EXCEL containing lines of crash records identified by their CIN.
2. Updates for previously sent crash records will have a CIN as their subject line.
3. Create a EXCEL workbook on the desktop and name it “**Unprocessed Crash Records**”
4. As each new batch of records is received from TD/NPS copy the crash records in to this EXCEL under any records that are already saved in the file.
5. **Create** a folder on the desk top called “**All Scans**”
6. Scans of each DCS with a file name the same as the CIN will be received with each batch of new crash records, file these in the folder “All Scans”.

7. The updates for existing CINs need to be placed in an email folder called “CINs to update”. This folder needs to be created by the data checking staff on their email system.

8. **Create** an EXCEL called “**NRC**D”. This is the main working database file where all checked and reviewed data records will be saved to. This will be the EXCEL file that is backed up on a daily basis as per instructions in section 7.

5.3 Management Reports

Long term work flow and management of resources will be required for the ongoing sustainability of the NRCDS.

For this purpose a management Excel work book has been developed as an aid to the management team.

5.4 Data Checking and Storage

The next few sections cover the steps to check each crash record and progress each record in to the data base or hold for edit and review.

5.4.1 Selecting data record

1. **Select & Cut** the earliest data record from the “**Unprocessed Crash Records**” EXCEL.
2. **Paste** this data record where indicated in the DCSS welcome page.

5.4.2 Checking for duplication

It is important to check that a data record has not already been saved to the NRC D. This is a simple procedure of checking the CIN number of the data record you have just pasted in to the checking page with the NRC D.

1. **Select & Copy** the **CIN** located under the heading “1_CIN” on the checking page.
2. **Open** the **NRC**D EXCEL
3. **Select “Edit”** on the menu bar at the top of screen towards the left of screen.
4. **Select “Find”** from the drop down menu.
5. **Paste** your **CIN** in to “**Find What:**” box.
6. **Click “Find next”** in lower right corner of the Find Popup Box.

There are two possible results, not duplicated or duplicated:

1. CIN Not Duplicated

- If the CIN is new, that is not a duplicated data record a popup box appears saying,
“Microsoft Excel cannot find the data you’re searching for.”
- **Click OK** and **Click Close** and return to the DCSS checking screen
- **Go to step3** on the checking page

2. CIN Duplicated

- **Select and Copy** the data record (entire row)
- **Return** to the Checking page and **paste** where indicated.
- **Go to step2** on the checking page

5.4.3 Checking duplication data record

If a duplication of CIN has been indicated and the original record has now been pasted into the checking page a comparison must be performed to see if this is duplication or it is (in the most unlikely case) a new data record with the same CIN.

1. The checking page returns a “0” value.

- The new data record being checked and the data record from the data base are identical.
- The operator needs only copy this data record in to **“Duplications for management review file”**.
- Proceed to the next data record for checking.

2. The checking page returns a value of 1 or more.

- This number indicates how many columns are different
- The operator will need to review each column that is different and make a decision as to if this is a new crash record.

It is a very unlikely situation that there would only be one or two columns that are different. If this is a new record with the same CIN there will be many different variables, it is only the first 14 questions on the CRF that creates the CIN. So in the effort to rule it out as duplication the operator needs to look at the numbers of those involved, vehicle, passengers, drivers and pedestrians. If this has not ruled out a duplication look at age of each involved.

A new data record with the same CIN will be easy to identify and the operator then needs to change the CIN to reflect that this is not a duplicate. Change the 16th digit in the CIN from “0” to “1”.

Now if it has been established it is a new record and the CIN has been changed so as it is unique continue to step 3 in the checking page.

5.4.4 Checking DCC to CDS

This is step 3 in the checking page.

Here the operator needs to retrieve the CDS from the All Scans folder and compare the DCC definition with the diagram.

The checking page in DCSS under step 3 has returned information that relates to coding the crash type and therefore the DCC.

After comparing the returned data the operator will be OK with there turned DCC or may see that there are conflicts and needs to recode the data record. This is where the operator needs a good understanding of the NRCDSMM, which will assist in the decision process.

The majority of crashes are between two vehicles, or a pedestrian and one vehicle or a single vehicle and object, these type data records will have in most cases coded without error. The complication may come where a multi event has occurred and it has been recorded as one crash, this is when the operator will need to refer to section 10 on this manual, which are definitions. This will guide the operator to correcting information and possibly spiting the crash into two or more events.

5.4.5 Location (Latitude and Longitude)

For the data record to be compatible with GIS or for any analysis of black spots the information in relation to location of the crash needs to be in the data record.

Step 4 in the DCSS checking page will return information from the data record about location. The operator needs to check the returned information with the web-map address and confirm that the correct latitude and longitude information has been recorded in the data record.

5.4.6 Error Messages from DES

Step 5 in the DCSS checking page will return information about any error messages, which were not solved when the data was entered from the CRF.

The operator will need to review these error sand make changes where necessary. If the error has no effect on the DCC and there is no supporting information on the scanned CDS, the error may be left as is.

If the error will have an effect on the DCC the data record needs to be filed for further review. This may mean extra information from NPS or advise from senior staff.

Note: The operator needs to add comments, actions or notes to the Management Excel.

5.4.7 One or more Events

If the data record has more than 2 vehicles involved or 2 vehicles and pedestrians the operator needs to determine if this is one crash event or more than one crash event.

Section 10 of this manual gives all the definitions that will help the operator to determine the number of events.

5.4.8 Saving to the NRCD

Once all the steps have been completed and any changes (if needed) have been made to the data record, the operator needs to follow the instructions in DCSS to save the data record to the NRCD.

5.5 Reviewing

During the checking stages some data records may require extra information or advise from more experienced operators. These records have been filed in to a separate excel until the issues are resolved. Comments from the operator will have been added to the management excel and as with all data records the comments will be referenced by the CIN.

5.5.1 Advice from experienced operators

Once the operator has talked about the file for review and establishes a solution to coding issues the CIN may be reloaded in to DCSS. Make the changes to the crash record as required to solve any issues, than save to the NRCD.

Note: The operator needs to add comments, actions or notes to the Management Excel.

5.5.2 Requesting extra information from NPS

On some occasions it may be that extra information is required from NPS. The operator sends an email to the originating DEL (Note: This number is located on the crash record as the computer number). This email clearly identifies the CIN and what information is needed.

- It is **important** not to requests form in or information as NPS may not have the resources to follow up on these requests. This step should only be taken if a severity of **Fatal** or **Serious Injury** cannot be coded.

-
- In the case of minor or damage crashes as long as they can be coded in to a DCC Group it is sufficient.

These decisions of how far operators go in coding if the DES and DCSS systems have not achieved coding will need to be set by Management. Also protocol for contacting DELs directly needs to be approved by TD/NPS.

5.6 Receiving and entering updated data

When data requests or update of fatality status information is received the crash record needs to be updated.

1. **Located** the CIN's crash record line NRCD or the Reviewing file.
2. **Load** the crash record into DCSS
3. **Make** the required changes and do a final check.
4. **Save** to NRCD

Note: The operator needs to add comments, actions or notes to the Management Excel.

6 Updating Information Lists with in DES

External stakeholders provide lists of police station sand roads. Over time these lists may change as new police stations are added or closed, the same applies for roads. TD/NPSIT section and NRSC will need to coordinate changes to DES overtime. The method to up date the screen is set out in the following.

6.1 Police List

Every 6 months (seesection7.4), or if other wise as informed by NPS, check with NPS for their latest Police Station List. See Appendix 7 for the headings in DES.

6.1.1 Instruction on adding new Police Station List

1. When the **new** list is received **copy** it in to EXCEL format if it is not already in that format.
2. **DES** has a **capacity** of **1200 police stations** in total so the EXCEL can only have 1200 lines.
3. Make sure the **columns** are in the **same order** as DES. *(See Appendix 7 for headings order.)*
4. **Sort** by the “Station No. ”Column *(Keeping Headings in place)* in ascending order.
5. **Select and Copy** this prepared new list *(only select the police stations, with headings. Maximum of 1200 police stations.)*
6. **Paste** in cell “A11” in the DES Sheet named “List of Police Stations” *(see tabs at bottom of work sheet.)*
7. **Check** that headings are the same on the new list to the headings on page.
8. **The new list is now loaded and will update the look up lists**

Note: These steps are important as the auto fill process in the DES will feed from this new information and it is column location and column order sensitive and will not work if the file is not in the correct order.

6.2 Roads List

Every 6 months (seesection7.4), or if otherwise as informed by DOR or DOLIDAR, check with these stakeholders for their latest Road Lists. *(See Appendix 8 for headings in DES.)*

6.2.1 Instruction on adding new Road List

1. When the **new** list is received **copy** it in to EXCEL format if it is not already in that format.
2. List from **DOR and DOLIDAR** are in **different** orders and have a different number of columns.
3. Make sure the **columns** are in the **same order** as DES. *(See Appendix 8 for headings.)* As DOR and DOLIDAR do not have a common road numbering system a “**Look up Value**” has to be generated in the far left column.
 - a. **Add the two lists**, making sure column gaps have been added to make sure the information is in the correct column from each stakeholder
 - b. **Sort** the data by “Distich Name” and “Road Name”
4. **Generate** the “Lookup Value”
 - a. Auto Fill the “LookupValue” column from 1 to last line of road information *(this is 2670 at present).*
5. There are a **maximum of 6000** lines for **road names**.
6. **Select and Copy** this prepared new list of roads *(with two lines of heads the headings)*
7. **Paste in A15** in the DES Sheet named “List of Roads”

Note: These steps are important as the auto fill process in the DES will feed from this new information and It is column location and column order sensitive and will not work if the file is not in the correct order.

6.3 Updating all DES sat DELs

If the look up lists for roads or police stations are updated they need to be updated at all DELs.

As a list of DELs has been created and a list of emails has been made, it will be a process of sending out a new DES EXCEL with instruction to replace the existing DES in the DES. This is a simple role out change process.

A search DEL operates independently with a stand-alone DES updating of any information is this simple process. When definitions, instruction or edits to the NRCDSMM are need edit could all be done in this way.

Thus all independent systems remain consistent.

7 Schedule of Functions

7.1 Daily

7.1.1 Management Excel

A Excel work book has been supplied to help keep track of the day today activities of the data checking processes and to provide information for ongoing management.

The workbook is self-explanatory and requests operators to make notes about activities, for example how many new records received, how many processed and how many waiting for review. Notes are also kept on any decisions made in relation to changes to a data record.

It is important that these records are maintained to help with the long term sustainability of the NRCD.

7.1.2 Backup Day's Files

1. **Select & Copy** the NRCD excel file
2. **Paste** in the external hard drive
3. **Rename File** “NRCD yyyy mm dd”

7.2 Weekly

7.2.1 Backup Week's Files

1. **Select ALL** Files & Folders in the DCSS Pack
2. **Copy ALL** Files & Folders from the DCSS Pack
3. **Open** “10 Weekly Backup” folder
4. **Paste ALL** Files & Folders from the DCSS Pack

This process replaces the files from the previous week. A message of “Replace File ”may appear, select “Replace”.

7.2.2 External Backup of Files

1. **Select ALL** Files & Folders in the DCSS Pack
2. **Copy ALL** Files & Folders from the DCSS Pack
3. **Open** External Hard Drive
4. **Paste ALL** Files & Folders from the DCSS Pack

7.3 Monthly

7.3.1 Monthly Report

1. **Open** Management excel
2. **Follow** screen instructions

3. Print Report

4. Forward Report

Instructions on who to supply Monthly Report to will be supplied by NRSC.

This report contains counts of progress of work and may be the basis for resource levels required for the checking and saving data procedures.

7.4 Per Six Months

7.4.1 Check Information Lists in DES

Coordinate with DOR and DOLIDAR and NPS if any supplied lists that are used in the DES and DCSS have to be updated. If there are changes to the information contained in these lists see Section 6.

When this process has been completed the DES and DCSS Pack need to be updated. Also the new DES file has to go to all DELs so they may update theirs see Section 6.3.

7.5 Annual Report of Data base Operation

NRSC or its agent MOPIT will need to employ the services of a data analyst to check the amount of data collected in the Nepal Road Crash Database and report on the following topics.

The scope and detail of this report is to be defined by NRSC or it's agent resourcing is the responsibility of NRSC or its agent.

7.5.1 Under reporting trends

Prepare reports of amount of data collected in the NRCD compared to NPRCD and the Total is Reports generated by NPS. Check totals with numbers reported by the Health Sector and WHO.

7.5.2 Annual Operation of Database

- Prepare a numbers of crash reports received from TD/NPS
- Total number of crash reports received.
- Total number of reports progressed to NRCD
 - Number saved to NRCD without changes from DES
 - Number saved to NRCD after reviewing
- Number still to be processed.
- Number still to be reviewed

7.5.3 Annual Operation Issues

- Report any issued raise by operators
- Report resource level and progress of processing
- Report communication issues

7.5.4 DCC Monitoring

- Report on DCC monitoring (over use of “Other” see Section 12.5.5)

8 Data Dissemination

This Section of the Manual contains brief information how to draw data from the data base, what information needs to be supplied with the data to the customer so that they understand the data.

As the database has been set up on an EXCEL platform, retrieval of data is a simple procedure. The User manual provides information on what is contained in the database. Appendix 5 contains this information. End users and road safety professionals may request information based on this list. Operators will simply copy the database and sort down to the required set of data that has been requested and supply an EXCEL sheet with the requested set of data.

It would further be recommended that definitions, possible variables and the CRF also be supplied to new users of the data.

There has been some misconception among some of the stakeholders that the NRCDS, once set up, can generate key performance indicators of interest for monitoring safety performance. It is emphasized here again that the data base is created just to store crash data. It has no features for analyzing safety performance indicators. Once the end users get data as requested, they would easily be able to analyse data according to their needs. It is not the duty of the database owners or manager to provide data analysis service to the users of the data.

NRSC may establish a separate Data Analysis Unit or Cell to provide such services to its customers.

NRCDS is not about the analysis of the data but to collect and store data to serve the varying needs of different road safety professionals responsible to manage road safety.

9 GIS

The need for this information is crucial in locating the crash on the road network and for compatibility with GIS overlays to show clusters of crashes on the road network.

The following recommendations are made to help solve this gap in the interim until further enhancement projects or electronic collection of data projects are introduced.

9.1 Latitude and Longitude

Latitude and Longitude information may be gained in the following ways.

- By the Police Officer at the crash site using a smart phone application to note the

coordinates of the crash.

- By the data entry officer using a desktop application to enter the coordinates.
- By the NRCDS officers using a desktop application to enter the coordinates.

If the police officer has not used a smart phone application at the crash site and noted the coordinates on the CRF the data entry officer or the NRCDS officer may use the following steps to identify the Latitude and Longitude for DES.

To find Latitude and Longitude details, use the Road Name & Location on the diagram on the Crash Form and look up the coordinates on -

www.latlong.net/convert-address-to-lat-long.html

It is recommended that all officers and data entry staff involved in the processing of Road Crash Data add this website to their desktop workspace:

How to get coordinates with the use of this site:

- The Crash Report Form will have the following information, name of road, crash was on and area, town, or intersecting road.
- Type in road name and town or area
- Move your mouse over the location that matches the information on the Crash Diagram that has been supplied by Police.
- Click mouse and the Latitude & Longitude is displayed top of screen.

Enter these coordinates into the Data Entry Screen line107. *(Note to 6 decimal places)*

9.2 Cluster maps

During consultations our team was informed that a lot of work has been done on mapping all roads in Nepal. By including attitude and longitude in the RCD it will allow for the creation of cluster maps and identifications of black spots.

9.3 Definition Crash Clusters

The phenomenon of crash clusters has been recognized form any years and there is considerable evidences how that the identification and treatment of such sites with low- cost engineering remedial measures can be extremely cost-effective.

Approaches to crash cluster reduction includes Single Site, Mass, Area, and Route Action plans. Of the four basic strategies, the potential for crash reduction using simple low-cost remedial measures at single hazard sites is particularly high. In terms of crash reduction and prevention, local authorities in the many countries have had consider able success with low-cost engineering safety improvements directed towards treating crash clusters at localised sites.

9.4 Definition Black Spot

Black spots are road locations that have a record of large numbers of crashes. There are often common problems at these sites, which can be treated with engineering methods. Examples of problem solving for intersection-related crashes:

- Conversion of un sign a lised cross intersections to roundabouts
- New or revised traffic signals
- Grade separation
- Staggered cross intersections
- Extension of median through intersections (turn prohibited)
- Provision of protected right turn facilities

Examples of problem solving for non-intersection-related crashes:

- Central median to divide the road
- Pedestrian facilities
- Shoulder sealing
- Removal and/ or shielding of road side hazards
- Road delineation
- Over taking lanes

10 Definitions

10.1 Road and Road Related Area

10.1.1 Road

Road is defined as: An area that is open to or used by the public and is developed for or has as one of its main uses, the driving or riding of motor vehicles.

Excluding

- Road shoulder which for a curbed road is the curb, and for a sealed road, is any unsealed part of the road and any sealed part of the road outside and edge line of the road.
- Other road related area, as defined below (10.1.2).
- Roads, which have been temporarily or permanently, closed by either a sign, gate or other fixed obstruction.

10.1.2 Road Related Area

Road related area includes the following:

- An area that divides a road, (*Medians trips, separators, traffic islands. embayment and other area used for parking in the centre of the road*)
- A footpath or nature strip adjacent to a road, (*with in the nature strip, embayment and other areas at the site of the road used for parking*)
- An area that is not a road and that is open to the public and designated for use by cyclists or animals, and (*bicycle paths and separated footpaths*)
- The road shoulders which for a curbed road is the curb, and for sealed road, is any unsealed part of the road and any sealed part of the road outside an edge line on the road

An d ex cludes:

- An area that is not a road and is open to the public for driving, riding or parking vehicles (*petrol stations, shopping centre car parks, etc.*)
- The road, as defined in 10.1.1

Exception: Fatal crashes occurring in car parks are included as in scope. This may be change at the direction of the NRSC after consultation with the NPS. This exception does not apply to any other verity types.

10.1.3 Special Types of Roads

Special types of roads and road related areas **excluded, unless gazette as a public road**, are:

- Drive in business enterprises (*petrol station and food outlets*)
- Government and private enterprise car parks (*shopping centres, show ground, race tracks and rail way stations*)
- Road and related areas on private property
- Wharves, jetties and boat ramps
- Camping grounds and caravan car parks
- River beaches, picnic spots (*But not those used every day as roads.*)

10.1.4 Standard Roads and Related Areas

Areas **included** are:

- Standard roads
- Bicycle paths adjacent to roads
- Areas dividing standard roads
- Foot paths and nature strips adjacent to standard roads

10.1.5 'Non Standard' Road & Road Related Areas

Areas **included** are:

- Tourist roads, forestry roads and fire trails through forests whether named or not
- Airport access roads, whether government or private
- Roads in hospitals, universities, whether government or private
- Roads (named or unnamed) through private farming to facilitate routine public access to neighbouring farms
- Roads within village settlements whether government or private land
- Certain riverbeds that are in every day use as roads

10.2 Vehicle

A Vehicle is defined as **including**:

- A motor vehicle or trailer
- A bicycle
- Tempo
- An animal drawn vehicle, and an animal that is being ridden or drawing a vehicle
- A combination of the above
- A motorized wheelchair that can travel at over 10km/hr (on level ground) But

excluding:

- Another kind of wheel chair
- A train
- A wheel edrecreational device or
- Wheeled toy
- Motorcycle

10.2.1 Motorcycle

A motorcycle **includes**:

- A two wheeled motor vehicle
- A two wheeled motor vehicle with a side car supported by a third wheel
- A motor vehicle with three or four wheels that is ridden the same way as a motor vehicle with two wheels

10.2.2 Bicycle

Any one or more wheeled device, built to be propelled by human power.

Including

- Rickshaw
- Push Cart
- Bicycle (any size with two wheels in tandem)
- Bicycle with side-car or trailer attached
- Bicycle with training wheels attached
- Adult tricycle (i.e. tricycle or manually operated on the carriage way)
- Motorized bicycle with an auxiliary motor capable of generating power output of 200 watts or less

Excluding

- Any of the above devices when towed by another vehicle
- Wheeled toy or any other wheeled recreation device
- Wheeled Recreational Device

10.2.3 Wheeled Recreational Device

A wheeled recreational device is not a vehicle. It is a device built to transport a person, propelled by human power or gravity and ordinarily used for recreation or play and:

Includes

- Rollerblades
- Roller-skates
- Skateboard
- Or similar wheeled device but

Excludes

- Golf buggy
- Pram/ stroller
- Trolley(such as shopping trolley or other kind of hand cart)
- Bicycle
- Wheelchair
- Wheeled toy
- Wheeled Toy

10.2.4 Wheeled Toy

A wheeled toy is not a vehicle. It is a device such as:

- A child pedal car
- Scooter (non powered)
- Tricycle
- Or similartoy

Note: Only applicable when being used by a child under 12.

10.2.5 Other Vehicle

Any vehicle, not previously defined including:

- Animal-drawn vehicle
- Ridden animal
- Wind-powered vehicle
- To wed device such as a cara van, trailerorwag on, which has become detached from a vehicle

10.3 Road User Classes

Definition-Road users are classified into two broad types:

- Occupant of a vehicle
- Pedestrian

10.3.1 Occupan to fa Vehicle

Any person who is in, on, boarding, entering, alighting or falling from a road vehicle at the time of the road crash, providing a portion of the person is in /on the vehicle.

Occupants of vehicles are classified into two categories:

- Driver/rider/controller
- Passenger

10.3.1.1 *Driver/Rider/Controller*

Driving, riding or controlling is any person occupying one of these positions of a vehicle. It includes the Driver/rider/controller of a vehicle of the following categories:

- Person occupying the driving/ridding/controlling position of a parked or stationary-in-transit vehicle including a child who releases the hand brake from the driving position
- Person boarding or entering a vehicle to occupy the driving /riding/ controlling position, providing apportion of the person is in/on the vehicle at that time of the crash e.g. person pushing vehicle by steering wheel person who, having been in control of a vehicle, falls from it or Is killed or injured in the course of alighting or dismounting from it.

Excluding

- Person pushing or pulling a vehicle
- Person repairing or inspecting a vehicle
- Driver/rider/controller of a wheeled toy or wheeled recreational device

10.3.1.2 *Passenger*

Any person, other than the driver/rider/controller who is in, on, boarding, entering, alighting or falling from a vehicle at the time of a road crash, provided apportion of the person is in/on the vehicle.

Including

- Person other than the driver, in a parked vehicle
- Person on a pedalcycle, wheeled toy or a wheeled recreational device (such as roller skates or skate board) who uses a moving vehicle as a means of propulsion

Excluding

- A person on a wheeled toy or a wheeled recreational device unless second inclusion applies
- Pedestrian caught by clothing and towed by a vehicle

10.3.2 **Pedestrian**

Any person who is not in, on, boarding, alighting or falling from a vehicle at the time of a road crash.

Including

- Person standing, walking, sitting, lying or working upon a road or road related area
- Person pushing, pulling or otherwise attending to a vehicle
- Person leading or herding animals
- Person wheeling or holding a pedal cycle
- Driver or passenger of a vehicle who has a lighted completely and safely from the vehicle and who then sustains injury in a crash involving a moving vehicle
- Person outside the road or road related area not in or up on or entering or a lighting from a road vehicle (e.g. person walking, standing, sitting, lying or working on private property, including the occupant of a house)
- Person on a wheeled toy or wheeled recreational device or in a pram
- Person occupying on- motorised wheel chair
- Person pushing or holding a wheel barrow or hand barrow

Excluding

- Person boarding, entering, alighting or falling from a moving vehicle

10.4 Object

Definition-anything with which a vehicle collides other than another vehicle, pedestrian or animal.

Including

- Fixed object attached to the terrain, including tree, boulder, utility pole, traffic signal, parking meter, guard rail, curb, embankment, bridge abutment, fence, building, railway gate, overhead bridge or similar object
- Other object, such as fallen tree, stationary land slide material, load which falls from a moving vehicle, unattended wheeled toy or small wheeled vehicle, off road and road related areas, potholes or road humps

Excluding

- Moving object set in motion by natural disaster or other environmental factor e.g. moving avalanche material, flood water or falling tree.

10.5 Road Crash

Any apparently unpremeditated event reported to the Police or other relevant authority and resulting in death, injury or property damage of greater than NPR 25000 excluding vehicles or where at least one vehicle is towed that is attributable to the movement of a vehicle on a road.

(Note that the definition of a property damage only crash as damage over NPR 25000 excluding vehicles or at least one vehicle to wed a way, is recommended and may be changed by NRSC after negotiation with Nepal Police Services.)

Including

- A crash in which a vehicle on a road or road related area runs out of control and has a crash outside the road or road related area (e.g. a vehicle drives off the road into water and occupants are injured without a stabilised situation arising)
- A crash in which a pedal cyclist injures him/herself and/or pedestrian, provided the pedal cycle is moving on the road or road related area
- A crash involving a person boarding or alighting from a bus or other vehicle operating on the road or road related area. Vehicle can be stationary-in-transit or moving
- A crash involving the driverless vehicle (excluding an un-ridden animal) if attributable to vehicle movement (e.g. to wed device such as car a van or horse float accidentally detaches from a vehicle, a driverless vehicle rolls down a hill and collides with a pedestrian)
- A crash involving the load or part of the vehicle falling from or moving within a moving vehicle or from any device attached to a moving vehicle

-
- Explosion/ fire within vehicle
 - Poison from carbon monoxide or other chemicals from vehicle

Excluding

- A crash in an area outside the road or road related area unless first inclusion above applies
- A crash where no moving vehicle is involved (e.g. a pedestrian injures him/her self on a parked vehicle, a pedestrian collides with another pedestrian or object)
- Crash to a person not directly involved in the road crash (e.g. a pedestrian suffers shock after witnessing a crash)
- Crash after a stabilized situation
- A crash involving deliberate intent
- A crash involving legal intervention
- A crash not attributable to vehicle movement
- A crash occurring on a road or length of road temporarily closed to the public (e.g. on account of adverse weather conditions)

10.5.1 Road Crash Exclusions

Certain death, injury or property damage producing events involving moving vehicles are excluded from classification as road crashes. These are:

10.5.1.1 Crash Occurring Outside Road or Road Related Area

Some crashes that take place entirely outside the road or road related area are excluded from national statistics. However, details of these crashes would not be discarded as they may be of special interest to some authority or agency. Their DCC would be 000.

Including

- Crash in a government or private enterprise car park including parking area outside the road or road related area: such as regional shopping centres
- Some river beaches, picnic spot or recreational areas
- Crash in a petrol station
- Crash in a drive in-food outlet
- Crashes on wharves, jetties and boat ramps
- Crashes in a railway yard
- Crash on private property including easements
- Crash on a road or length of road temporarily closed to the public

- Start outside road or road related area (e.g. garage), cross road or road related area, go outside road or road related area then crashes in to object or pedestrian without being damaged or causing damage in a road or road related area

Excluding

- Crash in which a vehicle on a road runs out of control and has a crash outside the road or road related area.

10.5.1.2 Crash after Stabilised Situation

As tabilised situation marks the end of an event; that is, although other events may follow because of subsequent actions closely related to the first event, nothing further will occur in so far as the event itself is concerned. In a road crash in which a stabilized situation can be identified, subsequent death, injury or property damage producing events should not be considered

part of the original crash and separate crash reports may need to be created.

Examples

In a crash, live electric wires fall on a vehicle, but there is no injury from this event because the occupants remain in the vehicle. This is stabilized situation. Any subsequent death or injury attribute able to the electric current, resulting from attempts to leave the vehicle or rescue, is **not** part of the original road crash.

Occupant sofa vehicle are carried or thrown in to water, but there is no injury from this event and the occupants reacha temporary position of safety. This is a stabilized situation. Any subsequent death or injury attribute able to submersion, from attempts to reach shore, or attempts to rescue, is **not** part of the original road crash.

Ina road crash, objects are loosened which remain in place until all occupants are removed from the hazard of the object that fall or roll. This is stabilized situation. Any subsequent death, injury or property damage attribute able to the fall or roll of the loosened objects, is **not** part of the original road crash.

A vehicle runs out of control and overturns on the road or road related area. The occupants are freed from the vehicle. This is a stabilized situation. Any subsequent death, Injury or property damage resulting from another vehicle colliding with the disabled vehicle or with persons at the crash site, rescue, is **not** part of the original road crash.

10.5.1.3 *Crash Involving Deliberate Intent*

Sometimes, events involving vehicles occur because some person or persons intended that they should occur. Such events are excluded from classification as road crashes.

Examples

- A driver of vehicle suicides, or self-inflicts injury and this intent is verified.
- A person, having announced intent in some manner, causes death, injury or property damage by driving a vehicle against persons or other vehicles with homicidal, injury or damage producing intent.

If in undertaking such intended acts, other death, injury or property damage occurs that goes beyond the original intents, these events are accidental and meet the specifications of a road crash, unless the contrary can be established.

10.5.1.4 *Crash Involving Legal Intervention*

For statistical purposes, injury or property damage producing events caused by legal intervention (usually apprehension or attempt to apprehend) through use of a vehicle are excluded from classification as road crashes in so far as the law-enforcing agent and the law-violator relationship is concerned.

Examples of exclusions

- A road block is setup to stop a suspected law breaker and he/she crashes in to it, either intentionally.
- A police car cuts in front of a car to force the vehicle to the curb or the shoulder and, as a result, the two vehicles collide.
- A deliberate act by person being chased e.g. the vehicle being chased reverses in to police car; vehicle being chased slams on the brakes so police car hits the back of it.

Note:

It is not intended that law officers or violators be placed outside the restraints made on the rest of the population. Events other than those of the type specified in the three examples above should be included as road crashes provided they satisfy the necessary criterion.

If, in the examples above, death, injury or property damage occurs that goes beyond the original event, these events are accidental and meet the specifications of a road crash.

Examples of Inclusions

1. A police car cuts in front of a car to force the vehicle to the curb or shoulder and, as a result the other vehicle overturns without colliding with the police vehicle.
2. The vehicle being chased collides with the police vehicle e.g. vehicle being chased takes avoiding action and accidentally hits police car.
3. Any vehicles involved in a police chase, crashes with other vehicles.
4. Scenario 2 above, but the vehicle careers in to a pole, embankment, parked car or oncoming traffic.

10.5.1.5 *Crashed Not Attribute able to Vehicle Movement*

Some events involving moving vehicles are excluded from classification as road crashes because vehicle movement on a road is not deemed to be the primary factor contributing to death, injury or property damage.

Examples of Exclusions

- A vehicle occupant suffered a heart attack, stroke or other physical ailment, not associated with any prior crash trauma.
- An insect or animal bit a vehicle occupant.
- A loaded firearm being carried in a moving vehicle accidentally discharges.

Where such a death or injury caused a road crash, then that crash would be included (if it is otherwise in scope) but the original death or injury would not be included.

If a crash was caused by natural disaster rather than vehicle movement but could potentially have been prevented by road safety counter measures (such as engineering or enforcement) it is included. If a crash due to an unpredictable natural disaster could not have been prevented or influenced it is excluded.

Examples of Exclusions

- A vehicle is struck by lightning causing death or injury. No counter measure could prevent this occurrence.

Examples of Inclusions

- A tree or boulder falls up on a moving vehicle, killing or injuring the occupants. This crash is included, as it could potentially have been prevented by adequate maintenance of areas adjoining roads, (e.g. trimming of overhanging branches).
- A vehicle travelling on a cause way is washed away during a storm/ flood. This crash is included, as flood mitigation, bridge design or temporary road closure signs could potentially have prevented it.

Crashes which occur when a vehicle is Stationary-in-Transit are included if otherwise in scope (see 10.6 for definitions).

10.6 Vehicle Motion

This refers to what the vehicle was doing immediately prior to the crash.

10.6.1 Vehicle 'In Transit'

A vehicle, which is moving on a road or a road, related area.

Including

- Road vehicle being pushed

Excluding

- Disabled vehicle or vehicle involved in an earlier crash

10.6.2 Vehicle 'Stationary-In-Transit'

A vehicle is stationary-in-transit when it is temporarily stopped and intends to move on, the driver or rider is in the driving or riding position and, in the case of motor vehicles, the engine is running. For example, stopped to comply with the direction of a traffic-control (e.g. vehicle waiting at traffic light), traffic backup, temporarily stopped to pickup or set down passengers or goods (buses, taxis, Tempos) or to avoid conflict with an other vehicle prior to maneuvering (e.g. doing au-turn, reverse park etc.).

Note: The 'in transit' or 'stationary-in-transit' status of a vehicle is the criterion for distinguishing between parked and non-parked vehicles.

10.6.3 Parked Vehicle

For statistical purposes, any vehicle not 'intransit' or 'stationary-in-transit' at the time of a road crash is considered to be parked.

Including

- Vehicle parked in designated parking area
- Illegally parked vehicle
- A abandoned or disabled vehicle or vehicle involved in an earlier crash

-
- Unoccupied or unattended pedal cycle

Excluding

- Vehicle temporarily stationary (see stationary-in-transit-10.6.2)

10.7 Crash Location

Definition-The location of a crash is classified as one of the following:

- On road
- On road related area
- Off road

10.7.1 On Road

If the initial event is established as having occurred within the boundaries of the road, the crash location shall be classified as on road, even though all or part of the vehicle may come to rest off the road.

Examples

Two vehicles collide on the road then one of the vehicles leaves the road and collides with a pedestrian walking on the foot path. The crash location is classified as on road.

If the initial event involves a vehicle partly on the road and partly off, e.g. passenger side tyres are on the shoulder and driver side tyres are on the road, the crash location is classified as on road.

10.7.2 On Road Related Area

The incident is classified as road related area if the initial event is established as having occurred on the road related area as defined in 10.1.2.

Example

A vehicle loses control and collides with a light pole. Crash is classified as occurring on a road related area.

10.7.3 Off Road

If the initial event is established as having occurred outside the boundaries of the road or road related area, the crash location shall be classified as off road, even though all or part of the vehicle may come to rest on the road.

Including

- Petrol stations
- Drive through food outlet
- Car parks

10.8 Crash Type

Definition- A road crash consists of a series of events. For classification purposes one of these events must be selected before further more detailed classification can be made. The initial event forms the basis for classifying crash type, of which there are two broad categories:

- Collision crash
- Non-collision crash

These definitions for the purposes of identifying the nature of the crash may differ from the definitions in the DCC Coding.

10.8.1 Collision

Definition- a road crash in which the initial event occurs on any road related area and involves a vehicle, its load, attachments or parts colliding with another vehicle, pedestrian, object, un-ridden animal, etc.

Examples

- Two vehicles collide on a road then one or both vehicles collides with pedestrians
- A vehicle collides with a pedestrian on a road, and then the vehicle collides with a power pole
- A vehicle collides with a traffic signal, and then the vehicle collides another vehicle
- A vehicle collides with an un-ridden animal on a road, and then the vehicle collides with another vehicle.

10.8.2 Non-collision

Definition- a road crash in which the initial event occurs on any road related area but in which death, injury, or property damage is attributable to the movement of a vehicle on a road.

Examples

A vehicle goes out of control, running off the road, overturns and sub-squinty return to the road, colliding with another vehicle; classify the crash as non-collision

A pedal cyclist loses control, falls from his cycle and is struck by another vehicle; classify the crash as non-collision.

All non-collision crashes are classified as one of the following:

- Overturning
- Fall
- Other non-collision crash

10.8.2.1 Overturning

Definition- A road crash is classified as non-collision (overturning) if the initial event involves a vehicle overturning. Overturning includes events where the road vehicle at least rolls onto its side.

Including

A road crash in which occupants are killed or injured falling from or within a vehicle in the course of overturning

A road crash involving a motor cycle or pedal cycle which overturns, falls or drops

10.8.2.2 Fall

Definition- A road crash is classified as non-collision (fall) if the initial event involves a driver/ rider/ controller or passenger falling in or from a moving vehicle.

Including

The driver/ rider/ controller or passenger falling in or from a moving vehicle, which is not overturning

A person on a pedal cycle or small wheeled vehicle such as roller skates or skate board who uses a moving vehicle as a means of propulsion and is subsequently killed or injured falling from the vehicle. Note: Persons being propelled by a vehicle are classified as passengers of that vehicle.

Excluding

A road crash in which occupants fall in or from a vehicle in the process of a vehicle overturning

10.8.2.3 *Other Non-collision Crash*

Definition-A road crash is classified, as other non-collision crash, if the initial event is neither a collision, overturning nor fall, but death, injury or property damage is attributable to the movement of a vehicle on a road.

Including

Bridge collapsing under the weight of a moving vehicle

Occupant injured by moving or falling portion of vehicle in which occupant is travelling (e.g. load shifting)

Explosion or fire within vehicle

Poison from carbon monoxide in vehicle

Excluding

Road crash in which the **initial event** involves collision, overturning or fall

- *Fight between occupants of a vehicle
- *Discharge of firearm in vehicle
- *Death, injury or property damage from burning cigarette, beesting etc.
- *Any other death, injury or property damage-producing event not attributable to the movement of a road vehicle on a road

Note: Although exclusions marked* may be **factors contributing** to a road crash (e.g. the driver of a vehicle receives a beesting, loses control of the vehicle and subsequently collides with another vehicle) they are not **classified as events** in themselves.

10.9 Casualty

10.9.1 Casualty Crash

A road traffic crash where there was at least one injured person or a fatality. Does not include property damage only crashes.

10.9.2 Casualty Severity

A measure of the seriousness of the road traffic crash derived from the most severe casualty as a result of a crash.

10.9.2.1 *Fatal*

A fatality is recorded when a person dies within 30 days as a result of injuries sustained in a road crash.

10.9.2.2 *Serious Injury*

A person transported to hospital as a result of a road traffic crash and who does not die from injuries sustained in the crash within 30 days of the crash.

10.9.2.3 *Minor Injury*

Other injured, requiring medical treatment (i.e. treatment administered by a medical officer such as doctor, nurse, paramedic, ambulance person) but not hospitalised as a result of the road traffic crash.

10.9.2.4 *Uninjured*

Requiring no medical treatment

Excluding

- Person who dies within 30 days of the crash where factor so that than injuries sustained in the crash are deemed to have been primary in contributing to death (e.g. driver of a road vehicle who dies from a disease condition such as cerebralha emorrhage, heart attack or diabetic coma)
- Person not directly involved in a road crash who requires treatment (e.g. pedestrian who suffers shock after witnessing crash)
- Pedestrian who injures him/ herself on a parked vehicle
- Person killed or injured after a stabilized situation has arisen
- Person killed or injured where deliberate intent is clearly established (driver who suicides, person killed as a result of homicidal producing intent)

-
- Person killed or injured where vehicle movement is not deemed to be primary factor contributing to the death or injury-producing events

Including

- Fetal death if the baby is greater than 20 weeks gestation or weights greater than 500g. (Note that in this case if the mother is the controller the baby is also considered a controller.)

10.9.3 Property Damage Only Crash

A property damage only crash is a crash where no person was killed or injured and,

- i. At least one vehicle is towed away or
- ii. NPR 25,000 or more damage to property other than vehicles or;
- iii. NPR 25,000 or more damage to vehicle and/or other property

10.10 Road Features

10.10.1 Intersection

Definition- Technically the area bounded by the projections of the two sets of property boundaries of the roads is the intersection. This is readily discernible in urban areas but in rural areas the boundaries of the roads may be more appropriate, particularly if the road reserves are very wide.

The use of 20 meter distance to record a crash as an 'intersection crash' allows a deliberate degree of fuzziness. This is acceptable, provided the sketch shows the movements of the vehicles in relation to the boundaries of the carriage ways and it can be seen whether the incident was at, close to, or away from an intersection.

Including

- All intersections, junctions, interchange set of two or more roads
- All areas formed by the installation of traffic islands or roundabouts at intersections
- Offset intersections where the 10-metre distance from each meets or overlaps are treated as a single intersection (making a total of 20 meters maximum).

Excluding

- Points where drive ways meet roads
- Railway lines

Note: The drive ways might be from houses, hotels, schools, hospitals, petrol stations, shopping centers, camping ground set.

10.10.2 Divided Road

Definition-when a road has two or more parts, divided by a median strip or separator .Each direction of travel may one have or more lanes.

10.10.3 Lane

Definition- a lane is a portion of a road on which vehicles move in only one direction and may be separated by the line markings.

10.10.4 LATM Device

Definition- Local Area Traffic Management Devices such as speed humps, chicane, raised pavements, etc are feature designed to reduce the flow and speed of traffic through suburban areas.

10.10.5 Link

Definition - Those portions of road between points where a road meets another road, driveway, railway crossing, Region boundary, etc. .

10.10.6 Median Strip

Definition-The physical separate or that divides roads, it can consist of any material (e.g. traffic island, grass) but not painted lines.

11 Crash Types

11.1 Introduction

The system of classifying crashes in to the sub divisions is referred to in this guide line as the Descriptive Crash Codes (DCC). A crash-type is the classification used to describe a crash by the techniques used in a 'collision diagram', which is a tool that has been used for a long time by traffic engineers.

The crash type is based on the traffic movements leading up to the conflict situation, which results in the crash. Why and how the participant's impact is not of significance and the relative blame of the participants plays no part in the principle of crash-types. With regard to movements, driver or pedestrian intent as well as actual movement can be used in determining the crash type (for example the car was stationary waiting to turn right, when it was hit from behind.) The codes presented in this section have been adapted from those used in other countries and applied to the Nepal context.

11.2 Crash Events

11.2.1 Multiple Event Crash

A road crash may involve a single events or a series of events that constitute the whole incident.

- An example of single events is when a vehicle reverses in to the front of a parked vehicle and no further vehicle movement or action follows.
- An example of a crash which has two events is when a vehicle waiting to turn right is hit in the rear (event 1) and is pushed in to the opposing traffic stream and hit by a vehicle from the opposite direction (event 2).

It is important from both an analysis view point and a costing view point to recognize the multiple events in a crash and record them.

Some care should be exercised in deciding whether a crash is a multiple event crash or two separate crashes. If some distinct time has passed between the first event and the second event, they should be considered as two crashes.

- For example, two vehicles had a rear collision, then minutes later another vehicle runs in to the rear of the rear most crashed vehicle; this would be two separate crashes. Generally the events would be reported on two crash reports but if they appeared on

one report, they should be treated as two crashes with a difference in the time of occurrence.

Note. Separate crashes are to be created when a tabled situation has been identified for those subsequent events that occur and result in further injury or damage.

11.2.2 Independent Impacts with in a Crash

In some crashes, what might be viewed as a second crash is caused by the vehicle (s) in the first event without that vehicle (s) impacting the vehicle (s) in the second event? The two events are termed '**independent impacts**'.

- For example, Vehicles Can had just moved off after the traffic signal went green.
Vehicle A came through the red light (brakes failed).
 - As Vehicle A passed Vehicle B, it hit the side of Vehicle B.
 - Vehicle A then collided with rear left of Vehicle C spinning it to 180 degrees.
 - Vehicle A mounted embankment and rolled back down the slope and came to rest.
 - A mounted the embankment and rolled back down the slope and came to rest.
 - Vehicle E had seen Vehicle A out of control and swerved to miss it and collided with Vehicle D in the on the bound lane.

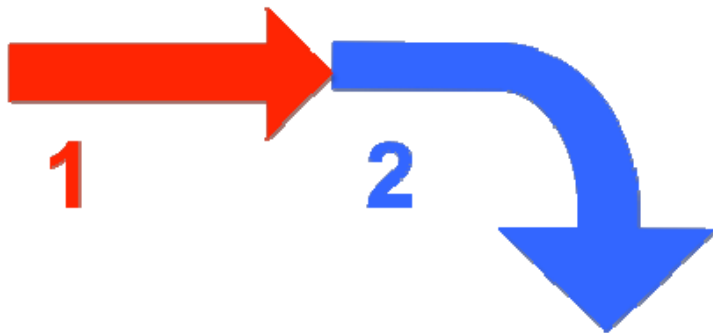
Treat all such events as two separate crashes. First crash in the example involves vehicles A, B, and C; Second crash involves vehicles D and E.

11.2.3 Convention of Vehicle 1 & Vehicle 2

The general convention in the DCC diagrams is that an arrow represents the vehicle at fault. This may not always be the case.

As a convention the vehicle that is “in the wrong” would be coded as Vehicle 1 on the Crash Report. The logic for this is that the coding will follow from this. The easiest example to demonstrate is a rear crash where the front vehicle is turning left, in most cases the vehicle that collides with the rear of the vehicle is in the wrong (following too close or is not observing what the vehicle in front is doing), so Vehicle 1’s manoeuvre would be, “8 Go Ahead” and Vehicle 2 manoeuvre would be, “2 Left Turn”. Even though this may be the convention it may not always be followed and careful use of variables in coding is advised.

A typical rear end type crash is represented in the following diagram. Note vehicle1 is red, in the wrong and following too closely.



Thru-Right 131

Figure11.1: An Example of DCC Template with Vehicle Convention

Figure 11. 1 is the example template for DCC 131 –Rear End Through–Right Turn crash. The full description of the crash is, “vehicles approaching from same direction, one travelling behind the other, one is going straight ahead and rear ends the vehicle in front turning right”. There are 71 of these templates. Appendix 6 is the full set of templates.

The emphasis to follow this convention will beat the time of data entry. The data entry officer will make a decision on which vehicle is vehicle 1 and which is vehicle 2 to best fit the DCC diagrams. Police will be informed of this convention on the CRF Guide for the Current Crash Form but it will be up to the data entry officer to check.

12 Descriptive Crash Code Template

12.1 Introduction

Collision type is important in the correct coding of the crash Type. A very important distinction here is that collision type is not the DCC, Descriptive Crash Code. There is a strong correlation but there are other factors that may determine the final DCC. The number of vehicles, passengers or pedestrians involved in the crash, also objects, location and maneuvers defines the DCC.

The Nepal DCCs are developed from information that may be gained from the CRF used by the NPS. The coding numbering system is not continuous; this has been developed to allow additional codes in the future, as the CRF is developed in the future to meet the changing needs of the users of the Nepal Road Crash Database.

12.2 DCC three digit code

A three-digit number defines the DCC.

- The first **digit** represents the **DCC groups**. This is a high level of clustering of crashes with broad similarity of characteristics.
- The **second digit** represents the **Sub-groups**. These Sub-groups may have the same Group characteristic but represent a further clustering of crashes into characteristics that make them different within the Group cluster.
- The **third digit** represents the final **DCC**. This final level further clusters the crashes into those with similar characteristics. This final level gives a cluster of crashes with very well defined set of characteristics. It's this final level of coding that gives the most information to assist the road safety analyst to look at ways to reduce or remove the set types of crashes from the road network.

12.3 DCC Group

The DCC Group is divided into four groups ,Multi Vehicle Crashes ,Single Vehicle Crashes, Hit Pedestrian Crashes and Passenger Crashes.

12.3.1 100 – Multi Vehicle Crashes

Included

- Crashes that involve 2 or more vehicles
- Crashes that involve 2 or more vehicles and as a result of that collision pedestrian is injured.
 - An example would be If two vehicles had ahead on collision and one of the vehicles then collided with a pedestrian causing injury.

The crash of the vehicles is what needs to be treated by the road safety analyst ;the pedestrian injury is an unfortunate result of that crash.

Excluded

- A crash involving multi vehicles but only one is being driven and the others are parked (See Section 10.6.3).
- Crashes that involve the injury of pedestrians as the first event in the crash(See Section 11.2.1).
 - An example of this is when a vehicle hits a pedestrian, than a second vehicle hits the first vehicle.

This crash has two events and the road safety analyst will need to treat both events.

- Crashes that involve passengers boarding, alighting or falling from vehicles

12.3.2 200 – Single Vehicle Crashes

Included

- Crashes that involve 1 vehicle
- Crashes that involve one vehicle and other parked vehicles (See Section 10.6.3).

Excluded

- Crashes involving the injury of pedestrians
- Crashes that involve passengers boarding, alighting or falling from vehicles.

12.3.3 300 – Hit Pedestrian Crashes

Included

- Crashes that involve 1 vehicle and a pedestrian
- Crashes that involve more than one vehicle but the injury of the pedestrian was the first event in the crash.
 - An example of this is where a vehicle applied the breaks to stop from hitting a pedestrian but collides with the pedestrian ,than a second vehicle collides with the vehicle that hit the pedestrian.

This example would be coded as two separate events or crashes .The first is Hit Pedestrian the second is a Multi Vehicle, Rear End .This is because both types of crashes require treatment to prevent.

Excluded

- Crashes involving more than one vehicle in motion (See Section 10.6).
- Crashes that may involve a pedestrian but the injury was the result of a previous event within the crash.
 - An example of this is where a vehicle has stopped for a pedestrian crossing the road ,than that vehicle is rear ended by a second vehicle and pushes the first vehicle towards the pedestrian causing injury.

This example is a Rear-End Crash and coded thus because that is the crash that must be treated .The first part of the crash was the stopping for a pedestrian and the vehicle did so successfully and thus there is no need to treat this event within the crash.

- Crashes that involve passengers boarding, alighting or falling from vehicles.

12.3.4 400 – Passenger Crashes

Included

- Crashes that involve passengers boarding, alighting or falling from vehicles.

Excluded

- Crashes that only involve vehicles and no passenger injury
- Crashes that involve pedestrians injuries
- Crashes that involve passenger injury other than when the passenger was boarding, alighting or falling off.
 - For example a crash involving a bus will have multiple passenger injuries. The practice of sitting on top or hanging on to the outside of the vehicle results in many injuries in bus crashes.

These type crashes are included in either Group 100 or 200 as it is not the passenger action that causes injuries; it is the bus collision that causes injuries.

12.4 DCC Sub-groups

Set under the four DCC Groups area total of 10 Sub- groups. Five are under 100, Multi Vehicle Crashes and the other five are under 200, Single Vehicle Crashes. The other two Groups of 300, Hit Pedestrian and 400, Passenger Crashes do not have Sub-groups and are further classified down to the DCC individual level.

12.4.1 100 – Multi Vehicle Crashes

110 – Head On

- Two vehicles or more
- Vehicles from opposing or opposite directions
- Collision is predominantly front of each vehicle, but it may be side damage only as vehicles take avoidance action or because of the types of vehicle maneuver
- No pedestrians
- No boarding, alighting or falling passenger activity
- Excludes a crash that involves a vehicle overtaking

130 – Rear End

- Two vehicles or more
- Vehicles from same direction
- Vehicle are following each other
- One collides with rear section of vehicle in front
- No pedestrians
- No boarding, alighting or falling passenger activity
- Excludes a crash that involves a vehicle overtaking

150 –Right Angle

- Two vehicles or more
- Vehicles from adjacent approaches at an intersection
- Collision is predominantly front side quarters or side as vehicles are “T-Boned” in the collision
- No pedestrians
- No boarding, alighting or falling passenger activity

170 – Side Swipe

- Two vehicles or more
- Vehicles from same direction
- Vehicle travelling side by side
- Collision is predominantly side of each vehicle
- No pedestrians
- No boarding, alighting or falling passenger activity

190 – Overtake

- Two vehicles or more
- At least one vehicle performing an overtaking maneuver
- No pedestrians
- No boarding, alighting or falling passenger activity

12.4.2 200 – Single Vehicle Crash

210 – Overturn

- One vehicle
- Vehicle may be going in any direction
- Damage is predominantly side and roof
- No pedestrians
- No boarding, alighting or falling passenger activity

Included

- It is important to note that this code is used for a vehicle that has over turned on the road because of some contributing factor to cause loss of control. The vehicle may come to rest on or off the road.

Excluded

- Vehicles that overturn after they leave the road, the contributing factors on the road did not cause the over turning, they caused a loss of control that lead to the vehicle going of the road.

230 – Hit Object In Road

- One vehicle
- Vehicle may be going in any direction
- Vehicle hits an object on the road
- Damage may be any where
- No pedestrians
- No boarding, alighting or falling passenger activity

250 – Hit Object Off Road

- One vehicle
- Vehicle may be going in any direction
- Damage may be anywhere
- Vehicle hits an object off the road
- No pedestrians
- No boarding, alighting or falling passenger activity

270 – Hit Parked Vehicle

- One vehicle in motion
- Other vehicle or vehicles which are parked
- Vehicle may be going in any direction
- Damage may be anywhere
- No pedestrians
- No boarding, alighting or falling passenger activity

290 – Hit Animal

- One vehicle
- Vehicle may be going in any direction
- Damage may be anywhere
- Vehicle hits an animal
- May occur on or off the road
- No pedestrians
- No boarding, alighting or falling passenger activity

12.4.3 300 – Hit Pedestrian Crash

- One vehicle
- Vehicle may be going in any direction
- Damage may be anywhere
- One or more pedestrians are injured
- No boarding, alighting or falling passenger activity

12.4.4 400 – Passenger Crash

- One or more vehicles
- A passenger must be boarding, alighting or falling from a vehicle
- Vehicle may be going in any direction
- No Pedestrians

12.5 Descriptive Crash Code

There is a total 71 individual DCC to define crash types that have the same characteristics.

Appendix 6 has a full set of Template diagrams of DCC.

12.5.1 100 – Multi Vehicle Crashes

- 110 – Head On

- 110 – Head On Through-Through

- Vehicles approaching from opposing directions, both are going straight ahead resulting in a head on. (A sides wipe from opposing directions is included in this DCC.)

- 111 – Head On Right Turn -Through

- Vehicles approaching from opposing directions and one is turning right the other is going straight ahead resulting in ahead on.

- 112 –Head On Left Turn-Through

- Vehicles approaching from opposing directions and one is turning left the other is going straight ahead resulting in a head on.

- 113 – Head On Right Turn – Right Turn

- Vehicles approaching from opposing directions are both turning right resulting in ahead on.

- 114 – Head On Right Turn –Left Turn

- Vehicles approaching from opposing directions, one is turning right the other is turning left resulting in ahead on.

- 115 – Head On Left Turn–Left Turn

- Vehicles approaching from opposing directions and are both turning left resulting in ahead on.

○116 – Head On U Turn -Through

- Vehicles approaching from opposing directions, one is doing a U Turn the other is going straight ahead resulting in ahead on.

○119 – Other Head On

- Vehicles approaching from opposing directions and result in a collision.

• **130 – Rear End**

○130 – Rear End Through-Through

- Vehicles approaching from same direction, one travelling behind the other, both are going straight ahead resulting in area rend crash.

○131 – Rear End Through– Right Turn

- Vehicles approaching from same direction, one travelling behind the other, one is going straight ahead and re arends the vehicle in front turning right.

○132 – Rear End Through–Left Turn

- Vehicles approaching from same direction, one travelling behind the other, one is going straight ahead and re arends the vehicle in front turning left.

○136 – Rear End U Turn-Through

- Vehicles approaching from same direction, one travelling behind the other, one is going straight ahead and has a collision with a vehicle in front doing a U Turn.

○139 – Other Rear End

- Vehicles approaching from same direction, one travelling behind the other, and resulting in a rear end crash.

- **150 – At Angle**

- 150 – At Angle Through-Through

- Vehicles approaching at an angle to each other and both are going straight ahead resulting in a collision. (These are intersection crashes.)

- 151 – At Angle Through– Right Turn

- Vehicles approaching at an angle to each other, one is going straight ahead the other is turning right, resulting in a collision.(These are intersection crashes.)

- 152 – At Angle Through–Left Turn

- Vehicles approaching at an angle to each other, one is going straight ahead the other is turning left, resulting in a collision. (These are intersection crashes.)

- 153 – At Angle Right Turn -Through

- Vehicles approaching at an angle to each other, one is turning right the other is going straight ahead, resulting in a collision.(These are intersection crashes.)

- 154 – At Angle Right Turn – Right Turn

- Vehicles approaching at an angle to each other, both are turning right resulting in a collision. (These are intersection crashes.)

- 155 – At Angle Left Turn – Right Turn

- Vehicles approaching at an angle to each other, one is turning left and the other turning right, resulting in a collision. (These are intersection crashes.)

○156 – At Angle Left Turn -Through

- Vehicles approaching at an angle to each other and one is turning left the other is going straight ahead, resulting in a collision. (These are intersection crashes.)

○157 – At Angle Right Turn –Left Turn

- Vehicles approaching at an angle to each other, one is turning right and the other turning left resulting in a collision. (These are intersection crashes.)

○158 – At Angle Left Turn –Left Turn

- Vehicles approaching at an angle to each other, both are turning left resulting in a collision. (These are intersection crashes.)

○159 – Other At Angle

- Vehicles approaching at an angle to each other that result in a collision. (These are intersection crashes.)

• **170 – Side Swipe**

○170 – Side Swipe Through -Through

- Vehicles approaching from same direction, travelling side by side and both going straight ahead, and there is a side swipe collision.

○171 – Side Swipe Lane Change

- Vehicles approaching from same direction, travelling side by side and are both going straight ahead when one of the vehicles makes a lane change which results in a side swipe collision.

○173 – Side Swipe Right Turn – Right Turn

- Vehicles approaching from same direction, travelling side by side and are both turning right when they side swipe each other.

○174 –SideSwipeLeft Turn –Left Turn

- Vehicles approaching from same direction, travelling side by side and are both turning left when they side swipe each other.

○179 – Other Side Swipe

- Vehicles approaching from same direction, travelling side by side when a side swipe collision occurs.

• **190 – Overtake**

○190 – Overtake Head On

- Vehicles approaching from opposing directions, one is overtaking and has ahead on with the other vehicle going straight ahead.

○191 – Overtake Rear End

- Vehicles approaching from same direction, one travelling behind the other, the following vehicle begins to overtake and rear-ends the vehicle in front.

○192 – Overtake Rear End Overtake

- Vehicles approaching from same direction, one travelling behind the other, both are overtaking, the following vehicle rear-ends the front vehicle.

○193 – Overtake Cut In

- Vehicles approaching from same direction, one travelling behind the other, the following vehicle overtakes and cuts off the vehicle travelling in front resulting in a collision.

○194 – OvertakeRight Turn

- Vehicles approaching from same direction, one travelling behind the other, the following overtakes the front vehicle, which is turning right, resulting in a collision.

○196 – Overtake U Turn

- Vehicles approaching from same direction, one travelling behind the other, the following vehicle overtakes the vehicle in front, which is performing U Turn, resulting in a collision.

○199 – Other Overtaking

- Vehicles approaching from same direction, one travelling behind the other and at least one vehicle is performing overtaking manoeuvre and there is a collision.

12.5.2 200 – Single Vehicle Crashes

- **210 – Overturn**

- 210 – Overturn on Straight

- A single vehicle is going straight ahead and loses control and overturns.

- 211 – Overturn Turning Right

- A single vehicle is turning right and loses control and overturns.

- 212 – Overturn Turning Left

- A single vehicle is turning left and loses control and overturns.

- 213 – Overturn U Turn

- A single vehicle is performing a U Turn and loses control and overturns.

- 214 – Overturn Overtaking

- A single vehicle is overtaking and loses control and overturns.

- 299 – Other Overturn

- A single vehicle loses control and overturns.

- **230 – Hit Object On Road**

- 230 – Hit Object On Straight

- A single vehicle is on a straight road and hits object on road.

○231 – Hit Object In Intersection

- A single vehicle is at an intersection and hits object on road.

○232 – Hit Object On Incline

- A single vehicle is on an incline and hits object on road.

○233 – Hit Object On Curve

- A single vehicle is on a curve and hits object on road.

○234 – Hit Object On Curved Incline

- A single vehicle is on a curved incline and hits object on road.

○235 – Hit Object when Reversing On Road

- A single vehicle is reversing and hits object on road.

• **250 – Hit Object Off Road**

○250 – Hit Object Off Straight

- A single vehicle is on a straight road and hits object off road.

○251 – Hit Object Off Intersection

- A single vehicle is at intersection and hits object off road.

○252 – Hit Object Off Incline

- A single vehicle is on incline and hits object off road.

○253 – Hit Object Off Curve

- A single vehicle is on a curve and hits object off road.

○254 – Hit Object OffCurvedIncline

- A single vehicle is on a curved incline and hits object off road.

○255 – Hit Object when Reversing Off Road

- A single vehicle is reversing and hits object off road.

- 270 – Hit Parked Vehicle

○270 – Hit Parked Vehicle On Road

- A single vehicle hits vehicle (s) parked on the road

○271 – Hit Parked Vehicle Off Road

- A single vehicle hits vehicle(s)parked off the.

- 290 – Hit Animal

- A singlevehiclehits animal on orofftheRoad

12.5.3 300 – Hit Pedestrian

○310 – Hit Pedestrian Crossing Road

- A single vehicle hits pedestrian (s) as they are as crossing the road.

○311 – Hit Pedestrian Walking A long Road

- A single vehicle hits pedestrian(s) as they are walking al one the road.

○312 – Hit Pedestrian Walking Along Edge of Road

- A single vehicle hits pedestrian(s) as they are walking alone edge of the road.

○313 – Hit Pedestrian Playing On Road

- A single vehicle hits pedestrian (s) as they are playing on the road.

○314 – Hit Pedestrian On Path

- A single vehicle hits pedestrian(s) when they are on the footpath.

○315 – Hit Pedestrian On Pedestrian Crossing

- A single vehicle hits pedestrian (s) as they are crossing a ta pedestrian crossing.

○316 – Hit Pedestrian Within 50 meters of Pedestrian Crossing

- A single vehicle hits pedestrian (s) as they are crossing with in 50 metres of a pedestrian crossing.

○317 – Hit Pedestrian in Centre Refuge

- A single vehicle hits pedestrian (s) when they are in a centre refuge.

○319 – Other Hit Pedestrian

- A single vehicle hits a pedestrian (s).

12.5.4 400 – Passenger

○410 – Passenger Boarding

- A vehicle hits a passenger as they are boarding an other vehicle.

○411 – Passenger Alighting

- A vehicle hits a passenger as they are alighting from another vehicle.

○412 – Passenger Falling Off Motor Cycle

- A passenger falls of a motorcycle.

○413 – Passenger Falling Off when Sitting Outside

- A passenger falls of a vehicle while sitting outside of that vehicle.

○414 – Passenger Falling Off when Standing Outside

- A passenger falls of a vehicle while standing outside of that vehicle.

12.5.5 Monitoring of DCC

NRSC is responsible for the annual review of the Descriptive Crash Codes (DCC).

Trained crash data base officers engaged by the NRSC will receive the entered data from the Nepal Police; manage the system in accordance with NRCDSMM. The management framework shall be based on the principle of sustainability.

One of the tasks with in the manual will be to check to see if an acceptable amount of crashes are coded into a DDC and it is only a small percentage that are code das “other”.

Annual Reports (Section 7.5) should be prepared to look at the number of crashes in the data base are either coded only to a Sub-group “Other” or coded 000 (Section 12).

If the NRCDS management team feels that there is a nun acceptable percentage of crashes are found to be code das “other” they will make recommendations to the NRSC for are view of the crash codes and possibility look at additional codes needed to identify changing conditions on the road network.

12.6 DCC Diagram Template

Each of the above definitions of the individual Descriptive Crash Codes may be represented in a simple diagram. A Template of these DCC Diagrams is in Appendix 6.

These diagrams help to match CDS on the CRF prepared by Nepal police officers with the crash typed definitions represented by the DCC. Also these DCCs diagrams are helpful tools when analysts using the database wish to prepare crash diagrams of crash clusters at black spots on the Road Network.

The general rule in the DCC Diagrams is the Red Arrow represents the vehicle at fault. (Note: May not always be the case-See Section 11.2.3)

13 Related Documents and Reference Material

Nepal Road Crash Database System Project Report

Nepal Road Crash Database System Users Manual

Data Analysis Road Crash Glossary (Queensland Government)

WHO Data Systems: A Road Safety Manual for Decision-Makers

Nepal Road Safety Action Plan

Nepal Road Safety Information Management System

Nepal Road Safety Management System

14 Appendices

Appendix MM1 CRF

Appendix MM2 How to complete CRF

Appendix MM3List of District Numbers Appendix4 How to use DES

Appendix MM5List of all data variables collected

Appendix MM6 DCC Template

Appendix MM7 Headings for new Police Stations

Appendix MM8 Headings for new Roads

APPENDIX MM1

CRF

180

VEHICLE 1		38. Vehicle Registration No. 		DRIVER 1		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue		47. Licence Type	
1. Bicycle 2. Rickshaw 3. Motor Cycle 4. Autorickshaw 5. Car 6. Pick up 7. Mini Bus 8. Bus 9. Truck 10. Other		1. Right Turn 2. Left Turn 3. U Turn 4. Cross Traffic 5. Merging 6. Diverging 7. Overtaking 8. Going Ahead 9. Flaversing 10. Sudden Start 11. Sudden Stop 12. Parked (off) Road		13. Parked (on) Road 14. Other		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
41. Loading		42. Vehicle Defect		43. Vehicle Damage		44. Ownership	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Front 3. Rear 4. Right 5. Left 6. Roof 7. Multiple 8. Other		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army	
45. Licence Number		46. Place of Issue		47. Driver Sex		48. Driver Age	
45. Licence Number 		46. Place of Issue 		47. Driver Sex 		48. Driver Age 	
51. Driver Error		52. Alcohol		53. Seat belt/Helmet in use		54. Driver Injury	
1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		1. Fatal 2. Serious 3. Minor 4. Uninjured 1. Not Suspected 2. Suspected		1. Yes 2. No		1. Fatal 2. Serious 3. Minor 4. Uninjured 1. Not Suspected 2. Suspected	

VEHICLE 2		38. Vehicle Registration No. 		DRIVER 2		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue		47. Licence Type	
1. Bicycle 2. Rickshaw 3. Motor Cycle 4. Autorickshaw 5. Car 6. Pick up 7. Mini Bus 8. Bus 9. Truck 10. Other		1. Right Turn 2. Left Turn 3. U Turn 4. Cross Traffic 5. Merging 6. Diverging 7. Overtaking 8. Going Ahead 9. Flaversing 10. Sudden Start 11. Sudden Stop 12. Parked (off) Road		13. Parked (on) Road 14. Other		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
41. Loading		42. Vehicle Defect		43. Vehicle Damage		44. Ownership	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Front 3. Rear 4. Right 5. Left 6. Roof 7. Multiple 8. Other		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army	
45. Licence Number		46. Place of Issue		47. Driver Sex		48. Driver Age	
45. Licence Number 		46. Place of Issue 		47. Driver Sex 		48. Driver Age 	
51. Driver Error		52. Alcohol		53. Seat belt/Helmet in use		54. Driver Injury	
1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		1. Fatal 2. Serious 3. Minor 4. Uninjured 1. Not Suspected 2. Suspected		1. Yes 2. No		1. Fatal 2. Serious 3. Minor 4. Uninjured 1. Not Suspected 2. Suspected	

Passenger Casualties									
Complete tables using codes from bottom panel									
Name & Address		54. Veh. No	55. Sex	56. Age	57. Injury	58. Position	59. Action	60. Belts/Helmets	
1									
2									
3									
4									

Pedestrian Casualties						
Complete tables using codes from bottom panel						
Name & Address		61. Sex	62. Age	63. Injury	64. Location	65. Action
1						
2						
3						

57. Passenger Injury		58. Passenger Position		59. Passenger Action		60. Seat Belt/Helmet in Use		64. Pedestrian Location		65. Pedestrian Action	
1. Fatal 2. Serious 3. Minor		1. Front Seat 2. Rear Seat 3. Motorcycle Passenger 4. Bus Passenger 5. Outside-Sitting 6. Outside-Standing		1. None 2. Boarding 3. Alighting 4. Falling 5. Other		1. Yes 2. No 66. Alcohol 1. Not Suspected 2. Suspected		1. On Pedestrian Crossing 2. Within 50m Ped. Crossing 3. On Central Refuge 4. In Road Centre not in 1-3 5. On Footpath/Verge		1. None 2. Crossing Road 3. Walking along Road 4. Walking along Edge 5. Playing on Road 6. On Footpath	

APPENDIX MM2

How to complete the CRF

How to Complete Crash Report Form (HCCRF) Nepal Police

Complete as much detail as possible on the CRF. Use extra forms if details are needed for more passengers, vehicles, drivers or pedestrians.

Strike through the most appropriate response on the CRF. E.g.

23. Road Condition

1. Good

~~2. Damaged~~

1	Report No.	As per NPS instructions.
2	Computer No.	This is the DELID as per NRCDSMM.
3	Police Station	Police Station Name or Number.
4	District	District Number.
5	No. Of Vehicles Involved	Number of vehicles with drivers. Exclude parked vehicles with no drivers.
6	No. Of Drivers Casualties	Included total number of drivers even uninjured.
7	No. Of Passenger Casualties	Total number of passengers injured.
8	No. Of Pedestrian Casualties	Total number of pedestrians injured.
9	Accident Severity	This is the highest severity of all casualties involved.
10, 11 and 12	Date Day/Month/Year	Use the Gregorian calendar (or Western) internationally accepted civil calendar, as it is suitable for data analysis.
13	Day of week	Monday, Tuesday etc.
14	Time (24 hours)	E.G. Midnight is 00:00 / Midday is 12:00 / 1pm is 13:00
15	Junction Type	Strike through the junction that most closely matches or write short description if no match.
16	Traffic Control	The traffic control must be facing or apply to the vehicles involved. That is not on a side street, which neither vehicle came from.
17	Collision Type	
	1 Head On 2 or more vehicles coming from opposing directions and no pedestrians.	6 or 7 Hit Object in / Off Road Single vehicle and an object on or off the road.
	2 Rear End 2 or more vehicles from same direction one behind the other and no pedestrians.	8 Hit Parked Vehicle Single vehicle hitting at least one parked vehicle. No pedestrians.
	3 Right Angle 2 or more vehicles from adjacent angles at intersection and no pedestrians.	9 Hit Pedestrian Single vehicle and one or more pedestrians.
	4 Side Swipe 2 or more vehicles from same direction travelling side by side and no pedestrians.	10 Hit Animal Single vehicle and animal on or off the road. No pedestrians.
	5 Overturned Vehicle Single vehicle that overturns on the road. No pedestrians.	11 Other Give details.
18, 19, 20, 21, 22, 23, 24, 25, and 26	Strike through the most accurate response.	
Name of City / Town		Name of town or city the crash occurred.
Location		Name of Road Crash was on.
Locate how many Kilometers from Town/Village to Town/Village.		
Crash Location Sketch Clearly indicate where the collision occurred in relation to the nearest intersecting road or land marks such as Km posts or bridges. Clearly mark North on sketch.		
Latitude and Longitude		

X =	Use your Smart Phone App. To write the Latitude (6 decimal places).
Y =	Use your Smart Phone App. To write the Longitude (6 decimal places).
Collision Diagram Sketch	
1. Clearly identify North.	3. If possible V1 is the vehicle in the wrong or at fault , which is wrong side of road, running up back of vehicle in front, changing lanes, overtaking.
2. Label vehicles as V1, V2 etc and match to details in question 38.	6. Clearly mark direction of travel of pedestrians.
4. Mark centre of road.	7. Label roads.
5. Label pedestrians P1 etc.	
If collision at intersection indicate how far from. Indicate direction of travel of pedestrian the nearest boundary or curb of the interesting road.	
<p>Example</p>	
8. Use arrows to clearly define where the vehicle came from and where it was intending to go. Like the example above, V1 was coming out of a side street and intended to turn left where as vehicle two was driving straight. The same applies for pedestrian movement, an arrow indicating their direction of movement.	
Police Description of Crash	
Give as much detail as possible that may have not been indicated in the questions. Things like other contributing factors, light conditions like sunset or sunrise effecting visibility, other road conditions Such as potholes, rutting, and corrugation or uneven surface. The road features such as a nup hill curve or narrow bridge. Also details about driver behaviour or witness comments.	
Witness	As per NPS instructions.
Reporting Officer	As per NPS instructions.
Reviewing Officer	As per NPS instructions.
Action Taken	As per NPS instructions.
Vehicle Details (Complete for each vehicle)	
Complete personal details as requested and "other" details where required.	
39, 40, 41, 42, 43, and 44	Strike thought the most accurate response.
Driver Details (Complete for each Driver)	
Complete personal details as requested and "other" details where required.	
45	License Number.
46	Place License was issued.
47, 50, 51, 52, and 53	Strike thought the most accurate response.
48 and 49	Sex – "M" male, "F" female, "O" other or "U" unknown. Age.
Passenger Details (Complete for each Passenger)	
Complete personal details as requested and "other" details where required.	
54	Indicate which vehicle the passenger was in V1, V2 etc.
55 and 56	Sex – "M" male, "F" female, "O" other or "U" unknown. Age.
57, 58, 59 and 60	Use codes located bottom of CRF.
Pedestrians Details (Complete for each Pedestrian)	
Complete personal details as requested and "other" details where required.	
61 and 62	Sex – "M" male, "F" female, "O" other or "U" unknown. Age.
63, 64, 65 and 66	Use codes located bottom of CRF.

APPENDIX MM3

List of District Codes

District Code List NEPAL

Code	Name	Code	Name	Code	Name
1	Taplejung	26	Bhaktapur	51	Arghakhanchi
2	Panchthar	27	Kathmandu	52	Pyuthan
3	Ilam	28	Nuwakot	53	Rolpa
4	Jhapa	29	Rasuwa	54	Rukum
5	Morang	30	Dhading	55	Salyan
6	Sunsari	31	Makwanpur	56	Dang
7	Dhankuta	32	Rautahat	57	Banke
8	Terhathum	33	Bara	58	Bardiya
9	Sankhuwasabha	34	Parsa	59	Surkhet
10	Bhojpur	35	Chitawan	60	Dailekh
11	Solukhumbu	36	Gorkha	61	Jajarkot
12	Okhaldhunga	37	Lamjung	62	Dolpa
13	Khotang	38	Tanahu	63	Jumla
14	Udayapur	39	Syangja	64	Kalikot
15	Saptari	40	Kaski	65	Mugu
16	Siraha	41	Manang	66	Humla
17	Dhanusa	42	Mustang	67	Bajura
18	Mahottari	43	Myagdi	68	Bajhang
19	Sarlahi	44	Parbat	69	Achham
20	Sindhuli	45	Baglung	70	Doti
21	Ramechhap	46	Gulmi	71	Kailali
22	Dolakha	47	Palpa	72	Kanchanpur
23	Sindhupalchok	48	Nawalparasi	73	Dadeldhura
24	Kavrepalanchok	49	Rupandehi	74	Baitadi
25	Lalitpur	50	Kapilbastu	75	Darchula

APPENDIX MM4

How to use DES

Welcome to DES

This is the first page in the DES Excel. The on screen instructions along with Section 3 in the NRCDSMM will assist data entry officers to enter crash data records from CBFs.

The first step is as simple as "click here".

This is where step one takes the operator to OCS crash Data Entry Screen.

Welcome to DES

Follow the red numbers and instruction

- 1 Open New Data *This will take you to the Data Entry Screen (DES)*
- 2
- 3 Click here to copy data for Email File
- 4 Click here to Close DES. Than click "X" top right of

Crash Data Entry Screen

Number of Errors.

NRCDS Management Manual
Section 3: Data Entry In Nepal
Question required to achieve coding

IDS of Crash Identification Number

Short Description

Line	1	BCC	0
2			
3			
4			
5		Go To Diagram Desc	Go To Vehicle
6		Go To Driver	Go To Passenger
7		Go To Pedestrian	Go To Police
8		Go To End	Go To Top
9		Number of data records required to capture all the details of this crash	
10	1	Report No.	
11	2	Computer No.	
12	3	Police Station	Click here to add Police Details

In Section 3.5, Step by step Data Entry,

line references are used to guide the operator.

These line references are located at the left edge of the screen.

located on the screen are "blue Buttons" which will take the operator to different sections of OCS.

At each location there will be a button to return to start point.

OL5 will also display information as the operator enters data from the CUI.

Crash Data Entry Screen

Error - More drivers than Vehicles. *Check - Answer to Q5 to Q8 do not match* *Error - Have not entered Road Name Crash was on.* *Error - Conflict with Question 8 - 1 Pedestrian(s) indicated.* *Must enter details for the number of drivers indicated in Question 6, which was 2.* *Error - Questions 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 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766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 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2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2*

At the end of DES there are the filing options.

DES will again guide the operator with on screen instructions. For example, this record has not been saved.

At the end of a data entry session DES will clear and return the operator to the welcome screen to file the data.

New instructions will appear for the operator to complete.

The package of Screen shots, Step-by-step table and the NRCDMM the operator has a set of tools which will help with the consistent and accurate entry of data from NPS CRFs.

APPENDIX MM5

List of all data variables collected

Column Code	Variable	Name / Code / Text / Number	Code Name
1_CIN	Crash Identification Number	Number	
2_DCC	Descriptive Crash Code	Number	
3_DCCSrD	Short Description of Crash	Text	
4_DCCDes	Long Description of Crash	Text	
5_NoFrUd	Number of data Entry forms to hold all details for this one crash	Number	
6_RepNo.	Report number supplied and used by Nepal Police	Number	
7_CompNo	Computer number used by Nepal Police	Number	
8_PolSta	Name of Police Station	Name	
9_StaNo.	Number of Police Station	Number	
10_Distct	Name of District	Name	
11_DistNo	Number of District	Number	
12_Zone	Name of Zone	Name	
13_ZoneNo	Number of Zone	Number	
14_Region	Name of Region	Name	
15_RegNo	Number of Region	Number	
16_No.Veh	Number of Vehicles Involved	Number	
17_No.Dri	Number of Drivers Involved	Number	
18_No.Pass	Number of Passengers Involved	Number	
19_No.Ped	Number of Pedestrians involved	Number	
20_SeviNA	This is the highest severity level record against any involved in this crash. Name	Fatal	
		Serious	
		Minor	
		Damage	
21_SeviCD	This is the highest severity level record against any involved in this crash. Code	1	Fatal
		2	Serious
		3	Minor
		4	Damage
22_dd	Day	Number	
23_mm	Month	Number	
24_yyyy	Year	Number	
25_day	Day	Name	
26_Hour24	Hours	Number	
27_Min.	Minutes	Number	
28_JncTNA	Type of Junction the Crash occurred at. Name	Not a junction	
		Cross Road	
		T Intersection	

Column Code	Variable	Name / Code / Text / Number	Code Name
		Offset cross	
		Y Intersection	
		Roundabout	
		Other	
29_JucTCD	Type of Junction the Crash occurred at. Code	1	Not a junction
		2	Cross Road
		3	T Intersection
		4	Offset cross
		5	Y Intersection
		6	Roundabout
		7	Other
30_TrCoNA	Traffic Control Name	None	
		Centerline	
		Ped. Crossing	
		Police	
		Traffic Signals	
		Stop Sign	
		Give Way Sign	
		Other	
31_TrCoCD	Traffic Control Code	1	None
		2	Centerline
		3	Ped. Crossing
		4	Police
		5	Traffic Signals
		6	Stop Sign
		7	Give Way Sign
		8	Other
32_ColTNA	Collision Type Name	Head On	
		Rear End	
		Right Angle	
		Side Swipe	
		Overturn Vehicle	
		Hit Object In Road	
		Hit Object Off Road	
		Hit Parked Vehicle	
		Hit Pedestrian	
		Hit Animal	
		Passenger	
		Other	

Column Code	Variable	Name / Code / Text / Number	Code Name
33_ColTCD	Collision Type Code	1	Head On
		2	Rear End
		3	Right Angle
		4	Side Swipe
		5	Overtake Vehicle
		6	Hit Object In Road
		7	Hit Object Off Road
		8	Hit Parked Vehicle
		9	Hit Pedestrian
		10	Hit Animal
		11	Passenger
		12	Other
34_MoveNA	Movement of Traffic Flow. Name	One Way	
		Two Way	
35_MoveCD	Movement of Traffic Flow. Code	1	One Way
		2	Two Way
36_WethNA	Weather Conditions. Name	Fair	
		Rain	
		Fog	
		Smoke/Dust	
		Other	
37_WethCD	Weather Conditions. Code	1	Fair
		2	Rain
		3	Fog
		4	Smoke/Dust
		5	Other
38_LitCNA	Lighting Conditions. Name	Daylight	
		Night (Unlit)	
		Night (Lit)	
39_LitCCD	Lighting Conditions. Code	1	Daylight
		2	Night (Unlit)
		3	Night (Lit)
40_WLitNA	Light Definition From Web. Name	Daylight	
		Civil Twilight	
		Night	
41_WLitCD	Light Definition From web. Code	1	Daylight
		2	Civil Twilight
		3	Night
42_RdChNA	Road Character. Name	Straight Flat	
		Curve Only	
		Incline Only	
		Curve + Incline	
		Bridge	

Column Code	Variable	Name / Code / Text / Number	Code Name
43_RdChCD	Road Character. Code	1	Straight Flat
		2	Curve Only
		3	Incline Only
		4	Curve + Incline
		5	Bridge
44_RivrNA	Name of River if Crash is on Bridge	Name	
45_SurMNA	Surface Material. Name	Asphalt	
		Gravel	
		Earth	
46_SurMCD	Surface Material. Code	1	Asphalt
		2	Gravel
		3	Earth
47_RdCdNA	Condition of Road Surface Material. Name	Damaged	
		Good	
48_RdCdCD	Condition of Road Surface Material. Code	1	Damaged
		2	Good
49_SurCNA	Surface Condition because of Weather. Name	Dry	
		Wet	
		Muddy	
		Flooded	
		Snow covered	
50_SurCD	Surface Condition because of Weather. Code	1	Dry
		2	Wet
		3	Muddy
		4	Flooded
		5	Icy
		6	Snow covered
51_RdWkYN	Road works present. Name	Yes	
		No	
52_RdWkCD	Road works present. Code	1	Yes
		2	No
53_HitRYN	Hit and Run. Name	Same as 51	
54_HitRCD	Hit and Run. Code	Same as 52	Yes
55_LoSkyN	Is there a Location Sketch	Same as 51	
56_CIDaYN	Is there a Collision Diagram	Same as 51	
57_PIDsYN	Is there a Police Description	Same as 51	
58_PolDTx	The typed Police Description	Text	
59_Latitu	Latitude	Number to 6 decimal places	

Column Code	Variable	Name / Code / Text / Number	Code Name
60_Longit	Longitude	Number to 6 decimal places	
61_NaCiTo	Name of City or Town In	Text	
62_NaLoAr	Location or Area	Text	
63_Kilmfr	Kilometers from Town or Village	Number	
64_FrToVi	Town or Village From	Text	
65_ToToVi	Town or Village To	Text	
66_LaMkNA	Landmark Name	Text	
67_MToLMk	Meters to Landmark	Number	
68_KToLMk	Kilometers to Landmark	Number	
69_DrLkNA	Direction from Crash to Landmark. Name	North	
		South	
		East	
		West	
70_DrLkCD	Direction from Crash to Landmark. Code	1	North
		2	South
		3	East
		4	West
71_NaRdCr	Name Of Road Crash is on	Text	
72_RdCode	Road Code	Number/Text	
73_RdClas	Road Class	Text	
74_LkCode	Link Code	Number/Text	
75_LkName	Link Name	Text	
76_RdDesc	Road Description	Text	
77_LinkFr	Link From	Text	
78_LinkTo	Link To	Text	
79_TotLen	Total Length	Number	
80_RdNaTx	Name of Road Crash is on if not in list	Text	
81_DCrRNA	Direction of Road crash is On. Name	East to West	
		North to South	
82_DCrRCD	Direction of Road crash is On. Code	1	East to West
		2	North to South
83_Wi20YN	Within 20 Meters of Intersection. Name	Same as 51	
84_Wi20CD	Within 20 Meters of Intersection. Code	Same as 52	
85_ICrDNA	Type of Intersection Drawn on the Collision Diagram. Name	Not a junction	
		Cross Road	

Column Code	Variable	Name / Code / Text / Number	Code Name
		T Intersection	
		Offset cross	
		Y Intersection	
		Roundabout	
		Other	
		1	Not a junction
86_ICrDCD	Type of Intersection Drawn on the Collision Diagram. Code	2	Cross Road
		3	T Intersection
		4	Offset cross
		5	Y Intersection
		6	Roundabout
		7	Other
87_DrV1NA	Direction Vehicle 1 Travelling. Name	North	
		South	
		East	
		West	
88_DrV1CD	Direction Vehicle 1 Travelling. Code	1	North
		2	South
		3	East
		4	West
89_DrV2NA	Direction Vehicle 2 Travelling. Name	Same as 87	
90_DrV2CD	Direction Vehicle 2 Travelling. Code	Same as 88	
91_DrP1NA	Direction Pedestrian 1 Travelling. Name	Same 87	
92_DrP1CD	Direction Pedestrian 1 Travelling. Code	Same as 88	
93_CrV1NA	Vehicle 1 in relation to centre of road. Name	Left of Centre	
		Right of Centre	
94_CrV1CD	Vehicle 1 in relation to centre of road. Code	1	Left of Centre
		2	Right of Centre
95_CrV2NA	Vehicle 2 in relation to centre of road. Name	Same as 93	
96_CrV2CD	Vehicle 2 in relation to centre of road. Code	Same as 94	
97_InV1NA	Vehicle 1 in relation to intersection. Name	More than 20 m from Int.	
		Approaching	

Column Code	Variable	Name / Code / Text / Number	Code Name
		Int. & within 20 m	
		In the Intersection	
		Leaving Int. still within 20 m	
		Was the collision off the road	
		Approaching Int. & within 20 m	
98_InV1CD	Vehicle 1 in relation to intersection. Code	1	More than 20 m from Int.
		2	Approaching Int. & within 20 m
		3	In the Intersection
		4	Leaving Int. still within 20 m
		5	Was the collision off the road
99_InV2NA	Vehicle 1 in relation to intersection. Name	Same as 97	
100_InV2CD	Vehicle 1 in relation to intersection. Code	Same as 98	
101_InR1NA	Intersecting Road 1 Name	Text	
102_Rd1Cod	Intersecting Road1 Code	No./Text	
103_Rd1Cla	Intersecting Road1 Class	No./Text	
104_LkCod1	Intersecting Road1 Link Code	No./Text	
105_LkNam1	Intersecting Road 1 Link Name	Text	
106_RdDes1	Intersecting Road1 Description	Text	
107_LkFro1	Intersecting Road1 From	Text	
108_LkTo1	Intersecting Road1 To	Text	
109_TotLe1	Intersecting Road1 Total Length	Number	
110_IRdTx1	Intersecting Road 1 Name if not in list.	Text	
111_InR1NA	Intersecting Road 2 Name	Text	
112_Rd1Cod	Intersecting Road2 Code	No./Text	
113_Rd1Cla	Intersecting Road2 Class	No./Text	
114_LkCod1	Intersecting Road2 Link Code	No./Text	
115_LkNam1	Intersecting Road 2 Link Name	Text	
116_RdDes1	Intersecting Road2 Description	Text	
117_LkFro1	Intersecting Road2 From	Text	

Column Code	Variable	Name / Code / Text / Number	Code Name
118_LkTo1	Intersecting Road2To	Text	
119_TotLe1	Intersecting Road2Total Length	Number	
120_IRdTx1	Intersecting Road 2 Name if not in list.	Text	
121_InR1NA	Intersecting Road 3 Name	Text	
122_Rd1Cod	Intersecting Road3 Code	No./Text	
123_Rd1Cla	Intersecting Road3 Class	No./Text	
124_LkCod1	Intersecting Road3 Link Code	No./Text	
125_LkNam1	Intersecting Road 3 Link Name	Text	
126_RdDes1	Intersecting Road3 Description	Text	
127_LkFro1	Intersecting Road3 From	Text	
128_LkTo1	Intersecting Road3To	Text	
129_TotLe1	Intersecting Road3Total Length	Number	
130_IRdTx1	Intersecting Road 3 Name if not in list.	Text	
131_PdInYN	Pedestrian Injury. Name	Same as 51	
132_PdInCD	Pedestrian Injury. Code	Same as 52	
133_PIPCYN	Pedestrian Injury as result of previous Crash. Name	Same as 51	
134_PIPCCD	Pedestrian Injury as result of previous Crash. Code	Same as 52	
135_OVehYN	Confirming one vehicle only. Name	Same as 51	
136_OVehCD	Confirming one vehicle only. Code	Same as 52	
137_HiObYN	Hit Object y/n. Name	Same as 51	
138_HiObCD	Hit Object y/n. Code	Same as 52	
139_ObHtNA	Object Hit. Name	Animal	
		Bridge	
		Building	
		Dividing fence middle of road	
		Double Parked Vehicle	
		Earlier Crash	
		Fence	
		Guardrail	
		Landslide	
		Other	
		Parked Vehicle	
		Pole/Post	
		Pot Hole on road	
		Rail Crossing	

Column Code	Variable	Name / Code / Text / Number	Code Name
		Raised Island on road	
		River	
		Roadwork	
		Speed Bump on road	
		Steep Valley Side of road	
		Train	
		Tree	
		Vehicle Parked on Roundabout	
		Vehicle Parked within 10 m of int.	
		Wall	
		Water on road	
140_ObHtCD	Object Hit Code	1	Animal
		2	Bridge
		3	Building
		4	Dividing fence middle of road
		5	Double Parked Vehicle
		6	Earlier Crash
		7	Fence
		8	Guardrail
		9	Landslide
		10	Other
		11	Parked Vehicle
		12	Pole/Post
		13	Pot Hole on road
		14	Rail Crossing
		15	Raised Island on road
		16	River
		17	Roadwork
		18	Speed Bump on road
		19	Steep Valley Side of road
		20	Train
		21	Tree
		22	Vehicle Parked on Roundabout
		23	Vehicle Parked within 10 m of int.

Column Code	Variable	Name / Code / Text / Number	Code Name
		24	Wall
		25	Water on road
141_OffRYN	Vehicle ran off road. Y/N	Same as 51	
142_OffRCD	Vehicle ran off road. Code	Same as 52	
143_SpLimt	Posted Speed Limit	Number	
144_LaNorE	Lanes North or East	Number	
145_LaSorW	Lanes South or West	Number	
146_CkLaYN	Checked the number of lanes. Y/N	Same as 51	
147_CkLaCD	Checked the number of lanes. Code	Same as 52	
148_PotHYN	Pot Holes. Y/N	Same as 51	
149_PotHCD	Pot Holes. Code	Same as 52	
150_RuttYN	Rutted Y/N	Same as 51	
151_RuttCD	Rutted. Code	Same as 52	
152_CorrYN	Corrugated. Y/N	Same as 51	
153_CorrCD	Corrugated. Code	Same as 52	
154_UnevYN	Surface is uneven. Y/N	Same as 51	
155_UnevCD	Surface is uneven. Code	Same as 52	
156_SpBpYN	Speed Bump. Y/N	Same as 51	
157_SpBpCD	Speed Bump. Code	Same as 52	
158_HNoENA	Horizontal looking North or East. Name	Is straight	
		Is curved to the left	
		Is curved to the right	
159_HNoECD	Horizontal looking North or East. Code	6	Is straight
		7	Is curved to the left
		8	Is curved to the right
160_HSoWNA	Horizontal looking South or West. Name	Is straight	
		Is curved to the left	
		Is curved to the right	
161_HSoWCD	Horizontal looking South or West. Code	6	Is straight
		7	Is curved to the left
		8	Is curved to the right
162_VNoENA	Vertical looking North or East. Name	Is flat	
		Is inclined (up hill)	

Column Code	Variable	Name / Code / Text / Number	Code Name
		Is declined (down hill)	
163_VNoECD	Vertical looking North or East. Code	9	Is flat
		10	Is inclined (up hill)
		11	Is declined (down hill)
164_VSoWNA	Vertical looking South or West. Name	Is flat	
		Is inclined (up hill)	
		Is declined (down hill)	
165_VSoWCD	Vertical looking South or West. Code	9	Is flat
		10	Is inclined (up hill)
		11	Is declined (down hill)
166_OTVeh1	Owners Town Vehicle 1	Text	
167_OTVeh2	Owners Town Vehicle 2	Text	
168_OTVeh3	Owners Town Vehicle 3	Text	
169_OTVeh4	Owners Town Vehicle 4	Text	
170_OTVeh5	Owners Town Vehicle 5	Text	
171_InV1NA	Insurance Type Vehicle 1. Name	Third Party Ins.	
		Property Ins.	
		Comprehensive Ins.	
		None	
172_InV1CD	Insurance Type Vehicle 1. Code	1	Third Party Ins.
		2	Property Ins.
		3	Comprehensive Ins.
		4	None
173_InV2NA	Insurance Type Vehicle 1. Name	Same as 171	
174_InV2CD	Insurance Type Vehicle 1. Code	Same as 172	
175_InV3NA	Insurance Type Vehicle 1. Name	Same as 171	
176_InV3CD	Insurance Type Vehicle 1. Code	Same as 172	
177_InV4NA	Insurance Type Vehicle 1. Name	Same as 171	
178_InV4CD	Insurance Type Vehicle 1. Code	Same as 172	
179_InV5NA	Insurance Type Vehicle 1. Name	Same as 171	
180_InV5CD	Insurance Type Vehicle 1. Code	Same as 172	
181_MakeV1	Make of Vehicle 1	Text	
182_MakeV2	Make of Vehicle 2	Text	
183_MakeV3	Make of Vehicle 3	Text	
184_MakeV4	Make of Vehicle 4	Text	
185_MakeV5	Make of Vehicle 5	Text	
186_YrMaY1	Year of Manufacture Vehicle 1	Number	

Column Code	Variable	Name / Code / Text / Number	Code Name
187_YrMaY2	Year of Manufacture Vehicle 2	Number	
188_YrMaY3	Year of Manufacture Vehicle 3	Number	
189_YrMaY4	Year of Manufacture Vehicle 4	Number	
190_YrMaY5	Year of Manufacture Vehicle 5	Number	
191_CoVeh1	Colour of Vehicle 1	Text	
192_CoVeh2	Colour of Vehicle 2	Text	
193_CoVeh3	Colour of Vehicle 3	Text	
194_CoVeh4	Colour of Vehicle 4	Text	
195_CoVeh5	Colour of Vehicle 5	Text	
196_TDi1NA	Direction of Travel Vehicle 1. Name	North	
		South	
		East	
		West	
197_TDi1CD	Direction of Travel Vehicle 1. CODE	1	North
		2	South
		3	East
		4	West
198_TDi2NA	Direction of Travel Vehicle 2. Name	Same as 196	
199_TDi2CD	Direction of Travel Vehicle 2. CODE	Same as 197	
200_RCV1NA	In Direction of Travel in relation to Centre of Road Vehicle 1. Name	Left of Centre	
		Right of centre	
201_RCV1CD	In Direction of Travel in relation to Centre of Road Vehicle 1. Code	1	Left of Centre
		2	Right of centre
202_RCV2NA	In Direction of Travel in relation to Centre of Road Vehicle 2. Name	Same as 200	
203_RCV2CD	In Direction of Travel in relation to Centre of Road Vehicle 2. Code	Same as 201	
204_RIV1NA	Vehicle 1 position in relation to intersection. Name	Same as 97	
205_RIV1CD	Vehicle 1 position in relation to intersection. Code	Same as 98	
206_RIV2NA	Vehicle 2 position in relation to intersection. Name	Same as 97	
207_RIV2CD	Vehicle 2 position in relation to	Same as 98	

Column Code	Variable	Name / Code / Text / Number	Code Name
	intersection. Code		
208_ORV1YN	Did Vehicle 1 go off road? Y/N	Same as 51	
209_ORV1CD	Did Vehicle 1 go off road? Code	Same as 52	
210_ORV2YN	Did Vehicle 2 go off road? Y/N	Same as 51	
211_ORV2CD	Did Vehicle 2 go off road? Code	Same as 52	
212_ORV3YN	Did Vehicle 3 go off road? Y/N	Same as 51	
213_ORV3CD	Did Vehicle 3 go off road? Code	Same as 52	
214_ORV4YN	Did Vehicle 4 go off road? Y/N	Same as 51	
215_ORV4CD	Did Vehicle 4 go off road? Code	Same as 52	
216_ORV5YN	Did Vehicle 5 go off road? Y/N	Same as 51	
217_ORV5CD	Did Vehicle 5 go off road? Code	Same as 52	
218_TyV1NA	Vehicle 1 Type. Name	Bicycle	
		Rickshaw	
		Motor Cycle	
		Autorickshaw	
		Car	
		Pick up	
		Mini Bus	
		Bus	
		Truck	
		Push Cart	
		Electric Scooter	
		Moped	
		Tempo	
		4WD Wagon	
		Other	
		Unknown	
219_TyV1CD	Vehicle 1 Type. Code	1	Bicycle
		2	Rickshaw
		3	Motor Cycle
		4	Autorickshaw
		5	Car
		6	Pick up
		7	Mini Bus
		8	Bus
		9	Truck
		10	Push Cart
		11	Electric Scooter
		12	Moped
		13	Tempo
		14	4WD Wagon
		15	Other
		99	Unknown
220_TyV2NA	Vehicle 2 Type. Name	Same as 218	

Column Code	Variable	Name / Code / Text / Number	Code Name
221_TyV2CD	Vehicle 2 Type. Code	Same as 219	
222_TyV3NA	Vehicle 3 Type. Name	Same as 218	
223_TyV3CD	Vehicle 3 Type. Code	Same as 219	
224_TyV4NA	Vehicle 4 Type. Name	Same as 218	
225_TyV4CD	Vehicle 4 Type. Code	Same as 219	
226_TyV5NA	Vehicle 5 Type. Name	Same as 218	
227_TyV5CD	Vehicle 5 Type. Code	Same as 219	
228_MaV1NA	Vehicle 1 Maneuver. Name	Right Turn	
		Left Turn	
		U' Turn	
		Cross Traffic	
		Merging	
		Diverging	
		Overtaking	
		Going Ahead	
		Reversing	
		Sudden Start	
		Sudden Stop	
		Parked (Off) Road	
		Parked (On) Road	
		Leave/Enter D/way	
		Veh. driving off Path	
		Double Parked	
		Roadside door open	
		Runaway Vehicle	
		Other	
229_MaV1CD	Vehicle 1 Maneuver. Code	1	Right Turn
		2	Left Turn
		3	U' Turn
		4	Cross Traffic
		5	Merging
		6	Diverging
		7	Overtaking
		8	Going Ahead
		9	Reversing
		10	Sudden Start
		11	Sudden Stop
		12	Parked (Off) Road

Column Code	Variable	Name / Code / Text / Number	Code Name
		13	Parked (On) Road
		14	Leave/Enter D/way
		15	Veh. driving off Path
		16	Double Parked
		17	Roadside door open
		18	Runaway Vehicle
		19	Other
230_MaV2NA	Vehicle 2 Maneuver. Name	Same as 228	
231_MaV2CD	Vehicle 2 Maneuver. Code	Same as 229	
232_MaV3NA	Vehicle 3 Maneuver. Name	Same as 228	
233_MaV3CD	Vehicle 3 Maneuver. Code	Same as 229	
234_MaV4NA	Vehicle 4 Maneuver. Name	Same as 228	
235_MaV4CD	Vehicle 4 Maneuver. Code	Same as 229	
236_MaV5NA	Vehicle 5 Maneuver. Name	Same as 228	
237_MaV5CD	Vehicle 5 Maneuver. Code	Same as 229	
238_LoV1NA	Vehicle 1 Loading. Name	Legally Loaded	
		Overloaded	
		Insecure Load	
		Protruding Load	
		Other Improper Load	
		Load fall off	
239_LoV1CD	Vehicle 1 Loading. Code	1	Legally Loaded
		2	Overloaded
		3	Insecure Load
		4	Protruding Load
		5	Other Improper Load
		6	Load fall off
240_LoV1NA	Vehicle 2 Loading. Name	Same as 238	
241_LoV1CD	Vehicle 2 Loading. Code	Same as 239	
242_LoV1NA	Vehicle 3 Loading. Name	Same as 238	
243_LoV1CD	Vehicle 3 Loading. Code	Same as 239	
244_LoV1NA	Vehicle 4 Loading. Name	Same as 238	
245_LoV1CD	Vehicle 4 Loading. Code	Same as 239	
246_LoV1NA	Vehicle 5 Loading. Name	Same as 238	
247_LoV1CD	Vehicle 5 Loading. Code	Same as 239	
248_1DV1NA	1stDefects Vehicle 1. Name	None	
		Brakes	
		Steering	
		Tyres	
		Lights	
		Multiple	
		Seat Belts	

Column Code	Variable	Name / Code / Text / Number	Code Name
		faulty, torn, broken.	
		Helmets, not up to standard, damaged, no strap.	
		Drivers View obscured by decorations on or around screen	
		Other	
249_1DV1CD	1stDefects Vehicle 1. Name	1	None
		2	Brakes
		3	Steering
		4	Tyres
		5	Lights
		6	Multiple
		7	Seat Belts faulty, torn, broken.
		8	Helmets, not up to standard, damaged, no strap.
		9	Drivers View obscured by decorations on or around screen
		10	Other
250_2DV1NA	2ndDefects Vehicle 1. Name	Same as 248	
251_2DV1CD	2ndDefects Vehicle 1. Code	Same as 249	
252_3DV1NA	3rdDefects Vehicle 1. Name	Same as 248	
253_3DV1CD	3rdDefects Vehicle 1. Code	Same as 249	
254_4DV1NA	4thDefects Vehicle 1. Name	Same as 248	
255_4DV1CD	4thDefects Vehicle 1. Code	Same as 249	
256_1DV2NA	1stDefects Vehicle 2. Name	Same as 248	
257_1DV2CD	1stDefects Vehicle 2. Code	Same as 249	
258_2DV2NA	2ndDefects Vehicle 2. Name	Same as 248	
259_2DV2CD	2ndDefects Vehicle 2. Code	Same as 249	
260_3DV2NA	3rdDefects Vehicle 2. Name	Same as 248	
261_3DV2CD	3rdDefects Vehicle 2. Code	Same as 249	
262_4DV2NA	4thDefects Vehicle 2. Name	Same as 248	
263_4DV2CD	4thDefects Vehicle 2. Code	Same as 249	
264_1DV3NA	1stDefects Vehicle 3. Name	Same as 248	
265_1DV3CD	1stDefects Vehicle 3. Code	Same as 249	
266_2DV3NA	2ndDefects Vehicle 3. Name	Same as 248	

Column Code	Variable	Name / Code / Text / Number	Code Name
267_2DV3CD	2 nd Defects Vehicle 3. Code	Same as 249	
268_3DV3NA	3 rd Defects Vehicle 3. Name	Same as 248	
269_3DV3CD	3 rd Defects Vehicle 3. Code	Same as 249	
270_4DV3NA	4 th Defects Vehicle 3. Name	Same as 248	
271_4DV3CD	4 th Defects Vehicle 3. Code	Same as 249	
272_1DV4NA	1 st Defects Vehicle 4 Name	Same as 248	
273_1DV4CD	1 st Defects Vehicle 4. Code	Same as 249	
274_2DV4NA	2 nd Defects Vehicle 4. Name	Same as 248	
275_2DV4CD	2 nd Defects Vehicle 4. Code	Same as 249	
276_3DV4NA	3 rd Defects Vehicle 4. Name	Same as 248	
277_3DV4CD	3 rd Defects Vehicle 4. Code	Same as 249	
278_4DV4NA	4 th Defects Vehicle 4. Name	Same as 248	
279_4DV4CD	4 th Defects Vehicle 4. Code	Same as 249	
280_4DV5NA	1 st Defects Vehicle 5. Name	Same as 248	
281_4DV5CD	1 st Defects Vehicle 5. Code	Same as 249	
282_1DV5NA	2 nd Defects Vehicle 5. Name	Same as 248	
283_1DV5CD	2 nd Defects Vehicle 5. Code	Same as 249	
284_2DV5NA	3 rd Defects Vehicle 5. Name	Same as 248	
285_2DV5CD	3 rd Defects Vehicle 5. Code	Same as 249	
286_3DV5NA	4 th Defects Vehicle 5. Name	Same as 248	
287_3DV5CD	4 th Defects Vehicle 5. Code	Same as 249	
288_DaV1NA	Damage to vehicle 1. Name	None	
		Front	
		Rear	
		Right	
		Left	
		Roof	
		Multiple	
		Other	
289_DaV1CD	Damage to vehicle 1. Code	1	None
		2	Front
		3	Rear
		4	Right
		5	Left
		6	Roof
		7	Multiple
		8	Other
290_DaV2NA	Damage to vehicle 2. Name	Same as 288	
291_DaV2CD	Damage to vehicle 2. Code	Same as 289	
292_DaV3NA	Damage to vehicle 3. Name	Same as 288	
293_DaV3CD	Damage to vehicle 3. Code	Same as 289	
294_DaV4NA	Damage to vehicle 4. Name	Same as 288	
295_DaV4CD	Damage to vehicle 4. Code	Same as 289	
296_DaV5NA	Damage to vehicle 5. Name	Same as 288	

Column Code	Variable	Name / Code / Text / Number	Code Name
297_DaV5CD	Damage to vehicle 5. Code	Same as 289	
298_OwV1NA	Vehicle 1 Owner. Name	Government	
		Corporation	
		Diplomatic	
		Private/Personal	
		Public	
		Police	
		Army	
299_OwV1CD	Vehicle 1 Owner. Code	1	Government
		2	Corporation
		3	Diplomatic
		4	Private/Personal
		5	Public
		6	Police
		7	Army
300_OwV2NA	Vehicle 2 Owner. Name	Same as 298	
301_OwV2CD	Vehicle 2 Owner. Code	Same as 299	
302_OwV3NA	Vehicle 3 Owner. Name	Same as 298	
303_OwV3CD	Vehicle 3 Owner. Code	Same as 299	
304_OwV4NA	Vehicle 4 Owner. Name	Same as 298	
305_OwV4CD	Vehicle 4 Owner. Code	Same as 299	
306_OwV5NA	Vehicle 5 Owner. Name	Same as 298	
307_OwV5CD	Vehicle 5 Owner. Code	Same as 299	
308_D1iVNA	Driver 1 in Vehicle number. Name	Unknown	
		Veh.1	
		Veh.2	
		Veh.3	
		Veh.4	
		Veh.5	
309_D1iVCD	Driver 1 in Vehicle number. Code	9	Unknown
		1	Veh.1
		2	Veh.2
		3	Veh.3
		4	Veh.4
		5	Veh.5
310_D2iVNA	Driver 2 in Vehicle number. Name	Same as 308	
311_D2iVCD	Driver 2 in Vehicle number. Code	Same as 309	
312_D3iVNA	Driver 3 in Vehicle number. Name	Same as 308	
313_D3iVCD	Driver 3 in Vehicle number. Code	Same as 309	

Column Code	Variable	Name / Code / Text / Number	Code Name
	Code		
314_D4iVNA	Driver 4 in Vehicle number. Name	Same as 308	
315_D4iVCD	Driver 4 in Vehicle number. Code	Same as 309	
316_D5iVNA	Driver 5 in Vehicle number. Name	Same as 308	
317_D5iVCD	Driver 5 in Vehicle number. Code	Same as 309	
318_D1IsAt	Driver 1 License Issued at	Text	
319_D2IsAt	Driver 2 License Issued at	Text	
320_D3IsAt	Driver 3 License Issued at	Text	
321_D4IsAt	Driver 4 License Issued at	Text	
322_D5IsAt	Driver 5 License Issued at	Text	
323_LTD1NA	License Type Driver 1. Name	Full License	
		Provisional License	
		Probationary	
		Unlicensed	
		Other	
324_LTD1CD	License Type Driver 1. Code	1	Full License
		2	Provisional License
		3	Probationary
		4	Unlicensed
		5	Other
325_LTD2NA	License Type Driver 2. Name	Same as 323	
326_LTD2CD	License Type Driver 2. Code	Same as 324	
327_LTD3NA	License Type Driver 3. Name	Same as 323	
328_LTD3CD	License Type Driver 3. Code	Same as 324	
329_LTD4NA	License Type Driver 4. Name	Same as 323	
330_LTD4CD	License Type Driver 4. Code	Same as 324	
331_LTD5NA	License Type Driver 5. Name	Same as 323	
332_LTD5CD	License Type Driver 5. Code	Same as 324	
333_SeD1NA	Sex Driver 1. Name	male	
		female	
		unknown	
		Other	
334_SeD1CD	Sex Driver 1. Code	1	male
		2	female
		3	unknown
		4	Other
335_SeD2NA	Sex Driver 2. Name	Same as 333	
336_SeD2CD	Sex Driver 2. Code	Same as 334	
337_SeD3NA	Sex Driver 3. Name	Same as 333	

Column Code	Variable	Name / Code / Text / Number	Code Name
338_SeD3CD	Sex Driver 3. Code	Same as 334	
339_SeD4NA	Sex Driver 4. Name	Same as 333	
340_SeD4CD	Sex Driver 4. Code	Same as 334	
341_SeD5NA	Sex Driver 5. Name	Same as 333	
342_SeD5CD	Sex Driver 5. Code	Same as 334	
343_AgeDr1	Age Diver 1	Number	
344_AgeDr2	Age Diver 2	Number	
345_AgeDr3	Age Diver 3	Number	
346_AgeDr4	Age Diver 4	Number	
347_AgeDr5	Age Diver 5	Number	
348_InD1NA	Injury Driver 1. Name	Fatal	
		Serious	
		Minor	
		Uninjured	
349_InD1CD	Injury Driver1. Code	2	Fatal
		2	Serious
		3	Minor
		4	Uninjured
350_InD2NA	Injury Driver 2. Name	Same as 348	
351_InD2CD	Injury Driver2. Code	Same as 349	
352_InD3NA	Injury Driver 3. Name	Same as 348	
353_InD3CD	Injury Driver3. Code	Same as 349	
354_InD4NA	Injury Driver 4. Name	Same as 348	
355_InD4CD	Injury Driver4. Code	Same as 349	
356_InD5NA	Injury Driver 5. Name	Same as 348	
357_InD5CD	Injury Driver5. Code	Same as 349	
358_E1D1NA	Error 1 Driver 1. Name	None	
		Fatigued/Asleep	
		Inattentive	
		Too Fast	
		Too Close	
		No Signal	
		Bad Overtaking	
		Bad Turning	
		Other	
359_E1D1CD	Error1 Driver1. Code	1	None
		2	Fatigued/Asleep
		3	Inattentive
		4	Too Fast
		5	Too Close
		6	No Signal
		7	Bad Overtaking
		8	Bad Turning
		9	Other

Column Code	Variable	Name / Code / Text / Number	Code Name
360_E2D1NA	Error2 Driver 1. Name	Same as 358	
361_E2D1CD	Error2 Driver1. Code	Same as 359	
362_E3D1NA	Error3 Driver 1. Name	Same as 358	
363_E3D1CD	Error3 Driver 1. Code	Same as 359	
364_E1D2NA	Error1 Driver 2. Name	Same as 358	
365_E1D2CD	Error1 Driver2. Code	Same as 359	
366_E2D2NA	Error2 Driver 2. Name	Same as 358	
367_E2D2CD	Error2 Driver2. Code	Same as 359	
368_E3D2NA	Error3 Driver 2. Name	Same as 358	
369_E3D2CD	Error3 Driver 2. Code	Same as 359	
370_E1D3NA	Error1 Driver 3. Name	Same as 358	
371_E1D3CD	Error1 Driver3. Code	Same as 359	
372_E2D3NA	Error2 Driver 3. Name	Same as 358	
373_E2D3CD	Error2 Driver3. Code	Same as 359	
374_E3D3NA	Error3 Driver 3. Name	Same as 358	
375_E3D3CD	Error3 Driver 3. Code	Same as 359	
376_E1D4NA	Error1 Driver 4. Name	Same as 358	
377_E1D4CD	Error1 Driver4. Code	Same as 359	
378_E2D4NA	Error2 Driver 4. Name	Same as 358	
379_E2D4CD	Error2 Driver4. Code	Same as 359	
380_E3D4NA	Error3 Driver 4. Name	Same as 358	
381_E3D4CD	Error3 Driver 4. Code	Same as 359	
382_E1D5NA	Error1 Driver 5. Name	Same as 358	
383_E1D5CD	Error1 Driver5. Code	Same as 359	
384_E2D5NA	Error2 Driver 5. Name	Same as 358	
385_E2D5CD	Error2 Driver5. Code	Same as 359	
386_E3D5NA	Error3 Driver 5. Name	Same as 358	
387_E3D5CD	Error3 Driver 5. Code	Same as 359	
388_AID1NA	Alcohol Suspected / Not Suspected Driver 1. Name	Not Suspected	
		Suspected	
389_AID1CD	Alcohol Suspected / Not Suspected Driver1. Code	1	Not Suspected
		2	Suspected
390_AID2NA	Alcohol Suspected / Not Suspected Driver 2. Name	Same as 388	
391_AID2CD	Alcohol Suspected / Not Suspected Driver2. Code	Same as 389	
392_AID3NA	Alcohol Suspected / Not Suspected Driver 3. Name	Same as 388	
393_AID3CD	Alcohol Suspected / Not Suspected Driver 3. Code	Same as 389	
394_AID4NA	Alcohol Suspected / Not Suspected Driver 4. Name	Same as 388	

Column Code	Variable	Name / Code / Text / Number	Code Name
395_AID4CD	Alcohol Suspected / Not Suspected Driver4. Code	Same as 389	
396_AID5NA	Alcohol Suspected / Not Suspected Driver 5. Name	Same as 388	
397_AID5CD	Alcohol Suspected / Not Suspected Driver5. Code	Same as 389	
398_BHD1YN	Seat belt or helmet in use Driver 1. Y/N	Same as 51	
399_BHD1CD	Seat belt or helmet in use Driver 1. Code	Same as 52	
400_BHD2YN	Seat belt or helmet in use Driver 2. Y/N	Same as 51	
401_BHD2CD	Seat belt or helmet in use Driver 2. Code	Same as 52	
402_BHD3YN	Seat belt or helmet in use Driver 3. Y/N	Same as 51	
403_BHD3CD	Seat belt or helmet in use Driver 3. Code	Same as 52	
404_BHD4YN	Seat belt or helmet in use Driver 4. Y/N	Same as 51	
405_BHD4CD	Seat belt or helmet in use Driver 4. Code	Same as 52	
406_BHD5YN	Seat belt or helmet in use Driver 5. Y/N	Same as 51	
407_BHD5CD	Seat belt or helmet in use Driver 5. Code	Same as 52	
408_P1iVNA	Passenger 1 in Vehicle number. Name	Same as 308	
409_P1iVCD	Passenger 1 in Vehicle number. Code	Same as 309	
410_P2iVNA	Passenger 2 in Vehicle number. Name	Same as 308	
411_P2iVCD	Passenger 2 in Vehicle number. Code	Same as 309	
412_P3iVNA	Passenger 3 in Vehicle number. Name	Same as 308	
413_P3iVCD	Passenger 3 in Vehicle number. Code	Same as 309	
414_P4iVNA	Passenger 4 in Vehicle number. Name	Same as 308	
415_P4iVCD	Passenger 4 in Vehicle number. Code	Same as 309	
416_P5iVNA	Passenger 5 in Vehicle number. Name	Same as 308	
417_P5iVCD	Passenger 5 in Vehicle number.	Same as 309	

Column Code	Variable	Name / Code / Text / Number	Code Name
	Code		
418_SeP1NA	Sex Passenger 1. Name	Same as 333	
419_SeP1CD	Sex Passenger1. Code	Same as 334	
420_SeP2NA	Sex Passenger 2. Name	Same as 333	
421_SeP2CD	Sex Passenger2. Code	Same as 334	
422_SeP3NA	Sex Passenger 3. Name	Same as 333	
423_SeP3CD	Sex Passenger3. Code	Same as 334	
424_SeP4NA	Sex Passenger 4. Name	Same as 333	
425_SeP4CD	Sex Passenger4. Code	Same as 334	
426_SeP5NA	Sex Passenger 5. Name	Same as 333	
427_SeP5CD	Sex Passenger5. Code	Same as 334	
428_AgePa1	Age Passenger 1	Number	
429_AgePa2	Age Passenger 2	Number	
430_AgePa3	Age Passenger 3	Number	
431_AgePa4	Age Passenger 4	Number	
432_AgePa5	Age Passenger 5	Number	
433_InP1NA	Injury Passenger 1. Name	Same as 348	
434_InP1CD	Injury Passenger1. Code	Same as 349	
435_InP2NA	Injury Passenger 2. Name	Same as 348	
436_InP2CD	Injury Passenger2. Code	Same as 349	
437_InP3NA	Injury Passenger 3. Name	Same as 348	
438_InP3CD	Injury Passenger3. Code	Same as 349	
439_InP4NA	Injury Passenger 4. Name	Same as 348	
440_InP4CD	Injury Passenger4. Code	Same as 349	
441_InP5NA	Injury Passenger 5. Name	Same as 348	
442_InP5CD	Injury Passenger5. Code	Same as 349	
443_PoP1NA	Position of Passenger 1. Name	Front Seat	
		Rear Seat	
		M/cycle Passenger	
		Bus Passenger	
		Outside-Sitting	
		Outside-Standing	
		Car Passenger	
		Pickup/Truck Passenger	
		Sitting on top	
		Standing Inside	
		Hanging on side or back	
		In back of open Ute or truck	
444_PoP1CD	Position of Passenger1. Code	1	Front Seat

Column Code	Variable	Name / Code / Text / Number	Code Name
		2	Rear Seat
		3	M/cycle Passenger
		4	Bus Passenger
		5	Outside-Sitting
		6	Outside-Standing
		7	Car Passenger
		8	Pickup/Truck Passenger
		9	Sitting on top
		10	Standing Inside
		11	Hanging on side or back
		12	In back of open Ute or truck
445_PoP2NA	Position of Passenger 2. Name	Same as 443	
446_PoP2CD	Position of Passenger 2. Code	Same as 444	
447_PoP3NA	Position of Passenger 3. Name	Same as 443	
448_PoP3CD	Position of Passenger 3. Code	Same as 444	
449_PoP4NA	Position of Passenger 4. Name	Same as 443	
450_PoP4CD	Position of Passenger 4. Code	Same as 444	
451_PoP5NA	Position of Passenger 5. Name	Same as 443	
452_PoP5CD	Position of Passenger 5. Code	Same as 444	
453_APa1NA	Action Passenger 1. Name	None	
		Boarding	
		Alighting	
		Falling	
		Other	
454_APa1CD	Action Passenger 1. Code	1	None
		2	Boarding
		3	Alighting
		4	Falling
		5	Other
455_APa2NA	Action Passenger 2. Name	Same as 453	
456_APa2CD	Action Passenger 2. Code	Same as 454	
457_APa3NA	Action Passenger 3. Name	Same as 453	
458_APa3CD	Action Passenger 3. Code	Same as 454	
459_APa4NA	Action Passenger 4. Name	Same as 453	
460_APa4CD	Action Passenger 4. Code	Same as 454	
461_APa5NA	Action Passenger 5. Name	Same as 453	
462_APa5CD	Action Passenger 5. Code	Same as 454	
463_BPa1YN	Seat belt or helmet in use Passenger 1. Y/N	Same as 51	
464_BPa1CD	Seat belt or helmet in use Passenger 1. Code	Same as 52	

Column Code	Variable	Name / Code / Text / Number	Code Name
465_BPa2YN	Seat belt or helmet in use Passenger 2. Y/N	Same as 51	
466_BPa2CD	Seat belt or helmet in use Passenger 2. Code	Same as 52	
467_BPa3YN	Seat belt or helmet in use Passenger 3. Y/N	Same as 51	
468_BPa3CD	Seat belt or helmet in use Passenger 3. Code	Same as 52	
469_BPa4YN	Seat belt or helmet in use Passenger 4. Y/N	Same as 51	
470_BPa4CD	Seat belt or helmet in use Passenger 4. Code	Same as 52	
471_BPa5YN	Seat belt or helmet in use Passenger 5. Y/N	Same as 51	
472_BPa5CD	Seat belt or helmet in use Passenger 5. Code	Same as 52	
473_APa1NA	Alcohol Suspected / Not Suspected Passenger 1. Name	Same as 388	
474_APa1CD	Alcohol Suspected / Not Suspected Passenger 1. Code	Same as 389	
475_APa2NA	Alcohol Suspected / Not Suspected Passenger 2. Name	Same as 388	
476_APa2CD	Alcohol Suspected / Not Suspected Passenger 2. Code	Same as 389	
477_APa3NA	Alcohol Suspected / Not Suspected Passenger 3. Name	Same as 388	
478_APa3CD	Alcohol Suspected / Not Suspected Passenger 3. Code	Same as 389	
479_APa4NA	Alcohol Suspected / Not Suspected Passenger 4. Name	Same as 388	
480_APa4CD	Alcohol Suspected / Not Suspected Passenger 4. Code	Same as 389	
481_APa5NA	Alcohol Suspected / Not Suspected Passenger 5. Name	Same as 388	
482_APa5CD	Alcohol Suspected / Not Suspected Passenger 5. Code	Same as 389	
483_TPe1NA	Direction of Travel Pedestrian 1. Name	Same as 196	
484_TPe1CD	Direction of Travel Pedestrian 1. CODE	Same as 197	
485_SPe1NA	Sex Pedestrian 1. Name	Same as 333	
486_SPe1CD	Sex Pedestrian 1. Code	Same as 334	
487_SPe2NA	Sex Pedestrian 2. Name	Same as 333	
488_SPe2CD	Sex Pedestrian 2. Code	Same as 334	
489_SPe3NA	Sex Pedestrian 3. Name	Same as 333	

Column Code	Variable	Name / Code / Text / Number	Code Name
490_SPe3CD	Sex Pedestrian 3. Code	Same as 334	
491_SPe4NA	Sex Pedestrian 4. Name	Same as 333	
492_SPe4CD	Sex Pedestrian 4. Code	Same as 334	
493_SPe5NA	Sex Pedestrian 5. Name	Same as 333	
494_SPe5CD	Sex Pedestrian 5. Code	Same as 334	
495_AgePe1	Age Pedestrian 1	Number	
496_AgePe2	Age Pedestrian 2	Number	
497_AgePe3	Age Pedestrian 3	Number	
498_AgePe4	Age Pedestrian 4	Number	
499_AgePe5	Age Pedestrian 5	Number	
500_IPe1NA	Injury Pedestrian 1. Name	Same as 348	
501_IPe1CD	Injury Pedestrian 1. Code	Same as 349	
502_IPe2NA	Injury Pedestrian 2. Name	Same as 348	
503_IPe2CD	Injury Pedestrian 2. Code	Same as 349	
504_IPe3NA	Injury Pedestrian 3. Name	Same as 348	
505_IPe3CD	Injury Pedestrian 3. Code	Same as 349	
506_IPe4NA	Injury Pedestrian 4. Name	Same as 348	
507_IPe4CD	Injury Pedestrian 4. Code	Same as 349	
508_IPe5NA	Injury Pedestrian 5. Name	Same as 348	
509_IPe5CD	Injury Pedestrian 5. Code	Same as 349	
510_LPe1NA	Location Pedestrian 1. Name	<i>On Pedestrian Crossing</i>	
		<i>Within 50m Ped Crossing</i>	
		<i>On Central Refuge</i>	
		<i>In Road centre not 1-3</i>	
		<i>On Footpath/Verge</i>	
511_LPe1CD	Location Pedestrian 1. Code	1	<i>On Pedestrian Crossing</i>
		2	<i>Within 50m Ped Crossing</i>
		3	<i>On Central Refuge</i>
		4	<i>In Road centre not 1-3</i>
		5	<i>On Footpath/Verge</i>
512_LPe2NA	Location Pedestrian 2. Name	Same as 510	
513_LPe2CD	Location Pedestrian 2. Code	Same as 511	
514_LPe3NA	Location Pedestrian 3. Name	Same as 510	
515_LPe3CD	Location Pedestrian 3. Code	Same as 511	
516_LPe4NA	Location Pedestrian 4. Name	Same as 510	
517_LPe4CD	Location Pedestrian 4. Code	Same as 511	
518_LPe5NA	Location Pedestrian 5. Name	Same as 510	

Column Code	Variable	Name / Code / Text / Number	Code Name
519_LPe5CD	Location Pedestrian 5. Code	Same as 511	
520_APe1NA	Action Pedestrian 1. Name	<i>None</i>	
		<i>Crossing Road</i>	
		<i>Walking Alone Road</i>	
		<i>Walking along Edge</i>	
		<i>Playing on Road</i>	
		<i>On Footpath</i>	
		<i>Working</i>	
		<i>Lying</i>	
		<i>Cross B/t Vehicles</i>	
521_APe1CD	Action Pedestrian 1. Code	1	<i>None</i>
		2	<i>Crossing Road</i>
		3	<i>Walking Alone Road</i>
		4	<i>Walking along Edge</i>
		5	<i>Playing on Road</i>
		6	<i>On Footpath</i>
		7	<i>Working</i>
		8	<i>Lying</i>
		9	<i>Cross B/t Vehicles</i>
522_APe2NA	Action Pedestrian 2. Name	Same as 520	
523_APe2CD	Action Pedestrian 2. Code	Same as 521	
524_APe3NA	Action Pedestrian 3. Name	Same as 520	
525_APe3CD	Action Pedestrian 3. Code	Same as 521	
526_APe4NA	Action Pedestrian 4. Name	Same as 520	
527_APe4CD	Action Pedestrian 4. Code	Same as 521	
528_APe5NA	Action Pedestrian 5. Name	Same as 520	
529_APe5CD	Action Pedestrian 5. Code	Same as 521	
530_Pe1ANA	Alcohol Suspected / Not Suspected Pedestrian 1. Name	Same as 388	
531_Pe1ACD	Alcohol Suspected / Not Suspected Pedestrian 1. Code	Same as 389	
532_Pe2ANA	Alcohol Suspected / Not Suspected Pedestrian 2. Name	Same as 388	
533_Pe2ACD	Alcohol Suspected / Not Suspected Pedestrian 2. Code	Same as 389	
534_Pe3ANA	Alcohol Suspected / Not Suspected Pedestrian 3. Name	Same as 388	
535_Pe3ACD	Alcohol Suspected / Not Suspected Pedestrian 3. Code	Same as 389	
536_Pe4ANA	Alcohol Suspected / Not	Same as 388	

Column Code	Variable	Name / Code / Text / Number	Code Name
	Suspected Pedestrian 4. Name		
537_Pe4ACD	Alcohol Suspected / Not Suspected Pedestrian 4. Code	Same as 389	
538_Pe5ANA	Alcohol Suspected / Not Suspected Pedestrian 5. Name	Same as 388	
539_Pe5ACD	Alcohol Suspected / Not Suspected Pedestrian 5. Code	Same as 389	
540_TotErr	Total Error remaining	Number	
541_DatEnt	Date CRF entered	Date	
542_DatStr	Date Stored into Database	Date	

APPENDIX MM6

DCC Template

Appendix 6

Nepal Descriptive Crash Codes (DCC)

	100 Mult. Vehicle Crashes						200 Single Vehicle Crashes				300	400
	110 Head On	120 Rear End	130 At Angle	170 Side Swipe	190 Overtake	210 Overtaken	230 Hit Object On Road	250 Hit Object Off Road	270 Hit Parked Vehicle	290 Hit Animal	300 Pedestrian	400 Passenger
0	 Thru-Thru 110	 Thru-Thru 120	 Thru-Thru 130	 Side Swipe 170	 O/T-O/Ten 190	 O/Ten On 210	 Hit Object On Road 230	 Hit Object Off Road 250	 Hit Parked V 270	 Hit Animal 290	 Crash Ped 300	 Striking 400
1	 Right-Thru 111	 Right-Rear 121	 Right-Thru 131	 Right-Side 171	 O/T-Right 191	 O/T Right On 211	 Hit Object On Rd 231	 Hit Object Off Rd 251	 Hit Parked V 271		 Crash Ped 301	 Striking 401
2	 Left-Thru 112	 Left-Rear 122	 Left-Thru 132		 O/T-Left 192	 O/T Left On 212	 Hit Object On Rd 232	 Hit Object Off Rd 252			 Crash Ped 302	 Striking 402
3	 Right-Thru 113		 Right-Thru 133	 Right-Side 173	 O/T-Right 193	 O/T Right On 213	 Hit Object On Rd 233	 Hit Object Off Rd 253			 Crash Ped 303	 Striking 403
4	 Left-Thru 114		 Left-Thru 134	 Left-Side 174	 O/T-Left 194	 O/T Left On 214	 Hit Object On Rd 234	 Hit Object Off Rd 254			 Crash Ped 304	 Striking 404
5	 Left-Thru 115		 Left-Thru 135				 Hit Object On Rd 235	 Hit Object Off Rd 255			 Crash Ped 305	
6	 Right-Thru 116	 Right-Rear 126	 Right-Thru 136		 O/T-Right 196						 Crash Ped 306	
7			 Left-Thru 137								 Crash Ped 307	
8			 Right-Thru 138									
9	100 Other Specified	200 Other Specified	300 Other Specified	400 Other Specified	500 Other Specified	600 Other Specified					300 Pedestrian	400 Passenger

APPENDIX MM 7

Headings for new Police Stations

Appendix 7

Headings for Police Station List

Region	DIST_NAME	Office	Station No.	R No.	Z No.	Zone	D No.
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APPENDIX MM8

Headings for new Roads

Appendix 8

Headings for Road List

Note: Heading derives from DOR and DOLIDAR

Lookup	District Name	dcode	road_name	road_code	road_class		road_ori	road_des		start_ch	end_ch	total_len	geo_len
Value	dist_name	Dist. No.	road_name	road_refno	road_class	link_code	link_name			link_from	link_to	link_len	

APPENDIX 12

NRCDS USERS' MANUAL

1 Introduction

The Nepal Road Crash Database System Project (NRCDSP) developed the Nepal Road Crash Database (NRCD) in 2016. The database is an EXCEL storage system of data collected by Nepal Police Services (NPS) on a Crash Report Form (CRF). Appendix1 provides a copy of the CRF.

The police were provided with a How to Complete the CRF (HCCRF) guide to help improve data collection and identification of crash location. The aim of the guide is to improve the consistency and accuracy of data recorded on the CRF. Appendix 2 is the HCCRF.

NPS officers using the Data Entry Screen (DES) at Data Entry Locations (DEL), enter the CRFs in to the first stage of computerising the raw data. The DES is designed to validate data, by eliminating data conflicts on the CRF, confirm location of the crash accurately and to code the crash reports in to crash types or Descriptive Crash Codes (DCC). It is important to note it is not the responsibility of NPS to code the crashes, only to help collect as much data as possible and enter the information into a computer.

This raw data is the property of NPS as it contains personal information and information only relevant to police procedures. The Traffic Directorate of Nepal Police Services (TD/NPS) then sends a sub-set of crash data, removing personal information and information only relevant to police procedure, to the National Road Safety Council (NRSC). Staff using a second EXCEL system, the Data Checking and Saving Screen (DCSS) to check there is no duplication of crash records, any remaining conflicts of entered variables are removed and coding DCC has been achieved (If automatic coding was not achieved in DES).

The final set of crash records are stored in NRCD EXCEL with a unique Crash Identification Number (CIN) and may be extracted as an EXCEL work sheet. The NRCD does not perform analysis on the data itself; it is the repository of road crash data suitable for distribution, collected by NPS.

2 Geographic Information System

The CRF that was in use at the commencement of this data base did not have Latitude or Longitude coordinates on the form. The HCCRF provided to police gives instructions on where to include this information, along with help to improve data collection and identification of crash location. The database will also contain the names of roads the crash was on, nearest intersecting roads and/or landmarks.

This information is crucial for analyst to identify clusters of road crashes on the road network.

3 Definitions

The Nepal Road Crash Database Management Manual (NRCDMM) defines terms and variables collected in the database. The NRCDMM sets out these definitions; terms and procedures to help ensure consistency in the data entered in the database. The following terms are some of the definitions in the NRCDMM.

- Road, road related areas, non-standard roads and special types of roads;
- Vehicles such as motorcycle, bicycle, wheeled recreational devices, wheel toys used on roads
- Road users such as drivers, occupants of vehicles, riders, controllers, passengers and pedestrians
- Objects on road
- Road crash, road crash exclusions, crash after stabilised situation, crash involving deliberate intent, crash involving legal intervention and crash not attribute able to vehicle movement
- Vehicle motion (vehicle in transit, vehicle stationary in transit, parked vehicle)
- Crash location (on road, on road related area, off road), crash casualty (fatal, serious injury, minor injury, uninjured);
- Road features (intersections, lane, LATM device, link)

4 Descriptive Crash Codes

The NRCDMM gives full descriptions of DCC, which is the grouping of crashes in to crash types. Appendix 3 is a template of the diagram matical representation of the set of DCC used in the NRCD. Practitioners need to refer to the management manual for full definitions.

5 List of Variables

Appendix 4 is a table, which gives a full list of all variables that are collected in the DES and loaded into the NRCD.

There are four columns in the table:

1. Column Code

- a. This column identifies the column label used in the database.
- b. The first two or three digits are the column number
- c. The last two digits represents the format of the data in the cell;
 - i. No – Number
 - ii. TX – Text
 - iii. NT – Number and/or Text
 - iv. NA – Name
 - v. CD – Code
 - vi. YN – Yes/No
- d. The middle four digits will be letters from the variable description

2. Variable Description

- a. This in most cases is the name or term used on the CRF or in DES. It is a short description of the variable collected

3. Name/ Code/ Text/ Number

- a. This refers to the format the data is in, in this column

4. Code Name

- a. If the previous column was a code, therefore a number value, this column will name that code
 - i. For example if column 3 was the code1 for severity column 4 in dicates1 represents Fatal.

6 DataUse

Examples

These are just a few examples of questions that maybe asked of the data:

- 1. What is the relationship between location of passenger in vehicle and sever it of injury?
 - As both the sequestions are answered on the CRF, where the passenger was and what was their injury this correlation may be investigated.
- 2. What is the relationship between loading issues on trucks and involvement in crashes?
 - As the CRF asks questions about loading, type of vehicle and crash involvement these

type of relationships may be investigated.

3. Relationship between age and crash involvement.

7 Data use warnings.

There is a very long list of examples that could be cited but there are a few warnings needed.

The database needs to contain a sufficient amount of data before analysis is advisable. Generally speaking in relation to road crash safety analysis a minimum of three years is best practice. This does not rule out the use of data in early stages as supporting data for other types of analysis.

- Looking at a simple one on one comparison with in the data base such as the comparison of injuries between the controller on a motorcycle wearing a helmet and the pillion passenger on the same motorcycle not wearing a helmet may not need a long series of time to support an argument of helmet use.

The same simple comparisons apply to items like seatbelt use, defects and location off passengers on a vehicle.

8 The data in this data base may need supporting data from other databases.

Take the example above about over loading being an issue in truck crashes. Here the variable indicating the number of trucks in the fleet are needed for comparison to other types of vehicles. There as on for this is to establish if the number of truck crashes is disproportionally higher then other types of vehicles. Also information on “exposure” to risk, are truck more at risk because of kilo metres travelled. This supporting information is not in the NRCD.

The second example above of relationship between age of driver and involvement in crash needs a population variable to establish if an age group is disproportionally represented in crash involvement.

9 Caution in relation to some of the data variables and the questions used to collect the answers.

The NRCDSP makes recommendation for changes overtime to the CRF, so users of the data need to check what question was used to collect the data.

An example of this is condition of road surface; on the CRF at the commencement of the data collection for the NRCD the possible answers are “Good” or “Damaged”. Both the question and answers are subjective, that is an opinion, not scientifically measurable. Unless you know the skill set of the officer who gave the answer, the value of the answer must be treated with caution in analysis.

DES has extra questions in relation to condition of surface, the presence of potholes, rutting, and

corrugations or uneven, answers to these questions may give a measurable variable of surface condition. Over time it is hoped that these questions are added to the CRF, but in the interim the data entry officer is requested to note any of this information if it is present in the officers' description of the crash event.

10 Requesting Data

Practitioners may request data using the Request form, which has been drafted in Appendix 5. The Request Form covers the following:

- Contact information for the supply of data
- Details of the data user
- Datauser's contact details
- For what purpose they want the data? This may be the question they are asking about certain events on the road network or types of crashes or locations. It may be that data collected in the NRCD is supportive of their studies.
- Date range of data request
- The variables they are requesting (these are the column codes).

NRSC staff or their agents acting on their behalf to supply the data may consult with the user to help with the selection of variables and supporting documentation, such as definitions and collection methods.

Appendices

AppendixUM1 CRF

AppendixUM2 How to complete CRF

AppendixUM3 DCC Template

AppendixUM4 List of all data variables collected

AppendixUM5 How to request data

APPENDIX UM1

CRF

VEHICLE 1		38. Vehicle Registration No. 		DRIVER 1		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue 		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
1. Bicycle 2. Rickshaw 3. Motor Cycle 4. Autorickshaw 5. Car 6. Pick up 7. Mini Bus 8. Bus 9. Truck 10. Other		1. Right Turn 2. Left Turn 3. 'U' Turn 4. Cross Traffic 5. Merging 6. Diverging 7. Overtaking 8. Going Ahead 9. Reversing 10. Sudden Start 11. Sudden Stop 12. Parked (off) Road 13. Parked (on) Road 14. Other		48. Driver Sex 		49. Age 	
41. Loading		42. Vehicle Defect		43. Vehicle Damage		44. Ownership	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Front 3. Rear 4. Right 5. Left 6. Roof 7. Multiple 8. Other		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army	
51. Driver Error		52. Alcohol		53. Seat belt/Helmet in use			
1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		1. Fatal 2. Serious 3. Minor 4. Uninjured		1. Not Suspected 2. Suspected			

VEHICLE 2		38. Vehicle Registration No. 		DRIVER 2		Driver's Name 	
Owner's Name & Address 				Driver's Address 			
Third Party Insurance <input type="checkbox"/> Yes <input type="checkbox"/> No		Make 		45. Licence Number 		47. Licence Type	
39. Vehicle Type		40. Vehicle Maneuver		46. Place of Issue 		1. Full Licence 2. Provisional Licence 3. Probationary 4. Unlicensed	
1. Bicycle 2. Rickshaw 3. Motor Cycle 4. Autorickshaw 5. Car 6. Pick up 7. Mini Bus 8. Bus 9. Truck 10. Other		1. Right Turn 2. Left Turn 3. 'U' Turn 4. Cross Traffic 5. Merging 6. Diverging 7. Overtaking 8. Going Ahead 9. Reversing 10. Sudden Start 11. Sudden Stop 12. Parked (off) Road 13. Parked (on) Road 14. Other		48. Driver Sex 		49. Age 	
41. Loading		42. Vehicle Defect		43. Vehicle Damage		44. Ownership	
1. Legally Loaded 2. Overloaded 3. Insecure Load 4. Protruding Load 5. Other Improper Load		1. None 2. Brakes 3. Steering 4. Tyres 5. Lights 6. Multiple 7. Other		1. None 2. Front 3. Rear 4. Right 5. Left 6. Roof 7. Multiple 8. Other		1. Government 2. Corporation 3. Diplomatic 4. Private/ Personal 5. Public 6. Police 7. Army	
51. Driver Error		52. Alcohol		53. Seat belt/Helmet in use			
1. None 2. Fatigued/Asleep 3. Inattentive 4. Too Fast 5. Too Close 6. No Signal 7. Bad Overtaking 8. Bad Turning 9. Other		1. Fatal 2. Serious 3. Minor 4. Uninjured		1. Not Suspected 2. Suspected			

Passenger Casualties							
Name & Address				Complete tables using codes from bottom panel			
	54. Veh. No	55. Sex	56. Age	57. Injury	58. Position	59. Action	60. Belts/Helmets
1							
2							
3							
4							

Pedestrian Casualties							
Name & Address				61. Sex	62. Age	63. Injury	64. Location
1							
2							
3							

57/63. Passenger Injury		58. Passenger Position		59. Passenger Action		60. Seat Belt/Helmet in Use		64. Pedestrian Location		65. Pedestrian Action	
1. Fatal 2. Serious 3. Minor		1. Front Seat 2. Rear Seat 3. M/cycle Passenger 4. Bus Passenger 5. Outside-Sitting 6. Outside-Standing		1. None 2. Boarding 3. Alighting 4. Falling 5. Other		1. Yes 2. No 66. Alcohol 1. Not Suspected 2. Suspected		1. On Pedestrian Crossing 2. Within 50m Ped. Crossing 3. On Central Refuge 4. In Road Centre not in 1-3 5. On Footpath/Verge		1. None 2. Crossing Road 3. Walking along Road 4. Walking along Edge 5. Playing on Road 6. On Footpath	

APPENDIX UM2

How to complete the CRF

How to Complete Crash Report Form (HCCRF) Nepal Police

Complete as much detail as possible on the CRF. Use extra forms if details are needed form or e passengers, vehicles, drivers or pedestrians.

Strike through the most appropriate response on the CRF. E.g.

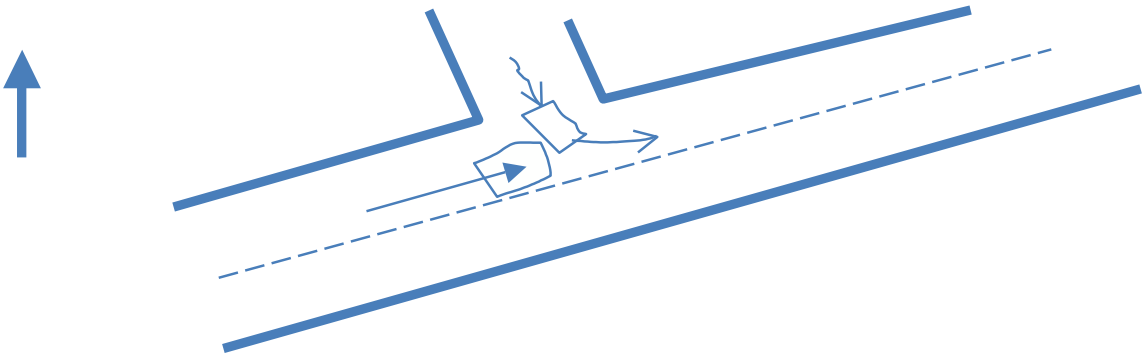
23. Road Condition

1. Good

~~2. Damaged~~

1	Report No.	As per NPS instructions.
2	Computer No.	This is the DELID as per NRCDSMM.
3	Police Station	Police Station Name or Number.
4	District	District Number.
5	No. Of Vehicles Involved	Number of vehicles with drivers. Exclude parked vehicles with no drivers.
6	No. Of Drivers Casualties	Included total number of drivers even uninjured.
7	No. Of Passenger Casualties	Total number of passengers injured.
8	No. Of Pedestrian Casualties	Total number of pedestrians injured.
9	Accident Severity	This is the highest severity of all casualties involved.
10, 11 and 12	Date Day/Month/Year	Use the Gregorian calendar (or Western) internationally accepted civil calendar, as it is suitable for data analysis.
13	Day of week	Monday, Tuesday etc.
14	Time (24 hours)	E.G. Midnight is 00:00 / Midday is 12:00 / 1pm is 13:00
15	Junction Type	Strike through the junction that most closely matches or write short description if no match.
16	Traffic Control	The traffic control must be facing or apply to the vehicles involved. That is not on a side street, which neither vehicle came from.
17	Collision Type	
	1 Head On 2 or more vehicles coming from opposing directions and no pedestrians.	6 or 7 Hit Object in / Off Road Single vehicle and an object on or off the road.
	2 Rear End 2 or more vehicles from same direction one behind the other and no pedestrians.	8 Hit Parked Vehicle Single vehicle hitting at least one parked vehicle. No pedestrians.
	3 Right Angle 2 or more vehicles from adjacent angles at intersection and no pedestrians.	9 Hit Pedestrian Single vehicle and one or more pedestrians.
	4 Side Swipe 2 or more vehicles from same direction travelling side by side and no pedestrians.	10 Hit Animal Single vehicle and animal on or off the road. No pedestrians.
	5 Overturned Vehicle Single vehicle that overturns on the road. No pedestrians.	11 Other Give details.
18, 19, 20, 21, 22, 23, 24, 25, and 26	Strike through the most accurate response.	
Name of City / Town		Name of town or city the crash occurred.
Location		Name of Road Crash was on.
Locate how many Kilometers from Town/Village to Town/Village.		
Crash Location Sketch Clearly indicate where the collision occurred in relation to the nearest intersecting road or landmarks such as Km posts or bridges. Clearly mark North on sketch.		
Latitude and Longitude		







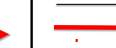































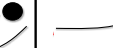























X =	Use your Smart Phone App. To write the Latitude (6 decimal places).
Y =	Use your Smart Phone App. To write the Longitude (6 decimal places).
Collision Diagram Sketch	
1. Clearly identify North.	3.If possible V1 is the vehicle in the wrong or at fault , which is wrong side of road, running up back
2.Label vehicles as V1,V2 etc and match to details in question 38.	
4. Mark centre of road.	6. Clearly mark direction of travel of
5. Label pedestrians P1 etc.	7. Label roads.
If collision at intersection indicate how far from Indicate direction of travel of pedestrian the nearest boundary or curb of the interesting road.	
<p><i>Example</i> Bill Street</p> <p style="text-align: center;">V1</p> <p style="text-align: right;">Main Road V2</p>	
8.Use arrows to clearly define where the vehicle came from and where it was intending to go. Like the example above, V1 was coming out of a side street and intended to turn left where as vehicle two was driving straight. The same applies for pedestrian movement, an arrow indicating their direction of movement.	
Police Description of Crash Give as much detail as possible that may have not been indicated in the questions. Things like other contributing factors, light conditions like sunset or sunrise effecting visibility, other road conditions Such as potholes, rutting, and corrugation or uneven surface. The road features such as a nup hill curve or narrow bridge. Also details about driver behaviour or witness comments.	
Witness	As per NPS instructions.
Reporting Officer	As per NPS instructions.
Reviewing Officer	As per NPS instructions.
Action Taken	As per NPS instructions.
Vehicle Details (Complete for each vehicle)	
Complete personal details as requested and “other” details where required.	
39, 40, 41, 42, 43, and 44	Strike thought the most accurate response.
Driver Details (Complete for each Driver)	
Complete personal details as requested and “other” details where required.	
45	License Number.
46	Place License was issued.
47, 50, 51,52, and 53	Strike thought the most accurate response.
48 and 49	Sex – “M” male, “F” female, “O” other or “U” unknown.
Passenger Details(Complete for each Passenger)	
Complete personal details as requested and “other” details where required.	
54	Indicate which vehicle the passenger was in V1, V2 etc.
55 and 56	Sex – “M” male, “F” female, “O” other or “U” unknown.
57, 58, 59 and 60	Use codes located bottom of CRF.
Pedestrians Details (Complete for each Pedestrian)	
Complete personal details as requested and “other” details where required.	
61 and 62	Sex – “M” male, “F” female, “O” other or “U” unknown.



APPENDIX UM3

DCC Template

Nepal Descriptive Crash Codes (DCC)

	100 Multi Vehicle Crashes					200 Single Vehicle Crashes					300	400
	110 Head On	130 Rear End	150 At Angle	170 Side Swipe	190 Overtake	210 Overturn	230 Hit Object On Road	250 Hit Object Off Road	270 Hit Parked Vehicle	290 Hit Animal	Hit Pedestrian	Passenger
0	 Thru-Thru!" " #!	 Thru-Thru!" # \$!	 Thru-Thru!" # \$!	 Side Swipe 170!	 O/T-n/On 190!	 O/Turn Str. 210!	 Hit Obj. On Straight. 230!	 Hit Object Off Straight. 250!	 Hit Park/V 270	 Hit Animal 290	 Crossing Rd 310	 Boarding 410
1	 Right-Thru!" " "!	 Thru-Right!" # #!	 Thru-Right!" # #!	 Lane/C ! " ! #	 O/T-R/End ! " ! #	 O/T Right 211!	 Hit Obj. In Int. 231!	 Off Int. 251!	 Hit Park/V 271		 Walk On Rd 311	 Allighting 411
2	 Left-Thru!" " "!	 Thru-Left!" # \$!	 Thru-Left!" # \$!		 O/T-RE/O ! " #!	 O/T Left 212!	 Hit Object On Incline 232!	 Hit Object Off Incline 252!			 Walk Edge Rd 312	 Fall Off Motor Cycle!" # \$!
3	 Right-Right!" " #!		 Right-Thru!" # \$!	 S/S R-R!" # \$!	 O/T-Cut In 193!	 O/T UTurn 213!	 Hit Object On Curve 233!	 Hit Object Off Curve 253!			 Playing On Road 313	 Sitting Outside Falling Off 413!
4	 Right-Left!" " #!		 Right-Right!" # \$!	 S/S L-L!" # \$!	 O/T-Right 194	 O/T OTake 214!	 Hit Object On Incline/Cve. 234	 Hit Object On Incline/Cve. 234			 On Path 314	 On Path 314
5	 Left-Left!" " #!		 Left-Right!" # #!				 Reverse Into Object On Road 235	 Reverse Into Object Off Road 255			 OnPed-Xing 315	
6	 UTurn-Thru!" " #!	 UTurn-Thru!" # \$!	 Left-Thru!" # \$!		 O/T-u turn 196						 50m Xing 316	
7			 Right-Left!" # \$!									
8			 Left-Left!" # \$!									
9	119! Other! Opposing!	139! Other! Rear End!	159! Other! At Angle!	179! Other! Side Swipe!	199! Other! Overtaking!	299! Other! Overturned!					399! Other! Pedestrian!	499! Other! Passenger!

APPENDIX UM4

List of all data variables

Appendix UM4

NRCDSUM

List of Variables from DES

Page 242 of

5

Column Code	Variable	Name / Code / Text / Number	Code Name
1_CIN	Crash Identification Number	Number	
2_DCC	Descriptive Crash Code	Number	
3_DCCSrD	Short Description of Crash	Text	
4_DCCDes	Long Description of Crash	Text	
5_NoFrUd	Number of data Entry forms to hold all details for this one crash	Number	
6_RepNo.	Report number supplied and used by Nepal Police	Number	
7_CompNo	Computer number used by Nepal Police	Number	
8_PolSta	Name of Police Station	Name	
9_StaNo.	Number of Police Station	Number	
10_Distct	Name of District	Name	
11_DistNo	Number of District	Number	
12_Zone	Name of Zone	Name	
13_ZoneNo	Number of Zone	Number	
14_Region	Name of Region	Name	
15_RegNo	Number of Region	Number	
16_No.Veh	Number of Vehicles Involved	Number	
17_No.Dri	Number of Drivers Involved	Number	
18_No.Pass	Number of Passengers Involved	Number	
19_No.Ped	Number of Pedestrians involved	Number	
20_SeviNA	This is the highest severity level record against any involved in this crash. Name	Fatal	
		Serious	
		Minor	
		Damage	
21_SeviCD	This is the highest severity level record against any involved in this crash. Code	1	Fatal
		2	Serious
		3	Minor
		4	Damage
22_dd	Day	Number	
23_mm	Month	Number	
24_yyyy	Year	Number	
25_day	Day	Name	
26_Hour24	Hours	Number	
27_Min.	Minutes	Number	
28_JncTNA	Type of Junction the Crash occurred at. Name	Not a junction	
		Cross Road	
		T Intersection	

Appendix4

NRCDSUM

List of Variables from DES

Page 243 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		Offset cross	
		Y Intersection	
		Roundabout	
		Other	
29_JucTCD	Type of Junction the Crash occurred at. Code	1	Not a junction
		2	Cross Road
		3	T Intersection
		4	Offset cross
		5	Y Intersection
		6	Roundabout
		7	Other
30_TrCoNA	Traffic Control Name	None	
		Centerline	
		Ped. Crossing	
		Police	
		Traffic Signals	
		Stop Sign	
		Give Way Sign	
		Other	
31_TrCoCD	Traffic Control Code	1	None
		2	Centerline
		3	Ped. Crossing
		4	Police
		5	Traffic Signals
		6	Stop Sign
		7	Give Way Sign
		8	Other
32_ColTNA	Collision Type Name	Head On	
		Rear End	
		Right Angle	
		Side Swipe	
		Overturn Vehicle	
		Hit Object In Road	
		Hit Object Off Road	
		Hit Parked Vehicle	
		Hit Pedestrian	
		Hit Animal	
		Passenger	
		Other	

Appendix4

NRCDSUM

List of Variables from DES

Page 244 of

Column Code	Variable	Name / Code / Text / Number	Code Name
33_ColTCD	Collision Type Code	1	Head On
		2	Rear End
		3	Right Angle
		4	Side Swipe
		5	Overturn Vehicle
		6	Hit Object In Road
		7	Hit Object Off Road
		8	Hit Parked Vehicle
		9	Hit Pedestrian
		10	Hit Animal
		11	Passenger
		12	Other
34_MoveNA	Movement of Traffic Flow. Name	One Way	
		Two Way	
35_MoveCD	Movement of Traffic Flow. Code	1	One Way
		2	Two Way
36_WethNA	Weather Conditions. Name	Fair	
		Rain	
		Fog	
		Smoke/Dust	
		Other	
37_WethCD	Weather Conditions. Code	1	Fair
		2	Rain
		3	Fog
		4	Smoke/Dust
		5	Other
38_LitCNA	Lighting Conditions. Name	Daylight	
		Night (Unlit)	
		Night (Lit)	
39_LitCCD	Lighting Conditions. Code	1	Daylight
		2	Night (Unlit)
		3	Night (Lit)
40_WLitNA	Light Definition From Web. Name	Daylight	
		Civil Twilight	
		Night	
41_WLitCD	Light Definition From web. Code	1	Daylight
		2	Civil Twilight
		3	Night
42_RdChNA	Road Character. Name	Straight Flat	
		Curve Only	
		Incline Only	
		Curve + Incline	
		Bridge	

Appendix4

NRCDSUM

List of Variables from DES

Page 245 of

Column Code	Variable	Name / Code / Text / Number	Code Name
43_RdChCD	Road Character. Code	1	Straight Flat
		2	Curve Only
		3	Incline Only
		4	Curve + Incline
		5	Bridge
44_RivrNA	Name of River if Crash is on Bridge	Name	
45_SurMNA	Surface Material. Name	Asphalt	
		Gravel	
		Earth	
46_SurMCD	Surface Material. Code	1	Asphalt
		2	Gravel
		3	Earth
47_RdCdNA	Condition of Road Surface Material. Name	Damaged	
		Good	
48_RdCdCD	Condition of Road Surface Material. Code	1	Damaged
		2	Good
49_SurCNA	Surface Condition because of Weather. Name	Dry	
		Wet	
		Muddy	
		Flooded	
		Snow covered	
50_SurCD	Surface Condition because of Weather. Code	1	Dry
		2	Wet
		3	Muddy
		4	Flooded
		5	Icy
		6	Snow covered
51_RdWkYN	Road works present. Name	Yes	
		No	
52_RdWkCD	Road works present. Code	1	Yes
		2	No
53_HitRYN	Hit and Run. Name	Same as 51	
54_HitRCD	Hit and Run. Code	Same as 52	Yes
55_LoSkiYN	Is there a Location Sketch	Same as 51	
56_ClDaYN	Is there a Collision Diagram	Same as 51	
57_PIDsYN	Is there a Police Description	Same as 51	
58_PolDTx	The typed Police Description	Text	
59_Latitu	Latitude	Number to 6 decimal places	

Appendix4

NRCDSUM

List of Variables from DES

Page 246 of

Column Code	Variable	Name / Code / Text / Number	Code Name
60_Longit	Longitude	Number to 6 decimal places	
61_NaCiTo	Name of City or Town In	Text	
62_NaLoAr	Location or Area	Text	
63_Kilmfr	Kilometers from Town or Village	Number	
64_FrToVi	Town or Village From	Text	
65_ToToVi	Town or Village To	Text	
66_LaMkNA	Landmark Name	Text	
67_MToLMk	Meters to Landmark	Number	
68_KToLMk	Kilometers to Landmark	Number	
69_DrLkNA	Direction from Crash to Landmark. Name	North	
		South	
		East	
		West	
70_DrLkCD	Direction from Crash to Landmark. Code	1	North
		2	South
		3	East
		4	West
71_NaRdCr	Name Of Road Crash is on	Text	
72_RdCode	Road Code	Number/Text	
73_RdClas	Road Class	Text	
74_LkCode	Link Code	Number/Text	
75_LkName	Link Name	Text	
76_RdDesc	Road Description	Text	
77_LinkFr	Link From	Text	
78_LinkTo	Link To	Text	
79_TotLen	Total Length	Number	
80_RdNaTx	Name of Road Crash is on if not in list	Text	
81_DCrRNA	Direction of Road crash is On. Name	East to West	
		North to South	
82_DCrRCD	Direction of Road crash is On. Code	1	East to West
		2	North to South
83_Wi20YN	Within 20 Meters of Intersection. Name	Same as 51	
84_Wi20CD	Within 20 Meters of Intersection. Code	Same as 52	
85_ICrDNA	Type of Intersection Drawn on the Collision Diagram. Name	Not a junction	
		Cross Road	

Appendix4

NRCDSUM

List of Variables from DES

Page 247 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		T Intersection	
		Offset cross	
		Y Intersection	
		Roundabout	
		Other	
		1	Not a junction
86_ICrDCD	Type of Intersection Drawn on the Collision Diagram. Code	2	Cross Road
		3	T Intersection
		4	Offset cross
		5	Y Intersection
		6	Roundabout
		7	Other
87_DrV1NA	Direction Vehicle 1 Travelling. Name	North	
		South	
		East	
		West	
88_DrV1CD	Direction Vehicle 1 Travelling. Code	1	North
		2	South
		3	East
		4	West
89_DrV2NA	Direction Vehicle 2 Travelling. Name	Same as 87	
90_DrV2CD	Direction Vehicle 2 Travelling. Code	Same as 88	
91_DrP1NA	Direction Pedestrian 1 Travelling. Name	Same 87	
92_DrP1CD	Direction Pedestrian 1 Travelling. Code	Same as 88	
93_CrV1NA	Vehicle 1 in relation to centre of road. Name	Left of Centre	
		Right of Centre	
94_CrV1CD	Vehicle 1 in relation to centre of road. Code	1	Left of Centre
		2	Right of Centre
95_CrV2NA	Vehicle 2 in relation to centre of road. Name	Same as 93	
96_CrV2CD	Vehicle 2 in relation to centre of road. Code	Same as 94	
97_InV1NA	Vehicle 1 in relation to intersection. Name	More than 20 m from Int.	
		Approaching	

Appendix4

NRCDSUM

List of Variables from DES

Page 248 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		Int. & within 20 m	
		In the Intersection	
		Leaving Int. still within 20 m	
		Was the collision off the road	
		Approaching Int. & within 20 m	
98_InV1CD	Vehicle 1 in relation to intersection. Code	1	More than 20 m from Int.
		2	Approaching Int. & within 20 m
		3	In the Intersection
		4	Leaving Int. still within 20 m
		5	Was the collision off the road
99_InV2NA	Vehicle 1 in relation to intersection. Name	Same as 97	
100_InV2CD	Vehicle 1 in relation to intersection. Code	Same as 98	
101_InR1NA	Intersecting Road 1 Name	Text	
102_Rd1Cod	Intersecting Road1 Code	No./Text	
103_Rd1Cla	Intersecting Road1 Class	No./Text	
104_LkCod1	Intersecting Road1 Link Code	No./Text	
105_LkNam1	Intersecting Road 1 Link Name	Text	
106_RdDes1	Intersecting Road1 Description	Text	
107_LkFro1	Intersecting Road1 From	Text	
108_LkTo1	Intersecting Road1 To	Text	
109_TotLe1	Intersecting Road1 Total Length	Number	
110_IRdTx1	Intersecting Road 1 Name if not in list.	Text	
111_InR1NA	Intersecting Road 2 Name	Text	
112_Rd1Cod	Intersecting Road2 Code	No./Text	
113_Rd1Cla	Intersecting Road2 Class	No./Text	
114_LkCod1	Intersecting Road2 Link Code	No./Text	
115_LkNam1	Intersecting Road 2 Link Name	Text	
116_RdDes1	Intersecting Road2 Description	Text	
117_LkFro1	Intersecting Road2 From	Text	

Appendix4

NRCDSUM

List of Variables from DES

Page 249 of

Column Code	Variable	Name / Code / Text / Number	Code Name
118_LkTo1	Intersecting Road2To	Text	
119_TotLe1	Intersecting Road2Total Length	Number	
120_IRdTx1	Intersecting Road 2 Name if not in list.	Text	
121_InR1NA	Intersecting Road 3 Name	Text	
122_Rd1Cod	Intersecting Road3 Code	No./Text	
123_Rd1Cla	Intersecting Road3 Class	No./Text	
124_LkCod1	Intersecting Road3 Link Code	No./Text	
125_LkNam1	Intersecting Road 3 Link Name	Text	
126_RdDes1	Intersecting Road3 Description	Text	
127_LkFro1	Intersecting Road3 From	Text	
128_LkTo1	Intersecting Road3To	Text	
129_TotLe1	Intersecting Road3Total Length	Number	
130_IRdTx1	Intersecting Road 3 Name if not in list.	Text	
131_PdInYN	Pedestrian Injury. Name	Same as 51	
132_PdInCD	Pedestrian Injury. Code	Same as 52	
133_PIPCYN	Pedestrian Injury as result of previous Crash. Name	Same as 51	
134_PIPCCD	Pedestrian Injury as result of previous Crash. Code	Same as 52	
135_OVehYN	Confirming one vehicle only. Name	Same as 51	
136_OVehCD	Confirming one vehicle only. Code	Same as 52	
137_HiObYN	Hit Object y/n. Name	Same as 51	
138_HiObCD	Hit Object y/n. Code	Same as 52	
139_ObHtNA	Object Hit. Name	Animal	
		Bridge	
		Building	
		Dividing fence middle of road	
		Double Parked Vehicle	
		Earlier Crash	
		Fence	
		Guardrail	
		Landslide	
		Other	
		Parked Vehicle	
		Pole/Post	
		Pot Hole on road	
		Rail Crossing	

Appendix4

NRCDSUM

List of Variables from DES

Page 250 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		Raised Island on road	
		River	
		Roadwork	
		Speed Bump on road	
		Steep Valley Side of road	
		Train	
		Tree	
		Vehicle Parked on Roundabout	
		Vehicle Parked within 10 m of int.	
		Wall	
		Water on road	
140_ObHtCD	Object Hit. Code	1	Animal
		2	Bridge
		3	Building
		4	Dividing fence middle of road
		5	Double Parked Vehicle
		6	Earlier Crash
		7	Fence
		8	Guardrail
		9	Landslide
		10	Other
		11	Parked Vehicle
		12	Pole/Post
		13	Pot Hole on road
		14	Rail Crossing
		15	Raised Island on road
		16	River
		17	Roadwork
		18	Speed Bump on road
		19	Steep Valley Side of road
		20	Train
		21	Tree
		22	Vehicle Parked on Roundabout
		23	Vehicle Parked within 10 m of int.

Appendix4

NRCDSUM

List of Variables from DES

Page 251 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		24	Wall
		25	Water on road
141_OffRYN	Vehicle ran off road. Y/N	Same as 51	
142_OffRCD	Vehicle ran off road. Code	Same as 52	
143_SpLimt	Posted Speed Limit	Number	
144_LaNorE	Lanes North or East	Number	
145_LaSorW	Lanes South or West	Number	
146_CkLaYN	Checked the number of lanes. Y/N	Same as 51	
147_CkLaCD	Checked the number of lanes. Code	Same as 52	
148_PotHYN	Pot Holes. Y/N	Same as 51	
149_PotHCD	Pot Holes. Code	Same as 52	
150_RuttYN	Rutted Y/N	Same as 51	
151_RuttCD	Rutted. Code	Same as 52	
152_CorrYN	Corrugated. Y/N	Same as 51	
153_CorrCD	Corrugated. Code	Same as 52	
154_UnevYN	Surface is uneven. Y/N	Same as 51	
155_UnevCD	Surface is uneven. Code	Same as 52	
156_SpBpYN	Speed Bump. Y/N	Same as 51	
157_SpBpCD	Speed Bump. Code	Same as 52	
158_HNoENA	Horizontal looking North or East. Name	Is straight	
		Is curved to the left	
		Is curved to the right	
159_HNoECD	Horizontal looking North or East. Code	6	Is straight
		7	Is curved to the left
		8	Is curved to the right
160_HSoWNA	Horizontal looking South or West. Name	Is straight	
		Is curved to the left	
		Is curved to the right	
161_HSoWCD	Horizontal looking South or West. Code	6	Is straight
		7	Is curved to the left
		8	Is curved to the right
162_VNoENA	Vertical looking North or East. Name	Is flat	
		Is inclined (up hill)	

Appendix4

NRCDSUM

List of Variables from DES

Page 252 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		Is declined (down hill)	
163_VNoECD	Vertical looking North or East. Code	9	Is flat
		10	Is inclined (up hill)
		11	Is declined (down hill)
164_VSoWNA	Vertical looking South or West. Name	Is flat	
		Is inclined (up hill)	
		Is declined (down hill)	
165_VSoWCD	Vertical looking South or West. Code	9	Is flat
		10	Is inclined (up hill)
		11	Is declined (down hill)
166_OTVeh1	Owners Town Vehicle 1	Text	
167_OTVeh2	Owners Town Vehicle 2	Text	
168_OTVeh3	Owners Town Vehicle 3	Text	
169_OTVeh4	Owners Town Vehicle 4	Text	
170_OTVeh5	Owners Town Vehicle 5	Text	
171_InV1NA	Insurance Type Vehicle 1. Name	Third Party Ins.	
		Property Ins.	
		Comprehensive Ins.	
		None	
172_InV1CD	Insurance Type Vehicle 1. Code	1	Third Party Ins.
		2	Property Ins.
		3	Comprehensive Ins.
		4	None
173_InV2NA	Insurance Type Vehicle 1. Name	Same as 171	
174_InV2CD	Insurance Type Vehicle 1. Code	Same as 172	
175_InV3NA	Insurance Type Vehicle 1. Name	Same as 171	
176_InV3CD	Insurance Type Vehicle 1. Code	Same as 172	
177_InV4NA	Insurance Type Vehicle 1. Name	Same as 171	
178_InV4CD	Insurance Type Vehicle 1. Code	Same as 172	
179_InV5NA	Insurance Type Vehicle 1. Name	Same as 171	
180_InV5CD	Insurance Type Vehicle 1. Code	Same as 172	
181_MakeV1	Make of Vehicle 1	Text	
182_MakeV2	Make of Vehicle 2	Text	
183_MakeV3	Make of Vehicle 3	Text	
184_MakeV4	Make of Vehicle 4	Text	
185_MakeV5	Make of Vehicle 5	Text	
186_YrMaY1	Year of Manufacture Vehicle 1	Number	

Appendix4

NRCD SUM

List of Variables from DES

Page 253 of

Column Code	Variable	Name / Code / Text / Number	Code Name
187_YrMaY2	Year of Manufacture Vehicle 2	Number	
188_YrMaY3	Year of Manufacture Vehicle 3	Number	
189_YrMaY4	Year of Manufacture Vehicle 4	Number	
190_YrMaY5	Year of Manufacture Vehicle 5	Number	
191_CoVeh1	Colour of Vehicle 1	Text	
192_CoVeh2	Colour of Vehicle 2	Text	
193_CoVeh3	Colour of Vehicle 3	Text	
194_CoVeh4	Colour of Vehicle 4	Text	
195_CoVeh5	Colour of Vehicle 5	Text	
196_TDi1NA	Direction of Travel Vehicle 1. Name	North	
		South	
		East	
		West	
197_TDi1CD	Direction of Travel Vehicle 1. CODE	1	North
		2	South
		3	East
		4	West
198_TDi2NA	Direction of Travel Vehicle 2. Name	Same as 196	
199_TDi2CD	Direction of Travel Vehicle 2. CODE	Same as 197	
200_RCV1NA	In Direction of Travel in relation to Centre of Road Vehicle 1. Name	Left of Centre	
		Right of centre	
201_RCV1CD	In Direction of Travel in relation to Centre of Road Vehicle 1. Code	1	Left of Centre
		2	Right of centre
202_RCV2NA	In Direction of Travel in relation to Centre of Road Vehicle 2. Name	Same as 200	
203_RCV2CD	In Direction of Travel in relation to Centre of Road Vehicle 2. Code	Same as 201	
204_RIV1NA	Vehicle 1 position in relation to intersection. Name	Same as 97	
205_RIV1CD	Vehicle 1 position in relation to intersection. Code	Same as 98	
206_RIV2NA	Vehicle 2 position in relation to intersection. Name	Same as 97	
207_RIV2CD	Vehicle 2 position in relation to	Same as 98	

Appendix4

NRCDSUM

List of Variables from DES

Page 254 of

Column Code	Variable	Name / Code / Text / Number	Code Name
	intersection. Code		
208_ORV1YN	Did Vehicle 1 go off road? Y/N	Same as 51	
209_ORV1CD	Did Vehicle 1 go off road? Code	Same as 52	
210_ORV2YN	Did Vehicle 2 go off road? Y/N	Same as 51	
211_ORV2CD	Did Vehicle 2 go off road? Code	Same as 52	
212_ORV3YN	Did Vehicle 3 go off road? Y/N	Same as 51	
213_ORV3CD	Did Vehicle 3 go off road? Code	Same as 52	
214_ORV4YN	Did Vehicle 4 go off road? Y/N	Same as 51	
215_ORV4CD	Did Vehicle 4 go off road? Code	Same as 52	
216_ORV5YN	Did Vehicle 5 go off road? Y/N	Same as 51	
217_ORV5CD	Did Vehicle 5 go off road? Code	Same as 52	
218_TyV1NA	Vehicle 1 Type. Name	Bicycle	
		Rickshaw	
		Motor Cycle	
		Autorickshaw	
		Car	
		Pick up	
		Mini Bus	
		Bus	
		Truck	
		Push Cart	
		Electric Scooter	
		Moped	
		Tempo	
		4WD Wagon	
		Other	
		Unknown	
219_TyV1CD	Vehicle 1 Type. Code	1	Bicycle
		2	Rickshaw
		3	Motor Cycle
		4	Autorickshaw
		5	Car
		6	Pick up
		7	Mini Bus
		8	Bus
		9	Truck
		10	Push Cart
		11	Electric Scooter
		12	Moped
		13	Tempo
		14	4WD Wagon
		15	Other
		99	Unknown
220_TyV2NA	Vehicle 2 Type. Name	Same as 218	

Appendix4

NRCDSUM

List of Variables from DES

Page 255 of

Column Code	Variable	Name / Code / Text / Number	Code Name
221_TyV2CD	Vehicle 2 Type. Code	Same as 219	
222_TyV3NA	Vehicle 3 Type. Name	Same as 218	
223_TyV3CD	Vehicle 3 Type. Code	Same as 219	
224_TyV4NA	Vehicle 4 Type. Name	Same as 218	
225_TyV4CD	Vehicle 4 Type. Code	Same as 219	
226_TyV5NA	Vehicle 5 Type. Name	Same as 218	
227_TyV5CD	Vehicle 5 Type. Code	Same as 219	
228_MaV1NA	Vehicle 1 Maneuver. Name	Right Turn	
		Left Turn	
		U' Turn	
		Cross Traffic	
		Merging	
		Diverging	
		Overtaking	
		Going Ahead	
		Reversing	
		Sudden Start	
		Sudden Stop	
		Parked (Off) Road	
		Parked (On) Road	
		Leave/Enter D/way	
		Veh. driving off Path	
		Double Parked	
		Roadside door open	
		Runaway Vehicle	
		Other	
229_MaV1CD	Vehicle 1 Maneuver. Code	1	Right Turn
		2	Left Turn
		3	U' Turn
		4	Cross Traffic
		5	Merging
		6	Diverging
		7	Overtaking
		8	Going Ahead
		9	Reversing
		10	Sudden Start
		11	Sudden Stop
		12	Parked (Off) Road

Appendix4

NRCDSUM

List of Variables from DES

Page 256 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		13	Parked (On) Road
		14	Leave/Enter D/way
		15	Veh. driving off Path
		16	Double Parked
		17	Roadside door open
		18	Runaway Vehicle
		19	Other
230_MaV2NA	Vehicle 2 Maneuver. Name	Same as 228	
231_MaV2CD	Vehicle 2 Maneuver. Code	Same as 229	
232_MaV3NA	Vehicle 3 Maneuver. Name	Same as 228	
233_MaV3CD	Vehicle 3 Maneuver. Code	Same as 229	
234_MaV4NA	Vehicle 4 Maneuver. Name	Same as 228	
235_MaV4CD	Vehicle 4 Maneuver. Code	Same as 229	
236_MaV5NA	Vehicle 5 Maneuver. Name	Same as 228	
237_MaV5CD	Vehicle 5 Maneuver. Code	Same as 229	
238_LoV1NA	Vehicle 1 Loading. Name	Legally Loaded	
		Overloaded	
		Insecure Load	
		Protruding Load	
		Other Improper Load	
		Load fall off	
239_LoV1CD	Vehicle 1 Loading. Code	1	Legally Loaded
		2	Overloaded
		3	Insecure Load
		4	Protruding Load
		5	Other Improper Load
		6	Load fall off
240_LoV1NA	Vehicle 2 Loading. Name	Same as 238	
241_LoV1CD	Vehicle 2 Loading. Code	Same as 239	
242_LoV1NA	Vehicle 3 Loading. Name	Same as 238	
243_LoV1CD	Vehicle 3 Loading. Code	Same as 239	
244_LoV1NA	Vehicle 4 Loading. Name	Same as 238	
245_LoV1CD	Vehicle 4 Loading. Code	Same as 239	
246_LoV1NA	Vehicle 5 Loading. Name	Same as 238	
247_LoV1CD	Vehicle 5 Loading. Code	Same as 239	
248_1DV1NA	1stDefects Vehicle 1. Name	None	
		Brakes	
		Steering	
		Tyres	
		Lights	
		Multiple	
		Seat Belts	

Appendix4

NRCDSUM

List of Variables from DES

Page 257 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		faulty, torn, broken.	
		Helmets, not up to standard, damaged, no strap.	
		Drivers View obscured by decorations on or around screen	
		Other	
249_1DV1CD	1stDefects Vehicle 1. Name	1	None
		2	Brakes
		3	Steering
		4	Tyres
		5	Lights
		6	Multiple
		7	Seat Belts faulty, torn, broken.
		8	Helmets, not up to standard, damaged, no strap.
		9	Drivers View obscured by decorations on or around screen
		10	Other
250_2DV1NA	2ndDefects Vehicle 1. Name	Same as 248	
251_2DV1CD	2ndDefects Vehicle 1. Code	Same as 249	
252_3DV1NA	3rdDefects Vehicle 1. Name	Same as 248	
253_3DV1CD	3rdDefects Vehicle 1. Code	Same as 249	
254_4DV1NA	4thDefects Vehicle 1. Name	Same as 248	
255_4DV1CD	4thDefects Vehicle 1. Code	Same as 249	
256_1DV2NA	1stDefects Vehicle 2. Name	Same as 248	
257_1DV2CD	1stDefects Vehicle 2. Code	Same as 249	
258_2DV2NA	2ndDefects Vehicle 2. Name	Same as 248	
259_2DV2CD	2ndDefects Vehicle 2. Code	Same as 249	
260_3DV2NA	3rdDefects Vehicle 2. Name	Same as 248	
261_3DV2CD	3rdDefects Vehicle 2. Code	Same as 249	
262_4DV2NA	4thDefects Vehicle 2. Name	Same as 248	
263_4DV2CD	4thDefects Vehicle 2. Code	Same as 249	
264_1DV3NA	1stDefects Vehicle 3. Name	Same as 248	
265_1DV3CD	1stDefects Vehicle 3. Code	Same as 249	
266_2DV3NA	2ndDefects Vehicle 3. Name	Same as 248	

Appendix4

NRCDSUM

List of Variables from DES

Page 258 of

Column Code	Variable	Name / Code / Text / Number	Code Name
267_2DV3CD	2ndDefects Vehicle 3. Code	Same as 249	
268_3DV3NA	3rdDefects Vehicle 3. Name	Same as 248	
269_3DV3CD	3rdDefects Vehicle 3. Code	Same as 249	
270_4DV3NA	4thDefects Vehicle 3. Name	Same as 248	
271_4DV3CD	4thDefects Vehicle 3. Code	Same as 249	
272_1DV4NA	1stDefects Vehicle 4 Name	Same as 248	
273_1DV4CD	1stDefects Vehicle 4. Code	Same as 249	
274_2DV4NA	2ndDefects Vehicle 4. Name	Same as 248	
275_2DV4CD	2ndDefects Vehicle 4. Code	Same as 249	
276_3DV4NA	3rdDefects Vehicle 4. Name	Same as 248	
277_3DV4CD	3rdDefects Vehicle 4. Code	Same as 249	
278_4DV4NA	4thDefects Vehicle 4. Name	Same as 248	
279_4DV4CD	4thDefects Vehicle 4. Code	Same as 249	
280_4DV5NA	1stDefects Vehicle 5. Name	Same as 248	
281_4DV5CD	1stDefects Vehicle 5. Code	Same as 249	
282_1DV5NA	2ndDefects Vehicle 5. Name	Same as 248	
283_1DV5CD	2ndDefects Vehicle 5. Code	Same as 249	
284_2DV5NA	3rdDefects Vehicle 5. Name	Same as 248	
285_2DV5CD	3rdDefects Vehicle 5. Code	Same as 249	
286_3DV5NA	4thDefects Vehicle 5. Name	Same as 248	
287_3DV5CD	4thDefects Vehicle 5. Code	Same as 249	
288_DaV1NA	Damage to vehicle 1. Name	None	
		Front	
		Rear	
		Right	
		Left	
		Roof	
		Multiple	
		Other	
289_DaV1CD	Damage to vehicle 1. Code	1	None
		2	Front
		3	Rear
		4	Right
		5	Left
		6	Roof
		7	Multiple
		8	Other
290_DaV2NA	Damage to vehicle 2. Name	Same as 288	
291_DaV2CD	Damage to vehicle 2. Code	Same as 289	
292_DaV3NA	Damage to vehicle 3. Name	Same as 288	
293_DaV3CD	Damage to vehicle 3. Code	Same as 289	
294_DaV4NA	Damage to vehicle 4. Name	Same as 288	
295_DaV4CD	Damage to vehicle 4. Code	Same as 289	
296_DaV5NA	Damage to vehicle 5. Name	Same as 288	

Appendix4

NRCDSUM

List of Variables from DES

Page 259 of

Column Code	Variable	Name / Code / Text / Number	Code Name
297_DaV5CD	Damage to vehicle 5. Code	Same as 289	
298_OwV1NA	Vehicle 1 Owner. Name	Government	
		Corporation	
		Diplomatic	
		Private/Personal	
		Public	
		Police	
		Army	
299_OwV1CD	Vehicle 1 Owner. Code	1	Government
		2	Corporation
		3	Diplomatic
		4	Private/Personal
		5	Public
		6	Police
		7	Army
300_OwV2NA	Vehicle 2 Owner. Name	Same as 298	
301_OwV2CD	Vehicle 2 Owner. Code	Same as 299	
302_OwV3NA	Vehicle 3 Owner. Name	Same as 298	
303_OwV3CD	Vehicle 3 Owner. Code	Same as 299	
304_OwV4NA	Vehicle 4 Owner. Name	Same as 298	
305_OwV4CD	Vehicle 4 Owner. Code	Same as 299	
306_OwV5NA	Vehicle 5 Owner. Name	Same as 298	
307_OwV5CD	Vehicle 5 Owner. Code	Same as 299	
308_D1iVNA	Driver 1 in Vehicle number. Name	Unknown	
		Veh.1	
		Veh.2	
		Veh.3	
		Veh.4	
		Veh.5	
309_D1iVCD	Driver 1 in Vehicle number. Code	9	Unknown
		1	Veh.1
		2	Veh.2
		3	Veh.3
		4	Veh.4
		5	Veh.5
310_D2iVNA	Driver 2 in Vehicle number. Name	Same as 308	
311_D2iVCD	Driver 2 in Vehicle number. Code	Same as 309	
312_D3iVNA	Driver 3 in Vehicle number. Name	Same as 308	
313_D3iVCD	Driver 3 in Vehicle number.	Same as 309	

Appendix4

NRCDSUM

List of Variables from DES

Page 260 of

Column Code	Variable	Name / Code / Text / Number	Code Name
	Code		
314_D4iVNA	Driver 4 in Vehicle number. Name	Same as 308	
315_D4iVCD	Driver 4 in Vehicle number. Code	Same as 309	
316_D5iVNA	Driver 5 in Vehicle number. Name	Same as 308	
317_D5iVCD	Driver 5 in Vehicle number. Code	Same as 309	
318_D1IsAt	Driver 1 License Issued at	Text	
319_D2IsAt	Driver 2 License Issued at	Text	
320_D3IsAt	Driver 3 License Issued at	Text	
321_D4IsAt	Driver 4 License Issued at	Text	
322_D5IsAt	Driver 5 License Issued at	Text	
323_LTD1NA	License Type Driver 1. Name	Full License	
		Provisional License	
		Probationary	
		Unlicensed	
		Other	
324_LTD1CD	License Type Driver 1. Code	1	Full License
		2	Provisional License
		3	Probationary
		4	Unlicensed
		5	Other
325_LTD2NA	License Type Driver 2. Name	Same as 323	
326_LTD2CD	License Type Driver 2. Code	Same as 324	
327_LTD3NA	License Type Driver 3. Name	Same as 323	
328_LTD3CD	License Type Driver 3. Code	Same as 324	
329_LTD4NA	License Type Driver 4. Name	Same as 323	
330_LTD4CD	License Type Driver 4. Code	Same as 324	
331_LTD5NA	License Type Driver 5. Name	Same as 323	
332_LTD5CD	License Type Driver 5. Code	Same as 324	
333_SeD1NA	Sex Driver 1. Name	male	
		female	
		unknown	
		Other	
334_SeD1CD	Sex Driver 1. Code	1	male
		2	female
		3	unknown
		4	Other
335_SeD2NA	Sex Driver 2. Name	Same as 333	
336_SeD2CD	Sex Driver 2. Code	Same as 334	
337_SeD3NA	Sex Driver 3. Name	Same as 333	

Appendix4

NRCDSUM

List of Variables from DES

Page 261 of

Column Code	Variable	Name / Code / Text / Number	Code Name
338_SeD3CD	Sex Driver 3. Code	Same as 334	
339_SeD4NA	Sex Driver 4. Name	Same as 333	
340_SeD4CD	Sex Driver 4. Code	Same as 334	
341_SeD5NA	Sex Driver 5. Name	Same as 333	
342_SeD5CD	Sex Driver 5. Code	Same as 334	
343_AgeDr1	Age Diver 1	Number	
344_AgeDr2	Age Diver 2	Number	
345_AgeDr3	Age Diver 3	Number	
346_AgeDr4	Age Diver 4	Number	
347_AgeDr5	Age Diver 5	Number	
348_InD1NA	Injury Driver 1. Name	Fatal	
		Serious	
		Minor	
		Uninjured	
349_InD1CD	Injury Driver1. Code	2	Fatal
		2	Serious
		3	Minor
		4	Uninjured
350_InD2NA	Injury Driver 2. Name	Same as 348	
351_InD2CD	Injury Driver2. Code	Same as 349	
352_InD3NA	Injury Driver 3. Name	Same as 348	
353_InD3CD	Injury Driver3. Code	Same as 349	
354_InD4NA	Injury Driver 4. Name	Same as 348	
355_InD4CD	Injury Driver4. Code	Same as 349	
356_InD5NA	Injury Driver 5. Name	Same as 348	
357_InD5CD	Injury Driver5. Code	Same as 349	
358_E1D1NA	Error 1 Driver 1. Name	None	
		Fatigued/Asleep	
		Inattentive	
		Too Fast	
		Too Close	
		No Signal	
		Bad Overtaking	
		Bad Turning	
		Other	
359_E1D1CD	Error1 Driver1. Code	1	None
		2	Fatigued/Asleep
		3	Inattentive
		4	Too Fast
		5	Too Close
		6	No Signal
		7	Bad Overtaking
		8	Bad Turning
		9	Other

Appendix4

NRCDSUM

List of Variables from DES

Page 262 of

Column Code	Variable	Name / Code / Text / Number	Code Name
360_E2D1NA	Error2 Driver 1. Name	Same as 358	
361_E2D1CD	Error2 Driver1. Code	Same as 359	
362_E3D1NA	Error3 Driver 1. Name	Same as 358	
363_E3D1CD	Error3 Driver 1. Code	Same as 359	
364_E1D2NA	Error1 Driver 2. Name	Same as 358	
365_E1D2CD	Error1 Driver2. Code	Same as 359	
366_E2D2NA	Error2 Driver 2. Name	Same as 358	
367_E2D2CD	Error2 Driver2. Code	Same as 359	
368_E3D2NA	Error3 Driver 2. Name	Same as 358	
369_E3D2CD	Error3 Driver 2. Code	Same as 359	
370_E1D3NA	Error1 Driver 3. Name	Same as 358	
371_E1D3CD	Error1 Driver3. Code	Same as 359	
372_E2D3NA	Error2 Driver 3. Name	Same as 358	
373_E2D3CD	Error2 Driver3. Code	Same as 359	
374_E3D3NA	Error3 Driver 3. Name	Same as 358	
375_E3D3CD	Error3 Driver 3. Code	Same as 359	
376_E1D4NA	Error1 Driver 4. Name	Same as 358	
377_E1D4CD	Error1 Driver4. Code	Same as 359	
378_E2D4NA	Error2 Driver 4. Name	Same as 358	
379_E2D4CD	Error2 Driver4. Code	Same as 359	
380_E3D4NA	Error3 Driver 4. Name	Same as 358	
381_E3D4CD	Error3 Driver 4. Code	Same as 359	
382_E1D5NA	Error1 Driver 5. Name	Same as 358	
383_E1D5CD	Error1 Driver5. Code	Same as 359	
384_E2D5NA	Error2 Driver 5. Name	Same as 358	
385_E2D5CD	Error2 Driver5. Code	Same as 359	
386_E3D5NA	Error3 Driver 5. Name	Same as 358	
387_E3D5CD	Error3 Driver 5. Code	Same as 359	
388_AID1NA	Alcohol Suspected / Not Suspected Driver 1. Name	Not Suspected	
		Suspected	
389_AID1CD	Alcohol Suspected / Not Suspected Driver1. Code	1	Not Suspected
		2	Suspected
390_AID2NA	Alcohol Suspected / Not Suspected Driver 2. Name	Same as 388	
391_AID2CD	Alcohol Suspected / Not Suspected Driver2. Code	Same as 389	
392_AID3NA	Alcohol Suspected / Not Suspected Driver 3. Name	Same as 388	
393_AID3CD	Alcohol Suspected / Not Suspected Driver 3. Code	Same as 389	
394_AID4NA	Alcohol Suspected / Not Suspected Driver 4. Name	Same as 388	

Appendix4

NRCDSUM

List of Variables from DES

Page 263 of

Column Code	Variable	Name / Code / Text / Number	Code Name
395_AID4CD	Alcohol Suspected / Not Suspected Driver4. Code	Same as 389	
396_AID5NA	Alcohol Suspected / Not Suspected Driver 5. Name	Same as 388	
397_AID5CD	Alcohol Suspected / Not Suspected Driver5. Code	Same as 389	
398_BHD1YN	Seat belt or helmet in use Driver 1. Y/N	Same as 51	
399_BHD1CD	Seat belt or helmet in use Driver 1. Code	Same as 52	
400_BHD2YN	Seat belt or helmet in use Driver 2. Y/N	Same as 51	
401_BHD2CD	Seat belt or helmet in use Driver 2. Code	Same as 52	
402_BHD3YN	Seat belt or helmet in use Driver 3. Y/N	Same as 51	
403_BHD3CD	Seat belt or helmet in use Driver 3. Code	Same as 52	
404_BHD4YN	Seat belt or helmet in use Driver 4. Y/N	Same as 51	
405_BHD4CD	Seat belt or helmet in use Driver 4. Code	Same as 52	
406_BHD5YN	Seat belt or helmet in use Driver 5. Y/N	Same as 51	
407_BHD5CD	Seat belt or helmet in use Driver 5. Code	Same as 52	
408_P1iVNA	Passenger 1 in Vehicle number. Name	Same as 308	
409_P1iVCD	Passenger 1 in Vehicle number. Code	Same as 309	
410_P2iVNA	Passenger 2 in Vehicle number. Name	Same as 308	
411_P2iVCD	Passenger 2 in Vehicle number. Code	Same as 309	
412_P3iVNA	Passenger 3 in Vehicle number. Name	Same as 308	
413_P3iVCD	Passenger 3 in Vehicle number. Code	Same as 309	
414_P4iVNA	Passenger 4 in Vehicle number. Name	Same as 308	
415_P4iVCD	Passenger 4 in Vehicle number. Code	Same as 309	
416_P5iVNA	Passenger 5 in Vehicle number. Name	Same as 308	
417_P5iVCD	Passenger 5 in Vehicle number. Code	Same as 309	

Appendix4

NRCDSUM

List of Variables from DES

Page 264 of

Column Code	Variable	Name / Code / Text / Number	Code Name
	Code		
418_SeP1NA	Sex Passenger 1. Name	Same as 333	
419_SeP1CD	Sex Passenger1. Code	Same as 334	
420_SeP2NA	Sex Passenger 2. Name	Same as 333	
421_SeP2CD	Sex Passenger2. Code	Same as 334	
422_SeP3NA	Sex Passenger 3. Name	Same as 333	
423_SeP3CD	Sex Passenger3. Code	Same as 334	
424_SeP4NA	Sex Passenger 4. Name	Same as 333	
425_SeP4CD	Sex Passenger4. Code	Same as 334	
426_SeP5NA	Sex Passenger 5. Name	Same as 333	
427_SeP5CD	Sex Passenger5. Code	Same as 334	
428_AgePa1	Age Passenger 1	Number	
429_AgePa2	Age Passenger 2	Number	
430_AgePa3	Age Passenger 3	Number	
431_AgePa4	Age Passenger 4	Number	
432_AgePa5	Age Passenger 5	Number	
433_InP1NA	Injury Passenger 1. Name	Same as 348	
434_InP1CD	Injury Passenger1. Code	Same as 349	
435_InP2NA	Injury Passenger 2. Name	Same as 348	
436_InP2CD	Injury Passenger2. Code	Same as 349	
437_InP3NA	Injury Passenger 3. Name	Same as 348	
438_InP3CD	Injury Passenger3. Code	Same as 349	
439_InP4NA	Injury Passenger 4. Name	Same as 348	
440_InP4CD	Injury Passenger4. Code	Same as 349	
441_InP5NA	Injury Passenger 5. Name	Same as 348	
442_InP5CD	Injury Passenger5. Code	Same as 349	
443_PoP1NA	Position of Passenger 1. Name	Front Seat	
		Rear Seat	
		M/cycle Passenger	
		Bus Passenger	
		Outside-Sitting	
		Outside-Standing	
		Car Passenger	
		Pickup/Truck Passenger	
		Sitting on top	
		Standing Inside	
		Hanging on side or back	
		In back of open Ute or truck	
444_PoP1CD	Position of Passenger1. Code	1	Front Seat

Appendix4

NRCDSUM

List of Variables from DES

Page 265 of

Column Code	Variable	Name / Code / Text / Number	Code Name
		2	Rear Seat
		3	M/cycle Passenger
		4	Bus Passenger
		5	Outside-Sitting
		6	Outside-Standing
		7	Car Passenger
		8	Pickup/Truck Passenger
		9	Sitting on top
		10	Standing Inside
		11	Hanging on side or back
		12	In back of open Ute or truck
445_PoP2NA	Position of Passenger 2. Name	Same as 443	
446_PoP2CD	Position of Passenger 2. Code	Same as 444	
447_PoP3NA	Position of Passenger 3. Name	Same as 443	
448_PoP3CD	Position of Passenger 3. Code	Same as 444	
449_PoP4NA	Position of Passenger 4. Name	Same as 443	
450_PoP4CD	Position of Passenger 4. Code	Same as 444	
451_PoP5NA	Position of Passenger 5. Name	Same as 443	
452_PoP5CD	Position of Passenger 5. Code	Same as 444	
453_APa1NA	Action Passenger 1. Name	None	
		Boarding	
		Alighting	
		Falling	
		Other	
454_APa1CD	Action Passenger 1. Code	1	None
		2	Boarding
		3	Alighting
		4	Falling
		5	Other
455_APa2NA	Action Passenger 2. Name	Same as 453	
456_APa2CD	Action Passenger 2. Code	Same as 454	
457_APa3NA	Action Passenger 3. Name	Same as 453	
458_APa3CD	Action Passenger 3. Code	Same as 454	
459_APa4NA	Action Passenger 4. Name	Same as 453	
460_APa4CD	Action Passenger 4. Code	Same as 454	
461_APa5NA	Action Passenger 5. Name	Same as 453	
462_APa5CD	Action Passenger 5. Code	Same as 454	
463_BPa1YN	Seat belt or helmet in use Passenger 1. Y/N	Same as 51	
464_BPa1CD	Seat belt or helmet in use Passenger 1. Code	Same as 52	

Appendix4

NRCDSUM

List of Variables from DES

Page 266 of

Column Code	Variable	Name / Code / Text / Number	Code Name
465_BPa2YN	Seat belt or helmet in use Passenger 2. Y/N	Same as 51	
466_BPa2CD	Seat belt or helmet in use Passenger 2. Code	Same as 52	
467_BPa3YN	Seat belt or helmet in use Passenger 3. Y/N	Same as 51	
468_BPa3CD	Seat belt or helmet in use Passenger 3. Code	Same as 52	
469_BPa4YN	Seat belt or helmet in use Passenger 4. Y/N	Same as 51	
470_BPa4CD	Seat belt or helmet in use Passenger 4. Code	Same as 52	
471_BPa5YN	Seat belt or helmet in use Passenger 5. Y/N	Same as 51	
472_BPa5CD	Seat belt or helmet in use Passenger 5. Code	Same as 52	
473_APa1NA	Alcohol Suspected / Not Suspected Passenger 1. Name	Same as 388	
474_APa1CD	Alcohol Suspected / Not Suspected Passenger 1. Code	Same as 389	
475_APa2NA	Alcohol Suspected / Not Suspected Passenger 2. Name	Same as 388	
476_APa2CD	Alcohol Suspected / Not Suspected Passenger 2. Code	Same as 389	
477_APa3NA	Alcohol Suspected / Not Suspected Passenger 3. Name	Same as 388	
478_APa3CD	Alcohol Suspected / Not Suspected Passenger 3. Code	Same as 389	
479_APa4NA	Alcohol Suspected / Not Suspected Passenger 4. Name	Same as 388	
480_APa4CD	Alcohol Suspected / Not Suspected Passenger 4. Code	Same as 389	
481_APa5NA	Alcohol Suspected / Not Suspected Passenger 5. Name	Same as 388	
482_APa5CD	Alcohol Suspected / Not Suspected Passenger 5. Code	Same as 389	
483_TPe1NA	Direction of Travel Pedestrian 1. Name	Same as 196	
484_TPe1CD	Direction of Travel Pedestrian 1. CODE	Same as 197	
485_SPe1NA	Sex Pedestrian 1. Name	Same as 333	
486_SPe1CD	Sex Pedestrian 1. Code	Same as 334	
487_SPe2NA	Sex Pedestrian 2. Name	Same as 333	
488_SPe2CD	Sex Pedestrian 2. Code	Same as 334	
489_SPe3NA	Sex Pedestrian 3. Name	Same as 333	

Appendix4

NRCDSUM

List of Variables from DES

Page 267 of

Column Code	Variable	Name / Code / Text / Number	Code Name
490_SPe3CD	Sex Pedestrian 3. Code	Same as 334	
491_SPe4NA	Sex Pedestrian 4. Name	Same as 333	
492_SPe4CD	Sex Pedestrian 4. Code	Same as 334	
493_SPe5NA	Sex Pedestrian 5. Name	Same as 333	
494_SPe5CD	Sex Pedestrian 5. Code	Same as 334	
495_AgePe1	Age Pedestrian 1	Number	
496_AgePe2	Age Pedestrian 2	Number	
497_AgePe3	Age Pedestrian 3	Number	
498_AgePe4	Age Pedestrian 4	Number	
499_AgePe5	Age Pedestrian 5	Number	
500_IPe1NA	Injury Pedestrian 1. Name	Same as 348	
501_IPe1CD	Injury Pedestrian 1. Code	Same as 349	
502_IPe2NA	Injury Pedestrian 2. Name	Same as 348	
503_IPe2CD	Injury Pedestrian 2. Code	Same as 349	
504_IPe3NA	Injury Pedestrian 3. Name	Same as 348	
505_IPe3CD	Injury Pedestrian 3. Code	Same as 349	
506_IPe4NA	Injury Pedestrian 4. Name	Same as 348	
507_IPe4CD	Injury Pedestrian 4. Code	Same as 349	
508_IPe5NA	Injury Pedestrian 5. Name	Same as 348	
509_IPe5CD	Injury Pedestrian 5. Code	Same as 349	
510_LPe1NA	Location Pedestrian 1. Name	<i>On Pedestrian Crossing</i>	
		<i>Within 50m Ped Crossing</i>	
		<i>On Central Refuge</i>	
		<i>In Road centre not 1-3</i>	
		<i>On Footpath/Verge</i>	
511_LPe1CD	Location Pedestrian 1. Code	1	<i>On Pedestrian Crossing</i>
		2	<i>Within 50m Ped Crossing</i>
		3	<i>On Central Refuge</i>
		4	<i>In Road centre not 1-3</i>
		5	<i>On Footpath/Verge</i>
512_LPe2NA	Location Pedestrian 2. Name	Same as 510	
513_LPe2CD	Location Pedestrian 2. Code	Same as 511	
514_LPe3NA	Location Pedestrian 3. Name	Same as 510	
515_LPe3CD	Location Pedestrian 3. Code	Same as 511	
516_LPe4NA	Location Pedestrian 4. Name	Same as 510	
517_LPe4CD	Location Pedestrian 4. Code	Same as 511	
518_LPe5NA	Location Pedestrian 5. Name	Same as 510	

Appendix4

NRCDSUM

List of Variables from DES

Page 268 of

Column Code	Variable	Name / Code / Text / Number	Code Name
519_LPe5CD	Location Pedestrian 5. Code	Same as 511	
520_APe1NA	Action Pedestrian 1. Name	None	
		Crossing Road	
		Walking Alone Road	
		Walking along Edge	
		Playing on Road	
		On Footpath	
		Working	
		Lying	
		Cross B/t Vehicles	
521_APe1CD	Action Pedestrian 1. Code	1	None
		2	Crossing Road
		3	Walking Alone Road
		4	Walking along Edge
		5	Playing on Road
		6	On Footpath
		7	Working
		8	Lying
		9	Cross B/t Vehicles
522_APe2NA	Action Pedestrian 2. Name	Same as 520	
523_APe2CD	Action Pedestrian 2. Code	Same as 521	
524_APe3NA	Action Pedestrian 3. Name	Same as 520	
525_APe3CD	Action Pedestrian 3. Code	Same as 521	
526_APe4NA	Action Pedestrian 4. Name	Same as 520	
527_APe4CD	Action Pedestrian 4. Code	Same as 521	
528_APe5NA	Action Pedestrian 5. Name	Same as 520	
529_APe5CD	Action Pedestrian 5. Code	Same as 521	
530_Pe1ANA	Alcohol Suspected / Not Suspected Pedestrian 1. Name	Same as 388	
531_Pe1ACD	Alcohol Suspected / Not Suspected Pedestrian 1. Code	Same as 389	
532_Pe2ANA	Alcohol Suspected / Not Suspected Pedestrian 2. Name	Same as 388	
533_Pe2ACD	Alcohol Suspected / Not Suspected Pedestrian 2. Code	Same as 389	
534_Pe3ANA	Alcohol Suspected / Not Suspected Pedestrian 3. Name	Same as 388	
535_Pe3ACD	Alcohol Suspected / Not Suspected Pedestrian 3. Code	Same as 389	
536_Pe4ANA	Alcohol Suspected / Not	Same as 388	

Appendix4

NRCDSUM

List of Variables from DES

Page 269 of

Column Code	Variable	Name / Code / Text / Number	Code Name
	Suspected Pedestrian 4. Name		
537_Pe4ACD	Alcohol Suspected / Not Suspected Pedestrian 4. Code	Same as 389	
538_Pe5ANA	Alcohol Suspected / Not Suspected Pedestrian 5. Name	Same as 388	
539_Pe5ACD	Alcohol Suspected / Not Suspected Pedestrian 5. Code	Same as 389	
540_TotErr	Total Error remaining	Number	
541_DatEnt	Date CRF entered	Date	
542_DatStr	Date Stored into Database	Date	

APPENDIX UM5

How to request Data

NRCD Data Request Form				
Complete the information requested on this form and sent to NRSC.				
Date of Request				
<i>If you need assistance in making data selection or advise on suitability of the data in the NRCD contact the Data Analyst at the NRSC via contact details below.</i>				
Address	<i>To be supplied</i>			
Email	<i>To be supplied</i>			
Phone	<i>To be supplied</i>			
User's Details				
Organisation				
Contact				
Address				
Email				
Phone				
Purpose the data is required for				
Date Range	to			
Data variables that are request. Refer to the full list that may be requested from NRSC or online at www.ToBeSupplied.com				
All data variables				
All variables relating to crash type				
All variables relating to vehicle				
All variables relating to driver				
All variables relating to passenger				
All variables relating to pedestrian				
All variables relating to road				
Variables in each of these groups is defined at www.ToBeSupplied.com				
Or you may request individual variables as stand alone or in addition to the groups above. (Just supply the column codes)				

[illegible]