

Technical Note

Project:	Dunsbury Hill Farm	To:	John Malyon
Subject:	Collision Analysis	From:	Gemma Hunt
Date:	23/8/11	cc:	Steve Dimmock

1.1. Introduction

A new 3-arm roundabout is proposed to be located on the B2150 Hulbert Road on the western boundary of the proposed development site. This accident analysis is to be used to inform the Dunsbury Hill Farm development scheme development proposals.

Injury collision data was provided by Hampshire County Council for the period from 6 July 2006 to 31 May 2011 for the existing highway network of the B2150 Hulbert Road from the location of the proposed new scheme roundabout to the eastern arm of the roundabout junction of the A3 (M) Junction 3. The area under consideration and the locations of the collisions are shown in Appendix A.1. The Contributory Factors report summary is shown in Appendix A.2.

1.2. Collision Analysis

Table 1.1 summaries the reported injury collision (and casualty) numbers by severity that occurred from 6 July 2006 to 31 May 2011.

Table 1. 1 - Collisions (casualties) by severity from 6 July 2006 – 31 May 2011

Collisions in the period:	Fatal collisions (casualties)	Serious collisions (casualties)	Slight collisions (casualties)	Total collisions (casualties)	KSI%
July 2010 – May 2011	0 (0)	0 (0)	0 (0)	0 (0)	0
July 2009 – June 2010	0 (0)	0 (0)	3 (4)	3 (4)	0
July 2008 – June 2009	0 (0)	0 (0)	0	0	0
July 2007 – June 2008	0 (0)	0 (0)	1 (1)	1 (1)	0
July 2006 – June 2007	0 (0)	0 (0)	4 (6)	4 (6)	0
Total collisions	0 (0)	0 (0)	8 (11)	8 (11)	0

As shown in Table 1.1 above, eight slight injury collisions occurred between July 2006 and May 2011 in the area under consideration. There there was an average of 2.2 casualties per year (1.3 casualties per accident).

A study of the interpreted listings (Contributory Factors Report Summary, Appendix A.2) showed that the general injury collision characteristics are as follows:

- Most accidents (5, 62.5%) occurred in dry conditions with 3 (37.5%) wet/damp;
- 2 (25%) accidents occurred in dark conditions; and
- Most accidents (5, 62.5%) occurred during fine weather conditions, with 2 (25%) occurring when it was raining and 1 (12.5%) when there was fog/mist.

Table 1.2 shows the accidents by collision type totals, percentages and a comparative national average collision figure, and Table 1.3 shows the resultant casualties by user group and severity.

Table 1.2 – Accidents by vehicle type totals, percentages and comparative national average collision figure

	Motor vehicles	Powered Two Wheelers	Pedal Cycles
Number of collisions	8	1	0
Percentage of total (%)	100	12.5	0
Comparative collision ¹ (%)	93	7	7

As Table 1.2 shows all the collisions involved motor vehicles and there was one collision involving a Powered Two Wheeler. Although the accident sample is small, Table 1.2 also shows that there is nothing to suggest that the vehicle types involved are over represented in comparison to the national average.

Table 1.3 – Casualties by user groups and severity

User Group	Fatal (%)	Serious (%)	Slight (%)	Total (%)	KSI%
Motor vehicle driver	0 (0)	0 (0)	7 (64)	7 (64)	0
Passenger	0 (0)	0 (0)	3 (27)	3 (27)	0
Motorcycle rider	0 (0)	0 (0)	1 (9)	1 (9)	0
Total	0 (0)	0 (0)	11 (100)	11 (100)	0

Table 1.3 shows that there were no KSI casualties in the accident sample. The national average comparative KSI figure is 11.1%².

1.3. Analysis by Location

Review of the collisions revealed that the majority of the collisions (7, 87.5%) occurred on Hulbert Road on the eastern approach to the A3 (M) roundabout. In the majority of these collisions (6, 85%) there was one vehicle reported as 'waiting to go ahead but held up' and over half (4, 57%) had the Contributory Factor 'failed to look properly'.

There was one accident on the B2150 Hulbert Road in the vicinity of the proposed new roundabout which occurred when a vehicle travelling north on the B2150 lost control and spun round hit oncoming traffic. A Contributory Factor of this accident was also a 'slippery road due to weather'.

¹ Reported Road Casualties Great Britain 2009: Vehicles involved in reported B road accidents, all severities, 2009.

² Reported Road Casualties Great Britain 2009: All reported casualties: by built up roads, B roads and severity, 2009.

1.4. Summary

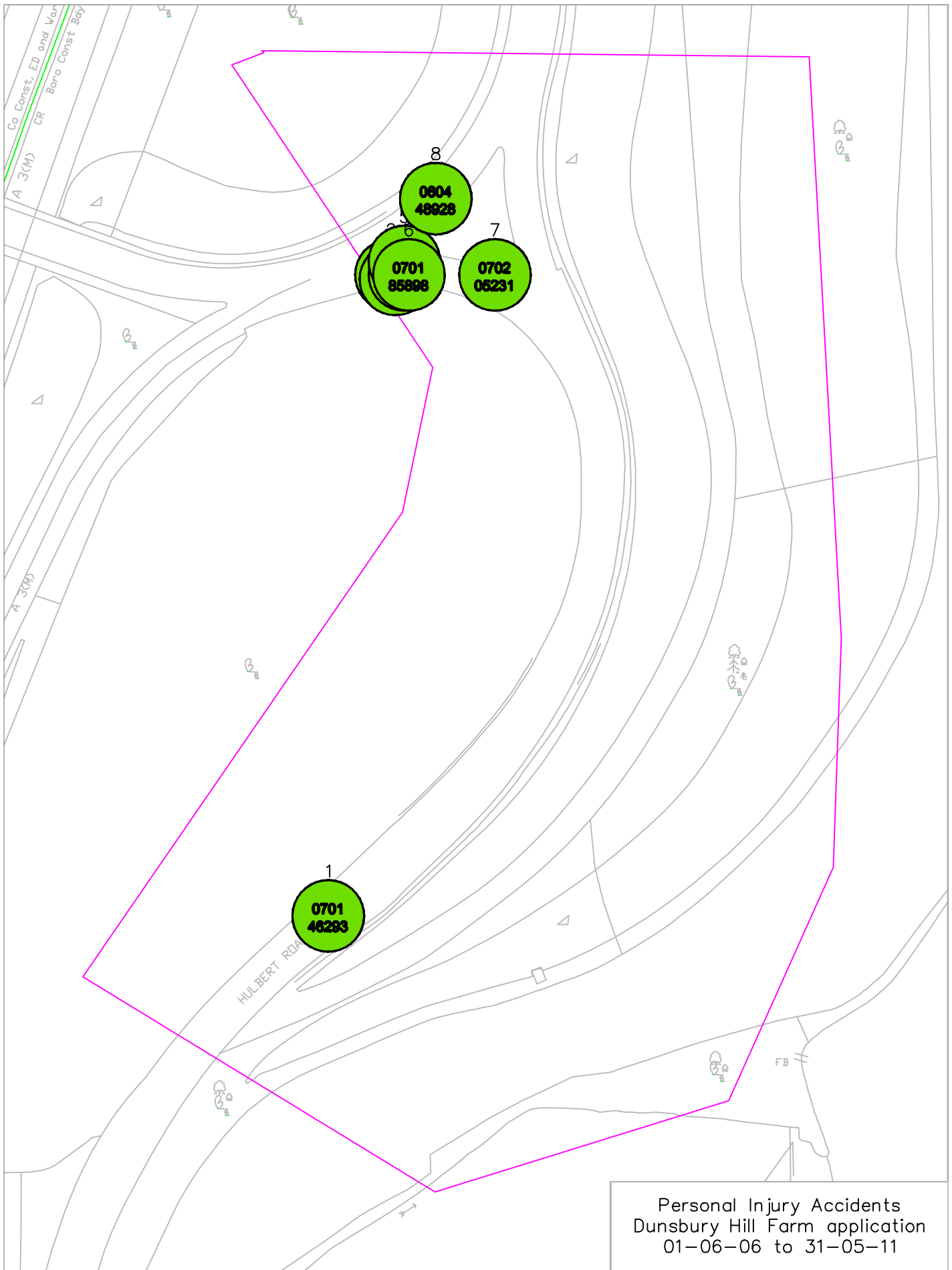
Eight slight injury collisions occurred between 6 July 2006 and 31 May 2011 on the B2150 Hulbert Road from the location of the proposed new scheme roundabout to the eastern arm of the roundabout junction of the A3 (M) Junction 3.

Review of the eight slight injury collisions revealed that the majority (7, 87.5%) occurred on Hulbert Road on the eastern approach to the A3 (M) Junction 3 roundabout. It is of note that in the majority of these collisions (6, 85%), there was one vehicle reported as 'waiting to go ahead but held up', and over half (4, 57%) had the Contributory Factor 'failed to look properly'. The causation factor 'waiting to go ahead but held up' is not uncharacteristic of collisions that occur on the approach to a roundabout. However, the fact that there is a cluster of accidents with the characteristic of 'waiting to go ahead but held up' and a 'failure to look properly' could be indicative of a road safety problem at this location such as poor visibility. This suggests that further investigation should be carried out into this cluster of collisions on Hulbert Road at the approach to the A3 (M) Junction 3 roundabout, in order to establish if mitigation measures could prevent future accidents.

Analysis of traffic flow data could potentially enable the calculation of a collision rate and comparison with the national average for a typical road of this type. It is recommended that any scheme proposals take the potentially elevated collision risks on Hulbert Road at the approach to the A3 (M) Junction 3 roundabout into consideration, and incorporate mitigating measures where appropriate.

A. Appendices

- A.1. Personal Injury Accident Location Plot of the B2150 Hulbert Road from the location of the proposed new scheme roundabout to the eastern arm of the roundabout junction of the A3 (M) Junction 3**



Personal Injury Accidents
Dunsbury Hill Farm application
01-06-06 to 31-05-11



Hampshire
County Council

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"HAMPSHIRE COUNTY COUNCIL, 100019180".

A.2. Contributory Factors Report Summary

Contributory Factors Report Summary - Dunsbury Hill Farm application

Accidents Found Date Range: 06/07/2006 - 31/05/2010

Grid Coordinate Range: 469589,108757 - 469613,108917

Accident Severity

	2006	2007	2009	2010	Total
Slight	2	3	2	1	8
Total	2	3	2	1	8

Casualty Severity

	2006	2007	2009	2010	Total
Slight	2	5	3	1	11
Total	2	5	3	1	11

Casualty KSI

	2006	2007	2009	2010	Total
Slight	2	5	3	1	11
Total	2	5	3	1	11

Dunsbury Hill Farm application

Dunsbury Hill Farm application

Accident Reference:070146293 Slight B2150 HULBERT ROAD 200 METRES SOUTH OF A3M, HAVANT, Accident 1 of 8
HAMPSHIRE

Friday 30/03/2007 19:31 Grid Coords 469589/108757 Daylight Dark/no lights

Surface Wet/Damp Weather Raining without high winds

Contributory Factors

	Participant	Confidence	Did a police officer attend?
103 Slippery road due to weather (Road Environment Contrib)	Vehicle 1	Very likely	Yes
410 Loss of control (Driver/Rider - Error)	Vehicle 1	Very likely	
408 Sudden braking (Driver/Rider - Error)	Vehicle 2	Very likely	

Accident Description

VEH 1 (CAR) TRAVELLING NORTH ON B2150, LOOSES CONTROL OF VEHICLE SPINNING CAR AROUND AND HITTING ON COMING TRAFFIC. VEH 2 (CAR) BRAKED HARD, BUT WAS HIT BY VEH 1. VEH 3 (CAR) THEN COLLIDED WITH REAR OF VEH 2 DUE TO SUDDEN BRAKING.

Vehicles

1 Car	Going ahead right hand bend	Skid	Negative	SW to NE	Male Age 30	
2 Car	Going ahead left hand bend	No skid	Negative	NE to SW	Female Age 60	
3 Car	Going ahead left hand bend	No skid	Negative	NE to SW	Male Age 60	

Casualties

1 Driver or Rider	Slight	Vehicle no.2	Female 60
2 Passenger	Slight	Vehicle no.3	Female 60

Accident Reference:060258491 Slight A3M/B2150 RBT HULBERT RD W/BOUND APPROACH Accident 2 of 8

Thursday 06/07/2006 07:55 Grid Coords 469603/108900 Daylight Light/no lights

Surface Dry Weather Fine without high winds

Contributory Factors

	Participant	Confidence	Did a police officer attend?
405 Failed to look properly (Driver/Rider - Error)	Vehicle 2	Very likely	No - reported 'over the
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 2	Very likely	
402 Junction restart (Driver/Rider - Error)	Vehicle 2	Very likely	

Accident Description

STAT CAR1 AT RBT FACING WEST FROM HAVANT STRUCK IN REAR BY FOLLOWING CAR2

Vehicles

1 Car	Waiting to go ahead but held up	No skid	Not contacted	E to W	Female Age 30	
2 Car	Starting	No skid	Not contacted	E to W	Male Age 36	

Casualties

1 Driver or Rider	Slight	Vehicle no.1	Female 30
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Dunsbury Hill Farm application

Accident Reference:090310664 Slight A3M SOUTHBOUND ONSLIP AT JUNCTION WITH B2150 HULBERT ROAD, HAVANT, HAMPSHIRE Accident 3 of 8

Friday 17/07/2009 11:54 Grid Coords 469604/108899 Daylight Light/no lights
Surface Dry Weather Fine without high winds

Contributory Factors

408 Sudden braking (Driver/Rider - Error)
308 Following too close (Drive/Rider - Injudicious)
602 Careless/Reckless (Driver/Rider - Behaviour)
103 Slippery road due to weather (Road Environment Contrib)

Participant	Confidence
Vehicle 1	Possible
Vehicle 2	Possible
Vehicle 2	Possible
Vehicle 2	Possible

Did a police officer attend?
No - reported 'over the

Accident Description

BOTH VEHS TRAVELLING WEST ALONG B2150 HULBERT ROAD. VEH 2 (VAN) COLLIDED WITH REAR OF VEH 1 (CAR) WHICH WAS WAITING FOR GAP BEFORE ENTERING ROUNDABOUT.

Vehicles

1 Car	Waiting to go ahead but held up	No skid	Not contacted	E to W	Female Age 30
2 Goods < 3.5t	Going ahead other	No skid	Not contacted	E to W	Male Age -1

Casualties

1 Driver or Rider Slight Vehicle no.1 Female 30

Accident Reference:100222308 Slight B2150 HULBERT ROAD AT JUNCTION WITH THE A3(M), WATERLOOVILLE, HAMPSHIRE Accident 4 of 8

Monday 31/05/2010 13:50 Grid Coords 469606/108900 Daylight Light/with lights
Surface Dry Weather Fine without high winds

Contributory Factors

406 Failed to judge other person's path/speed (Driver/Rider - Error)
405 Failed to look properly (Driver/Rider - Error)

Participant	Confidence
Vehicle 2	Very likely
Vehicle 2	Possible

Did a police officer attend?
Yes

Accident Description

VEH 1 (M/CYCLE) TRAVELLING NW ALONG B2150 HULBERT ROAD SLOWS ON APPROACH TO RBT AT JUNCTION 3 OF THE A3(M) WHEN VEH 2 (CAR) BEHIND DOES COLLIDES INTO REAR OF VEH 1 HAVING ASSUMED VEH 1 WAS PROCEEDING.

Vehicles

1 M/cycle 50 - 125cc	Waiting to go ahead but held up	No skid	Negative	E to W	Female Age 68
2 Car	Going ahead other	No skid	Negative	E to W	Male Age 52

Casualties

1 Driver or Rider Slight Vehicle no.1 Female 68

Dunsbury Hill Farm application

Accident Reference:090555420 Slight HULBERT ROAD, AT JUNCTION WITH A3M JUNCTION 3, Accident 5 of 8
WATERLOOVILLE, HAMPSHIRE
Wednesday 30/12/2009 14:00 Grid Coords 469606/108903 Daylight Light/with lights
Surface Wet/Damp Weather Raining without high winds

Contributory Factors

		Participant	Confidence	Did a police officer attend?
405	Failed to look properly (Driver/Rider - Error)	Vehicle 2	Very likely	No - reported
406	Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 1	Very likely	'over the

Accident Description

VEH 1 (CAR) AT JUNCTION OF HULBERT ROAD, WITH THE A3M JUNCTION 3, HAVANT FACING WEST. VEH 2 (CAR) BEHIND VEH 1, ANTICIPATES VEH 1 MOVING OFF AND STARTS TO MOVE FORWARD COLLIDING INTO THE REAR OF VEH 1 CAUSING MINOR INJURY.

Vehicles

1 Car	Waiting to go ahead but held up	No skid	Not contacted	E to W	Female Age 17
2 Car	Going ahead other	No skid	Not contacted	E to W	Female Age 34

Casualties

1 Driver or Rider	Slight	Vehicle no.1	Female 17
2 Passenger	Slight	Vehicle no.2	Female 45

Accident Reference:070185898 Slight A3M/B2150 RBT HULBERT RD W/BOUND APPROACH Accident 6 of 8
Friday 20/04/2007 19:00 Grid Coords 469607/108900 Daylight Light/no lights
Surface Dry Weather Fine without high winds

Contributory Factors

		Participant	Confidence	Did a police officer attend?
405	Failed to look properly (Driver/Rider - Error)	Vehicle 2	Very likely	No - reported
605	Inexperienced or learner driver/rider (Driver/Rider - Behaviour)	Vehicle 2	Possible	'over the

Accident Description

STAT CAR1 AT RBT FACING WEST FROM HAVANT STRUCK IN REAR BY FOLLOWING CAR2

Vehicles

1 Car	Waiting to go ahead but held up	No skid	Not contacted	E to W	Female Age 22
2 Car	Stopping	No skid	Not contacted	E to W	Male Age 19

Casualties

1 Driver or Rider	Slight	Vehicle no.1	Female 22
2 Passenger	Slight	Vehicle no.1	Male 30

Dunsbury Hill Farm application

Accident Reference:070205231 Slight A3M/B2150 RBT HULBERT RD W/BOUND APPROACH Accident 7 of 8

Thursday 03/05/2007 17:10 Grid Coords 469607/108900 Daylight Light/no lights
Surface Dry Weather Fine without high winds

Contributory Factors

	Participant	Confidence	Did a police officer attend?
308 Following too close (Drive/Rider - Injudicious)	Vehicle 2	Very likely	No - reported
406 Failed to judge other person's path/speed (Driver/Rider - Error)	Vehicle 2	Possible	'over the

Accident Description

STAT CAR1 AT RBT FACING WEST FROM HAVANT STRUCK IN REAR BY FOLLOWING UNKKNOWN CAR2

Vehicles

1 Car	Waiting to go ahead but held up	No skid	Not contacted	E to W	Female Age 39
2 Car	Going ahead other	No skid	Not contacted	E to W	Male Age ?

Casualties

1 Driver or Rider Slight Vehicle no.1 Female 39

Accident Reference:060448928 Slight A3M/B2150 HULBERT RD RBT NR APPROACH FROM HAVANT ? Accident 8 of 8

Saturday 04/11/2006 22:12 Grid Coords 469613/108917 Daylight Dark/no lights
Surface Wet/Damp Weather Fog or mist - if hazard

Contributory Factors

	Participant	Confidence	Did a police officer attend?
602 Careless/Reckless (Driver/Rider - Behaviour)	Vehicle 1	Very likely	Yes
707 Rain, sleet, snow or fog (Driver/Rider - Vision Affected)	Vehicle 1	Possible	

Accident Description

CAR2 TRAV SOUTHWEST NEG RBT TOWARDS A3M S/BOUND EXIT STRUCK IN REAR BY FOLLOWING CAR1 ?

Vehicles

1 Car	Going ahead other	No skid	Negative	NE to SW	Male Age 18
2 Car	Going ahead other	No skid	Negative	NE to SW	Female Age 61

Casualties

1 Driver or Rider Slight Vehicle no.1 Male 18