Road Safety Council of Northern Ireland

“Understanding The Risks from a motorcyclist’s perspective”

24 October 2008

DAMIAN COLL
General information relating to road traffic collisions

Case Study
It’s not just speed that kills

- Speed alone: 5%
- Driver error/response: 66%
- Injudicious action: 28%
- Road envir: 15%
- Pedestrian only: 13%
- Vision affected: 10%
- Special codes: 5%
- Vehicle defect: 2%

DOT based on 147,509 collisions including 2613 fatalities
Number of motorcyclist fatalities by age (2005-2007)

Age group
- 10 - 16: 2
- 17 - 24: 12
- 25 - 34: 14
- 35 - 44: 12
- 45 - 54: 9
- 55 - 64: 1
- 65+: 3

PSNI Central Statistics Unit
Motorcyclist fatalities by speed limit (2005-2007)

PSNI Central Statistics Unit
COLLISION INVESTIGATION RECONSTRUCTION

- Giant Jigsaw
- The more pieces the better the picture
- Some pieces more important than others
- Scene examination normally provides most of the pieces
- Need to go back at least 10 seconds in time
  60mph approx 30 m/s then back 300 metres
EVIDENCE GATHERING

- Scene Examination
- Vehicle Examination (on board data)
- Person Examination (Alive/Deceased)
- Witness statements
- Collision History
- CCTV/On board video
- etc
EVIDENCE GATHERING

- Photography
- Mapping 2D/3D (3D laser scanning/R2S)
- Video
- Scene tests
- Computer Reconstruction
- etc
FATAL RTC

HILLHEAD/CREAGH ROAD

TOOMEBRIDGE

31 MAY 2007
Honda CBR 1000 RR (Fireblade) motorcycle
Mercedes-Benz tractor unit/triple axle semi-trailer
COLLISION SCENE
COLLISION SCENE
MOTORCYCLE
COLLISION SCENE
HEADLIGHT BULB
COLLISION SCENE
COLLISION SCENE
COMMENTS

• Length of tyre mark produced by rear tyre of motorcycle 61 metres
• Mark commenced 55 metres prior to centre of junction
• Mark commenced 290 metres into 40 mph speed limit
• Time for truck to move from stationary to impact approximately 8 seconds
CONCLUSIONS

• Minimum speed of motorcycle at commencement of tyre brake mark in the range 68 to 80 mph
• Motorcyclist was at least 80 to 110 metres from the junction when he commenced to perceive the lorry as a hazard
• Motorcyclist was at least 155 metres from the junction when the truck commenced manoeuvre
CONCLUSIONS

• Motorcycle was in a position to be seen
• If travelling at 40 mph motorcyclist should have been able to stop motorcycle prior to impact
VISIBILITY DISTANCE (153m)
VISIBILITY DISTANCE (170m)
VISIBILITY DISTANCE (231m)
VISIBILITY DISTANCE (109m)