

# Road Safety Council of Northern Ireland

## “Understanding The Risks from a motorcyclist’s perspective”

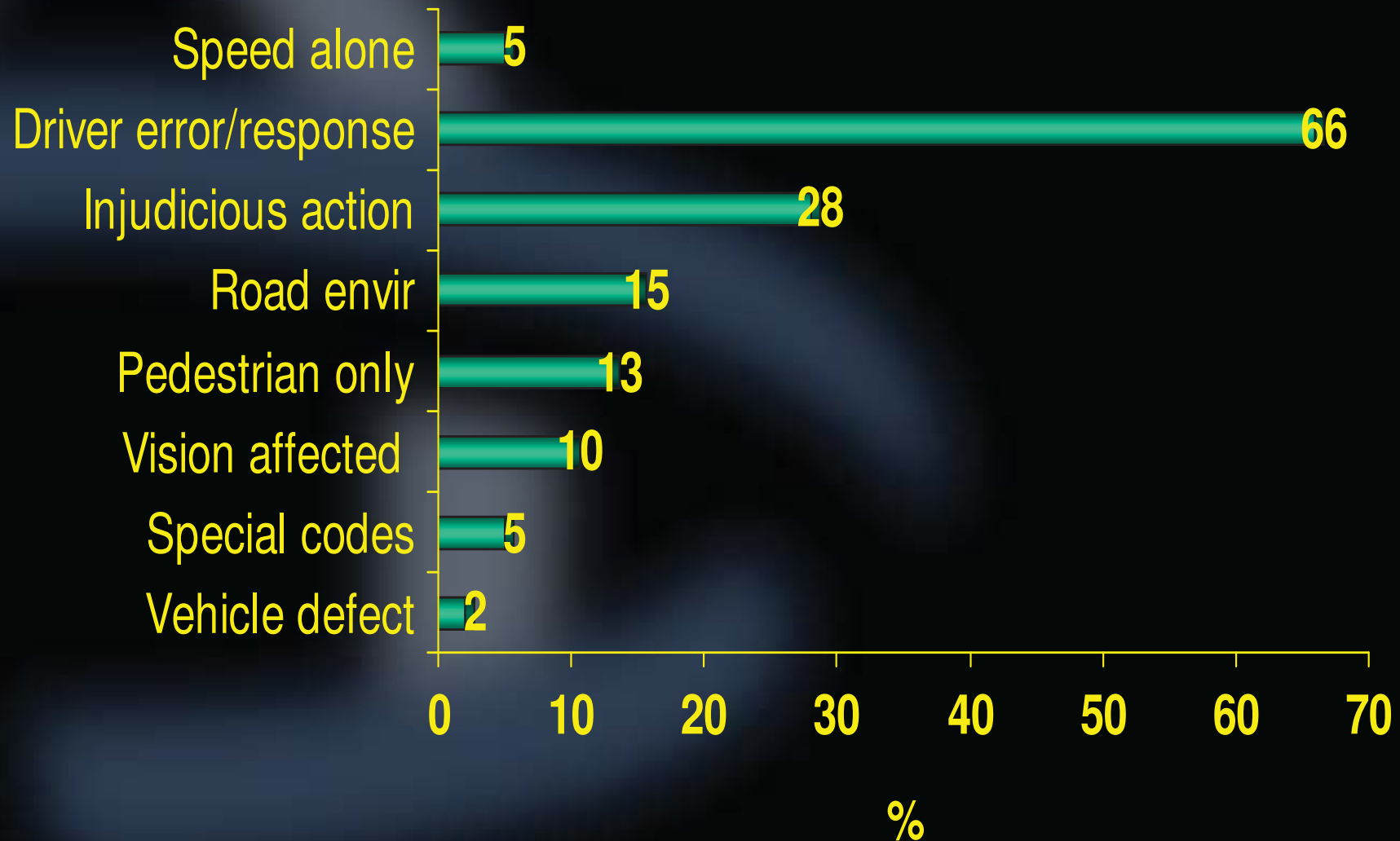
24 October 2008

DAMIAN COLL

# General information relating to road traffic collisions

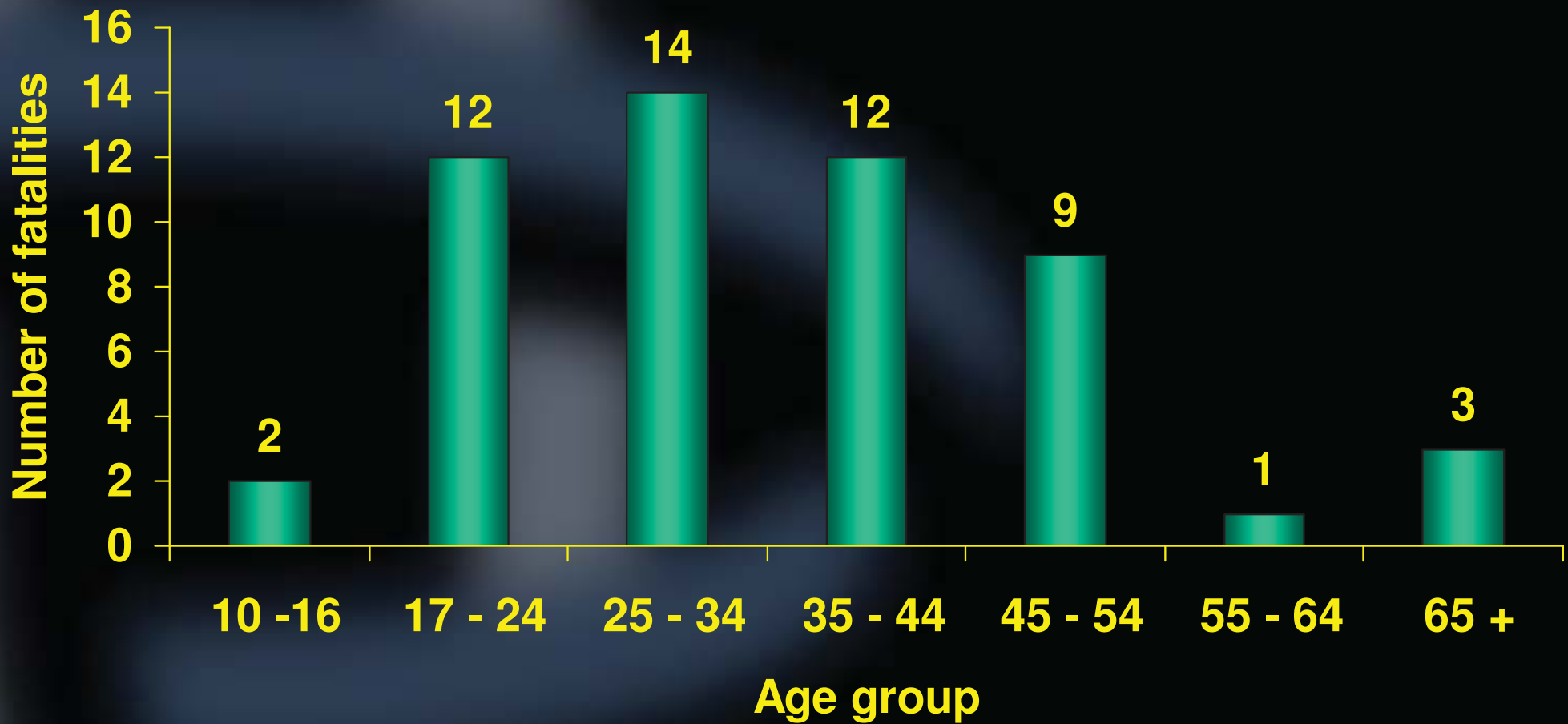
## Case Study

# It's not just speed that kills

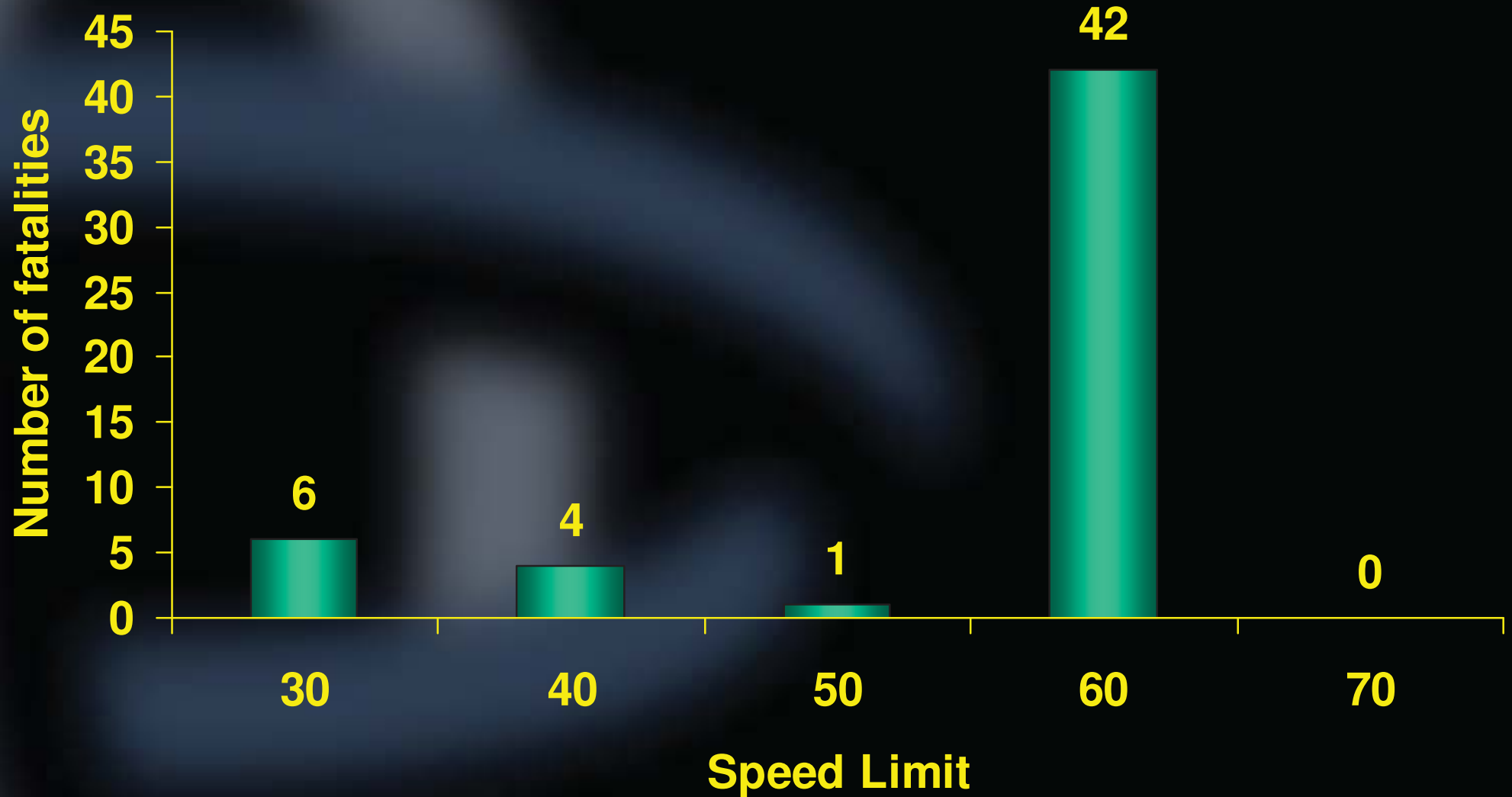


DOT based on 147,509 collisions including 2613 fatalities

# Number of motorcyclist fatalities by age (2005-2007)



# Motorcyclist fatalities by speed limit (2005-2007)



# 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



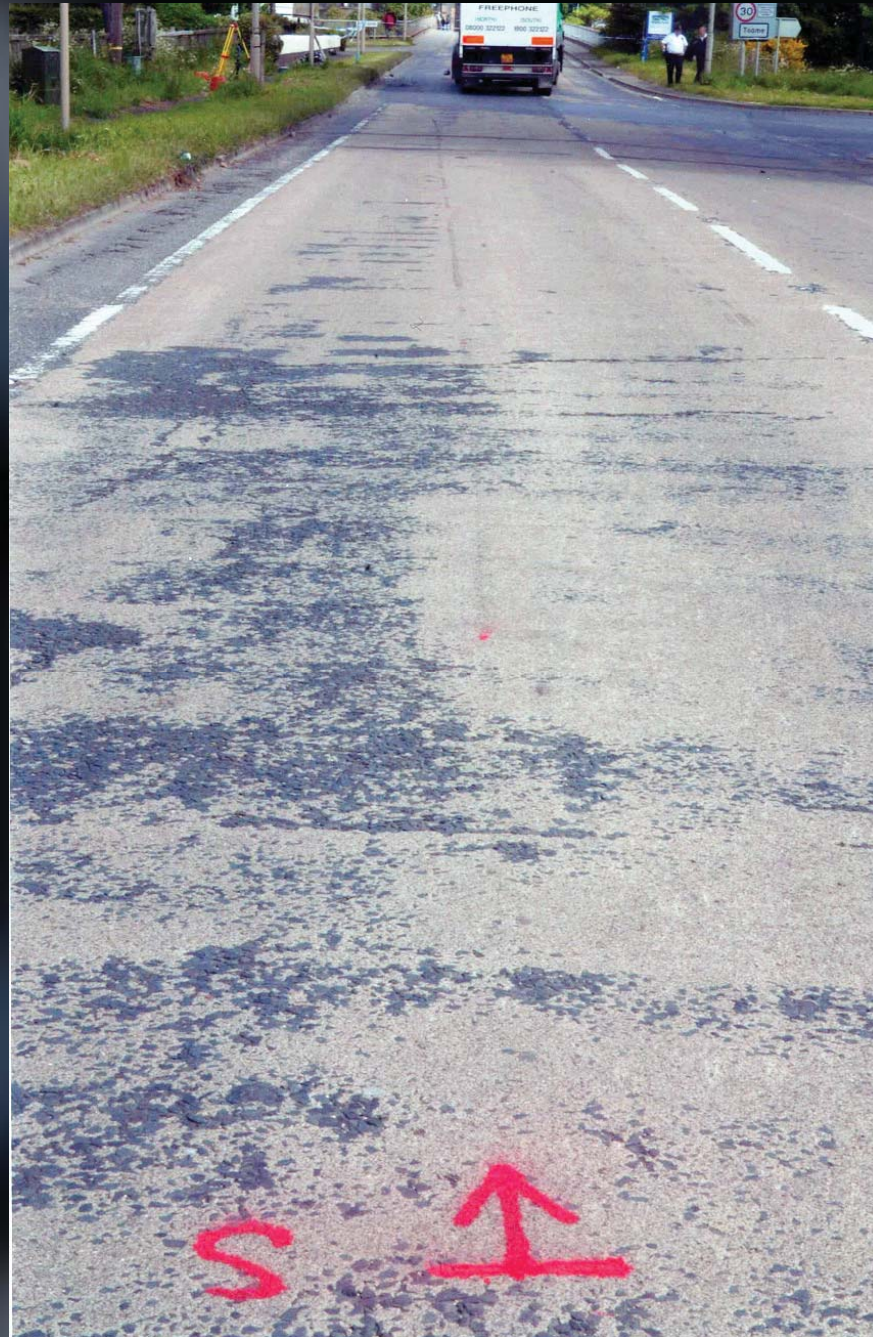


# COLLISION SCENE





# COLLISION SCENE



# COLLISION SCENE



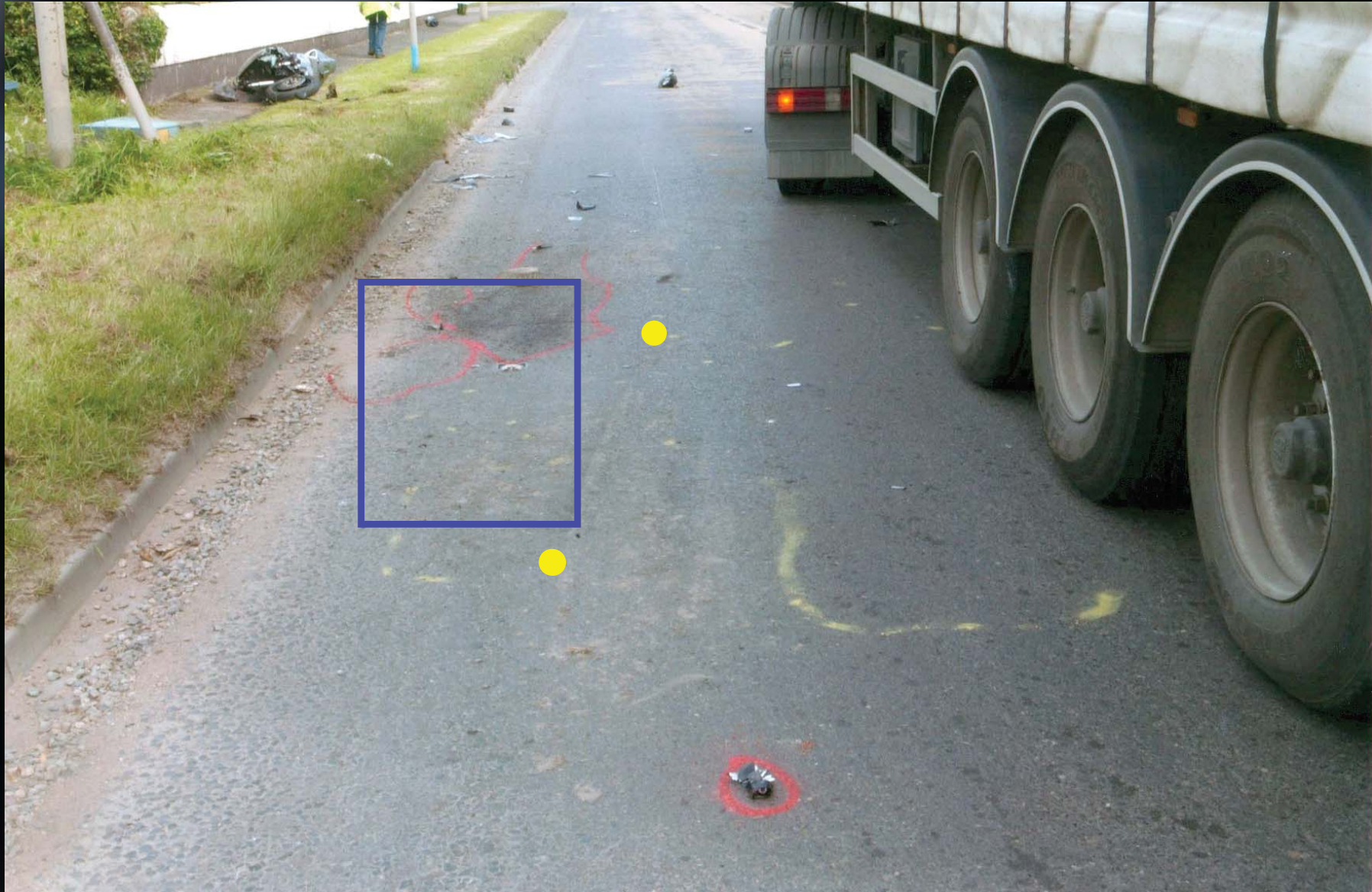


# COLLISION SCENE





# 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 (309m)





# VISIBILITY DISTANCE (109m)

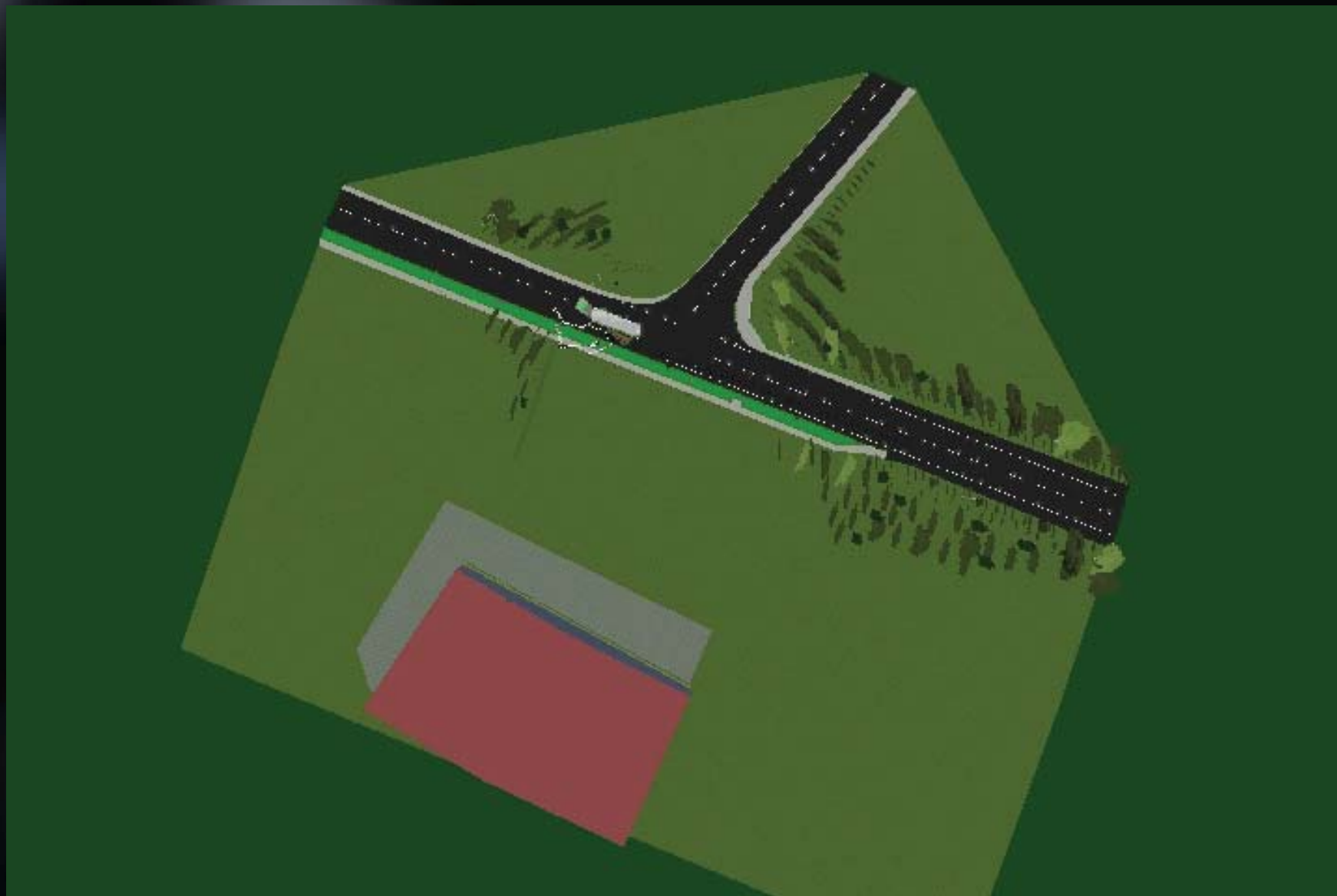




# COLLISION SCENE



# RELMO





# RELMO



# QUESTIONS/COMMENTS

