Vehicle Technology and Design to Improve Sightlines Around LGVs

Scorsa November 2012
Introduction

Ronnie Simpson – Northern Contract Haulage Manager

Julie Welch – Health and Safety Manager

Ronnie Simpson – Northern Contract Haulage Manager
Who are CEMEX?

More than 44,000 employees worldwide

Presence in more than 50 countries across the Americas, Europe, Africa, Middle East, Asia

2011 global sales $15.1 billion US Dollars

73 cement plants
1,921 Readymix
377 aggregate quarries
226 land-distribution centers
70 marine terminals

Top three cement manufacturer in the world

One of the largest producers of aggregates

The world’s leading supplier of ready-mixed concrete

The UK represents the 4th largest operation within CEMEX, with 11% of all revenues
A vertically integrated building materials company

- We supply **Cement**, **Readymix Concrete**, and **Aggregates**, as well as a range of other construction products and services.
CEMEX in the UK

- Cement, concrete, aggregates, asphalt
- Market leader in ready-mixed concrete
- Operates three cement plants
- Supply network of over 500 locations
- Over £1 billion annual sales
- 4,000+ employees
The CEMEX LGV Fleet

CONCRETE MIXERS
- 500+ Independent Haulage Contractors’s & 45 company vehicles

CEMENT TANKERS
- 120 x 44 tonne articulated vehicles

AGGREGATE & ASPHALT TIPPERS
- 55 x 44 tonne articulated vehicles
- 145 x 32 tonne 8 wheeled rigid vehicle
- 20 x 26 Tonne 6 wheeled rigid vehicles

Plus circa 2,800 Deliveries on sub-contactors / day
Of particular concern is the continuing rise in deaths and serious injuries among vulnerable road users.

Comparing 2011 with 2012, Killed / Seriously Injured:

- Pedestrians have risen by 8%
- Cyclists by 13%
- Motorcyclists by 8%
- Overall casualties for cyclists have risen in 10 of the last 13 quarters
Pedestrians

- More than 60 child pedestrians are killed or seriously injured every week, children often misjudge the speed and intentions of drivers and are easily distracted.
- Nearly half of all pedestrians killed are aged over 60 older people may have difficulties in seeing or hearing approaching traffic and may have decreased mobility.
- In 2011 there were 453 pedestrian deaths, 12 per cent more than in 2010.
- Seriously injured pedestrian casualties in accidents increased, by 5 per cent, to 5,454.
- These increases are set against a generally downward trend in the number of pedestrian casualties and fatalities since the 1970s.
Motorcyclists represent 1% of traffic yet account for up to 20% of the deaths and serious injuries on our roads.

Motorcyclists are 40 times more likely to be killed than car drivers.

Recent European research reveals that nearly 70% of motorcycle accidents involved a car, lorry or bus and that approximately 55% of accidents occur at junctions.

It is unlikely that in all these cases the motorist failed to look but rather failed to see the motorcyclist.

There were 362 motorcycle users killed in 2011, a 10% decrease compared to 2010. However reported as seriously injured increased by 10% to 5,247.
Cyclists

- Around 75% of fatal or serious cyclist accidents occur in urban areas
- Around half of cyclist fatalities occur on rural roads
- 75% happen at / near road junctions or roundabouts
- 80% occur in daylight - but night time incidents are more likely to be fatal
- Almost one quarter of the cyclists killed or injured are children
- 107 cyclists killed in 2011 (down from 111 in 2010)
- However, the number of seriously injured increased by 16 per cent to 3,085
- Cyclist traffic levels are estimated to have risen by 2.2 per cent over the same period.
Cyclists and large goods vehicles

- Large goods vehicles (LGVs) present a particular danger for cyclists, especially in London where around 20% of cyclist fatalities occur involve an LGV.
- These often occur when an LGV is turning left at a junction.
- About one quarter of accidents resulting in serious injury to a cyclist involved an LGV, bus or coach passing too close to the rider.
UK Reported Road Casualties 2011

Reported Road Casualties in Great Britain: Main Results 2011
Statistical Release
28 June 2012

Vehicle traffic levels are broadly stable after falling for 3 years
<table>
<thead>
<tr>
<th>Consequences of a fatality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>For the driver……………</strong></td>
</tr>
<tr>
<td>❑ Uncertainty of the circumstances</td>
</tr>
<tr>
<td>❑ The arrest - prosecution</td>
</tr>
<tr>
<td>❑ Future – driving?</td>
</tr>
<tr>
<td>❑ Guilt – depression – stress</td>
</tr>
<tr>
<td>❑ Coroners hearing</td>
</tr>
<tr>
<td>❑ Civil Claim</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>For the company……………</strong></td>
</tr>
<tr>
<td>❑ 3rd Party Claims for Accidents</td>
</tr>
<tr>
<td>❑ Personal Injury Claims</td>
</tr>
<tr>
<td>❑ Loss of Vehicle Earnings if Vehicle impounded - £500+ per day</td>
</tr>
<tr>
<td>❑ Bad Publicity / repute £??</td>
</tr>
<tr>
<td>❑ Loss of Work/Revenue £??</td>
</tr>
<tr>
<td>❑ Prosecution £??</td>
</tr>
<tr>
<td>❑ Emotional stress</td>
</tr>
</tbody>
</table>
Pressure to improve

Improve Road Safety

Government Agencies
Local Authorities
Politicians
Customers
Pressure Groups
Our Own Health & Safety Groups
Incidents with LGVs are high profile

Lorry drivers should be made to watch footage of fatal bicycle accidents in a bid to reduce the number of riders killed on the roads, it was claimed today.

Neil Maroni, whose cousin died earlier this month, spoke out a day after another London cyclist was killed, and a second critically injured, in two separate collisions involving lorries.

Yesterday's fatal accident happened in the City. The second, in Kensington, left a cyclist with serious injuries after apparently being struck by a left-turning lorry.

Tragic: Lisa Pontecorvo was killed as she pushed her bicycle in front of a cement lorry.

29 years old trainee architect killed by left turning truckmixer

64 years old, killed by truckmixer whilst wheeling bicycle across road

Tributes paid to crash cyclist

A CYCLIST killed when she was trapped by a cement mixer has been named.

Rebecca Goossen, 29, a trainee architect, was on her way to her job at Metropolitan Workshop in Cokayne Street, Finsbury, when the accident happened.

Ms Goossen, originally from Germany, lived in Bethnal Green and was said to be a very careful cyclist.

The crash happened at the junction of Goswell Road and Old Street, Finsbury - described by workers as an accident blackspot - at about 9.20am on April 9.

The full 22-tonne cement mixer had been attempting to turn left into Goswell Road when Ms Goossen was caught on the inside.
Incidents with Cyclists are high profile

**Cities fit for cycling**

**Ninety-nine cyclists killed so far in 2012**

Cities fit for Cycling: The Times campaign

27 July 2006
12 October 2012

Read the full story

The Times safe cycling campaign wins major award

The Cities Fit for Cycling campaign is recognised as ‘one of the best campaigns the transport sector has...’

Ride to the rescue of nation’s cyclists, Cameron is urged

PM must take personal responsibility for the safety of cyclists and promote safety measures, a letter from a cross-party...
Cyclist hurt in collision with lorry owned by death crash company

Ross Lydall
28.06.10

A cyclist is injured after colliding with a construction lorry owned by the same firm involved in the death of a rider three months ago.

The woman was taken to hospital with a suspected broken ankle after becoming trapped between the Keltbray lorry and a metal railing opposite Borough Tube station, at the junction of Borough High Street and Great Dover Street.

It is the latest serious crash involving construction lorries in the London Bridge area, where the 310-metre high Shard tower is being built within a new commercial development.
Pressure is now coming from Customers

Crossrail ups HGV cycle safety procedures

02 March 2012 | By Chris Tindall |

- HGVs delivering to Crossrail construction sites that have not been fitted with safety equipment for cyclists will be refused entry, according to the engineering firm.
- In addition, contractors will be liable for any costs incurred if they are turned away, as the company pushes ahead with measures to support Transport for London’s work to improve conditions for cyclists.
- HGVs are expected to have been fitted with Fresnel lenses, side scan equipment, under-run guards and warning alerts for cyclists.
- It also says more than 2,000 lorry drivers have received road safety training and that “a limited number of lorries” have already been turned away from its sites.
Parliament / Lobbying Pressures
The training leading to the achievement of this card has been designed specifically to increase the safety awareness of drivers and to encourage safe behavior at industry sites, delivery sites and on the road.

This will also provide you with 7 hours CPC. Following the main course there is a further Module and assessment which provides you With the MPQC Driver Skills Card.
"Road deaths are not 'accidents' - unavoidable, unforeseeable, inevitable, unpreventable sequences of events. They have causes and they are all avoidable."

Cynthia Barlow, Alex's mother
What can we do - as a Business and Industry?

- Raise awareness with our drivers and hauliers
- Driver development and training – Raising standards
- Develop safer vehicles
- Develop and share best practice
- Raise standards
- Raise public awareness
- Develop new technologies
- Change culture and improved image
These have been retro-fitted to all truckmixers, cement tankers and tipper vehicles owned by the company or operated by contractors in company livery within the UK since 2004. This accounts for in excess of 900 vehicles.
Improved Vehicle Safety Features – Continual Improvement

Fitting of Side guards – As part of the initiative to assist in cyclist safety. CEMEX tipping vehicles initially operating in London had these fitted to the N/S. It is now CEMEX standard to have them fitted to all aggregate delivery vehicles to both sides of the vehicle.

Near Side Proximity Sensors – Tippers, Truck mixers and Tankers have been fitted with proximity sensors on the nearside. These are operational when the left turn indicator is activated and give a verbal warning to cyclists and an audible alarm for the driver.
The Spafax VM5 mirror on trial
This mirror was found to give a greater field of vision by Loughborough University - Approx 10% - Now added to new vehicle specification
Camera Systems – 6 Systems on trial

Systems currently trialled

BRIGADE
backWATCH
ARK
ASL
VUE
VISION TECHNIQUES
Driver training and awareness

Cyclists and large vehicles

Driver Training and Information Programmes, Safety Alerts, Hazard Alerts, Tool Box Talks etc
Three Driver development officers supported by IAM driving assessors and lead drivers

Minimum 3 Day Induction Programme for all driver – up to 2 weeks

Defensive Driver Training and annual assessment

6 Monthly Driver Licence Check - DVLA

Bespoke Driver Handbooks including relevant Safe Operating Procedures and best practice.

Sharing of Best Practice through Safety Alerts – both internal and industry
Contents include:-

- Industry Incidents and Fatal RTA’s
- Company Policies and Procedures
- Best Practice and Leadership
- Safe Driving
- Vehicle Safety Checks
- Vulnerable Road Users
- Mobile Phones, Seat Belts, Drugs & Alcohol
- New Legislation
Organising Events around the UK

STEVENAGE

BRISTOL

NEWCASTLE

GLASGOW

Team Green Britain
Bike Week
18-26 June

Everyday Cycling
For Everyone!
18-26 June 2011
www.bikeweek.org.uk
Enhancing Public awareness

Working with schools and local communities
Lessons for cyclists on lorry danger

Rob Singh, Crime Reporter
13.11.07

Cyclists are being shown first hand how riding alongside lorries is a potential killer.

This week police are at Horse Guards Parade to emphasise to cyclists how important it is to keep a safe distance between themselves and commercial vehicles.

By demonstrating how blind lorry drivers can be to a cyclist's presence, officers hope to reduce accidents.

Police are increasingly concerned following a number of deaths of cyclists in recent years, many involving heavy goods vehicles.

Statistical data shows that 53 per cent of all cycle accidents happen during the rush hour. This year alone 13 cyclists have died in road collisions, with six involving heavy goods vehicles. Last year nine cyclists died in accidents involving HGVs.

Safety tips: Police emphasising the importance of a safe distance

Look here too

- Safer Cycling
- Coroner's plea after new cyclist death
- MP: Lorries should have safety mirrors
Supporting other groups

Crash Investigators Day
Company Open Days – Employees and members of the public invited to site. A chance to get in a cab and get the ‘driver’s view’.
And Finally ...........................

How easy is it to assume its ALL CLEAR ....