

Executive Summary

The Institute

The Institute of Highway Incorporated Engineers is the qualifying body for Chartered and Incorporated engineers and technicians in highways and transportation. It has been a licensed institution of the Engineering Council for thirty years.

Its 3000 members work in Central and Local Government, Consulting Engineers and supplying contractors.

Incorporated Engineers and technicians are the 'day to day' highway engineers designing, installing, operating and maintaining the highway network. As such our members deal with all aspects of highway operation including Highway design, Traffic engineering and management, Materials & Soils engineering, Traffic control, Transportation & Highway maintenance.

The Institute is well known for its training courses, and specialist qualifications in development control, traffic signing, and highway maintenance and signal control. IHIE published the industry-standard Home Zone Design Guidelines in 2002 and launched the UK Home Zones website with DfT backing in 2005. The IHIE Guidelines for Motorcycling, also published in 2005, is an award winning compendium of good practice for road engineers in how to consider that particular group of 'vulnerable' road users.

Summary of Proposals in the IHIE submission

UK highway engineers can be justifiably proud of the role that they have played in delivering government targets for casualty reduction since their introduction in 1987.

All involved in highway design, construction, operation and maintenance have a significant role to play in reducing the level of road trauma.

Casualty rates for highway travel are often compared unfavourably to those of other modes of transport (rail, sea and air). However, they are not wholly statistically comparable. It is not easy

to see how their levels of corporate responsibility of such modes could be transferred to the personal transport users and operators of our highway network.

IHIE is well placed to highlight concerns over the state of the highway industry. We have a long record in qualifying engineers and accrediting relevant qualifications. The last 5-10 years has seen a significant reduction in those entering the civil engineering and in particular highway engineering professions. The shortage of staff may impact on the successful delivery of the Government's road safety targets.

With the introduction by the DfT of its new "Road Safety Partnership Grant" IHIE are concerned that a valuable resource (i.e. the NGOs) has been 'frozen out'.

IHIE believes that in order that the public be more fully engaged then targets should be split from 2 into 3 groups Killed, Serious and Slight and that consideration be given for different, challenging, reductions in each of these groups. Future targets should reflect regional traffic growth and increases in differing modes (possibly via modal rate/Km target?)

- **IHIE believes that in setting the next round of targets it is vital for the Government to investigate how to 're-engage' the public if the level of road trauma is to be reduced in the UK (Para 1.7)**
- **IHIE believes that in setting any next round of targets, Government should be aware that in Local Authorities there is a deal of 'target fatigue' With something as important as road safety targets we should ensure that delivery doesn't result in short term or temporary gains at the expense of works that are 'too hard' to deliver. (Para 1.8)**
- **IHIE would welcome the active involvement of interested parties (DfT, Home Office, ACPO, CSS) to establish the best way to promulgate 'best practice' in partnership working between investigating officers and local highway authorities. This should in turn feed results back into highway design and operation. (Para 4.3)**
- **IHIE believes that if the UK is to maintain its pre-eminent role as a leader in Road Safety then a continued supply of qualified, skilled practitioners (in all disciplines) is of fundamental importance. Local Authorities, private sector**

- employers, Highway Agency regional offices (together with their HA managing agents) should all be actively encouraged to work with universities, colleges and schools (possibly via industry liaison boards) to promote engineering within a 'local' context. (Para 5.13)**
- **Private sector employers and Local Authorities, in association with the universities, colleges and professional bodies should investigate how best to attract staff (possibly from less 'traditional' backgrounds) to then equip them with the necessary competencies and indeed how to reward those achieving such competencies, to deliver highway engineering works. (Para 5.14)**
 - **IHIE believes that the re-establishment of day or block release courses (which may need to be subsidised centrally) to equip those from non engineering backgrounds should be actively pursued. (Para 5.15)**
 - **Despite competing financial demands private sector employers and Local Authorities (Possibly via an identified sum in Local Transport Plans?) should set aside an allocation for the training and continued professional development of staff. (Para 5.16)**
 - **IHIE believes that DfT should keep the new "Road Safety Partnership Grant" fund under review and consider how the long standing involvement of NGOs can be maintained. (Para 6.5)**
 - **IHIE believes that if the public are to be fully engaged in addressing road safety trauma then the decline in uniformed roads policing of the last 10 years needs to be halted. Such road policing has a role beyond that of enforcement into road safety education (and often by presence alone?) prevention. (Para 7.3)**

1. To what extent have targets for casualty reduction been a useful tool for focusing professional activity?

- 1.1. UK highway engineers can be justifiably proud of the role that they have played in delivering government targets for casualty reduction since their introduction in 1987.
- 1.2. The UK has a world wide reputation based on the professionalism and innovation of our road safety specialists but the delivery of road safety targets is not the sole province of such 'road safety' engineers. All involved in highway design, construction, operation and maintenance have a significant role to play in reducing the level of road trauma. But IHIE would question if the targets have brought about as much 'joined up action' across departments as might had been hoped.
- 1.3. The use of 'appropriate' targets is one way of focusing policy makers and professionals alike. On the plus side as the casualty numbers have fallen, local authorities (who collectively have born the lion's share of the work) have, in a number of cases developed partnerships in varying disciplines and with disparate stakeholders. But there is also a risk of target fatigue.
- 1.4. IHIE would, however, question whether a significant 'step change' can be made in reducing casualty numbers if the public, most of whom are unlikely to have little direct experience of road trauma, are not fully engaged in the setting, monitoring and progression of such targets.
- 1.5. The public can be very 'parochial' in terms of 'road safety': as an example many communities want traffic calming measures for themselves but want to travel unimpeded in other neighbourhoods.
- 1.6. Similarly it must be asked how the 'good news' message of casualty reduction by means of 'safety' cameras was lost and why a significant proportion of the public has become 'disengaged' and refers to 'stealth taxes'
- 1.7. IHIE believes that in setting the next round of targets it is vital for the Government to investigate how to 're-engage' the public if the level of road trauma is to be reduced in the UK**
- 1.8. IHIE believes that in setting any next round of targets, Government should be aware that in Local Authorities there is a deal of 'target fatigue' where such targets, often individually well intentioned, but linked to funding have spawned a new bureaucracy. With something as important as road safety targets we**

should ensure that delivery doesn't result in short term or temporary gains at the expense of works that are 'too hard' to deliver.

2. What further measures need to be adopted to reduce deaths and injuries arising from drinking and driving?

3. How does Great Britain compare with other EU countries in its approach to reducing deaths and injuries?

3.1. As we have said, the UK can be justifiably proud of its successes in delivering casualty reduction over the last 20-30 years, however, the significant reduction in casualties has, perhaps naturally, appeared to plateau.

4. How do approaches in reductions in risk on the roads compare to those adopted in other modes of transport?

4.1. Casualty rates for highway travel are often compared unfavourably to those of other modes of transport (rail, sea and air). However, they are not wholly statistically comparable. It is not easy to see how their levels of corporate responsibility of such modes could be transferred to the personal transport users and operators of our highway network.

4.2. Recent changes in legislation and the adoption and application by police of the Road Death Investigation Manual (whereby all fatal collisions are investigated as 'unlawful' killings) may, however, engender such a level of responsibility (In highway operators at least). IHIE has organized several courses with Kent promoting a partnership approach to implementing the RDIM and is keen to work with police forces and highway authorities to develop efficient procedures which feedback into authorities' safety, design and maintenance strategies.

4.3. **IHIE would welcome the active involvement of interested parties (DfT, Home Office, ACPO, CSS) to establish the best way to promulgate 'best practice' in partnership working between investigating officers and local highway authorities. This should in turn feed results back into highway design and operation.**

5. Are there specific blockages caused by shortages of appropriately trained and skilled staff?

- 5.1. IHE is well placed to highlight concerns over the state of the highway industry. We have a long record in qualifying engineers and accrediting relevant qualifications.
- 5.2. The last 5-10 years has seen a significant reduction in those entering the civil engineering and in particular highway engineering professions. The shortage of staff is particularly apparent in, though not restricted to, local authority highways departments. These authorities have traditionally been the training grounds for the highway engineers and in particular those responsible for the successful delivery of the Government's road safety targets. However, in common with many industries, where the post war 'baby boom' is working through, many of these experienced, highly skilled and qualified, engineers are now retiring (or will do so within the next few years). Such Engineers often depart, with short notice, as part of Local Authority 're-structuring' in order to deliver financial savings.
- 5.3. Despite a recent increase in the number studying civil engineering at University, a recent survey by the Academy for Sustainable Communities predicted that, because of significant increased demand, the existing shortage of Engineers will increase to 17% by 2012 with the most significant shortages being in the housing hotspots of the south and west of England.
- 5.4. Equally disturbing for the longer term future is the ETB's 2007 Survey which calls attention to the declining birth rate which means that the number of 16 year olds in 2018 will be 16% less than now.
- 5.5. Revisions in the educational qualifying standard since the late 1990's by the UK Engineering Council, to match central governments/ public aspirations of university education along with local government reorganisation and cost cutting has seen the effective demise of 'Day release' at the former polytechnic colleges (now universities) Such day release courses provided a firm grounding in engineering whilst staff learnt the 'practical' aspects 'on the job'. Many of these, then highly skilled staff 'journeyman' engineers would progress in their career via professional registration (which has seen a similar decline)
- 5.6. Those currently in 'tertiary' education perhaps eager to clear student debts and start earning 'a living' are not, it seems, naturally attracted to careers in engineering or transportation and many seem to be easily recruited directly from university into other professions that are also facing staff shortages.
- 5.7. In order to try and address the shortage of staff a number of local authorities have turned to out-sourcing their works to private consultancies. Yet such consultancies

are not themselves immune from the problems of staff recruitment and an ageing staff profile (indeed a number often employ the engineers who have recently 'retired' from the local authorities!) As more work is outsourced then local authority staff are tempted by more attractive packages and authorities may soon no longer able to act as 'intelligent clients' possibly weakening the delivery of safety targets.

- 5.8. Others have sought to fill the shortage with staff from abroad ,originally from commonwealth countries, Australia, New Zealand, etc, and laterally from the new European countries. But as these countries start to suffer their own skills shortage these staff have, and will continue to, return home.
- 5.9. It has been suggested that experienced engineers be 'encouraged' to delay retirement or to continue to work in a 'consultancy' basis. IHIE believes that whilst this might buy some time it would be but a short term fix to the problem.
- 5.10. There is an obvious need for employers and employees alike to attract staff from new sources, to train staff to industry recognised knowledge and competence standards, and for those staff to be required to show competence in their area of work.
- 5.11. IHIE has launched several Professional Certificates in specialist areas such as Development Control, Traffic Signs, and Traffic Signals designed to set a standard for training and for individual competence. The Minister and Highways Agency have welcomed our initiative and endorsed the Signs Certificate, for instance.
- 5.12. Enhanced professionalisation of road safety staff could attract more recruits and in 2008 IHIE will establish a Professional Certificate in Road Safety Engineering and we would also draw the Committee's attention to Transport for London's STAR and ProSTATT training and development initiatives.
- 5.13. **IHIE believes that if the UK is to maintain its pre-eminent role as a leader in Road Safety then a continued supply of qualified, skilled practioners (in all disciplines) is of fundamental importance. Local Authorities, private sector employers, Highway Agency regional offices (together with there HA managing agents) should all be actively encouraged to work with universities, colleges and schools (possibly via industry liaison boards) to promote engineering within a 'local' context.**
- 5.14. **Private sector employers and Local Authorities, in association with the universities, colleges and professional bodies should investigate how best to attract staff (possibly from less 'traditional' backgrounds) to then equip them**

with the necessary competencies and indeed how to reward those achieving such competencies , to deliver highway engineering works.

5.15. IHIE believes that the re-establishment of day or block release courses (which may need to be subsidised centrally) to equip those from non engineering backgrounds should be actively pursued.

5.16. Despite competing financial demands private sector employers and Local Authorities (Possibly via an identified sum in Local Transport Plans?) should set aside an allocation for the training and continued professional development of staff.

6. What further policies, not already widely used, might be considered for adoption and what evidence there is for their success?

6.1. For a number of years DfT has operated a “Road safety Challenge Fund’. This funding (capped @ £20,000 per grant) has allowed non government organisation with a strong commitment to Road Safety such as RoSPA, BRAKE, CAPT and ourselves to deliver many wide ranging, national projects, often focused on vulnerable road users and much valued by local authorities.

6.2. In 2006, however, the scheme was replaced with “Road Safety Partnership Grant” funding. This new “Road Safety Partnership Grant” is targeted specifically at local highway authorities and, whilst one of the stated aims is to encourage ‘partnership’ working, the summary statements for the first round of awards do not refer to NGOs.

6.3. The budget for the new “Road Safety Partnership Grant” funding was set at £4 million (although £5.5 Million seems to have been committed in the first year) but even in its most successful years the previous “Road safety Challenge Fund” committed less than £340,000 (8%).

6.4. Whilst the stated rewarding of innovation and sharing of good practice under the new “Road Safety Partnership Grant” fund is welcomed by the IHIE, we are concerned that a valuable resource (i.e. the NGOs) has been ‘frozen out’.

6.5. IHIE believes that DfT should keep the new “Road Safety Partnership Grant” fund under review and consider how the long standing involvement of NGOs can be maintained.

7. What should be the priorities for government in considering further targets for casualty reduction beyond 2010?

- 7.1. IHIE believes that in order that the public be more fully engaged then targets should be split from 2 into 3 groups Killed, Serious and Slight and that consideration be given for different, challenging, reductions in each of these groups.
- 7.2. The present targets are headline & numerical, based on averages from the late 1990's, they do not (at a local level at least) seem to take into account regional or modal variance. Future targets should reflect regional traffic growth and increases in differing modes (possibly via modal rate/Km target?)
- 7.3. IHIE believes that if the public are to be fully engaged in addressing road safety trauma then the decline in uniformed roads policing of the last 10 years needs to be halted. Such road policing has a role beyond that of enforcement into road safety education (and often by presence alone?) prevention.**