En route to safer mobility in EU capitals

Almost **40** million people live in the 27 capital cities of the European Union, about 8% of the total EU population. At least **24,000** people were killed in road accidents in the EU-27 capitals over the past decade. Despite reduction over the decade, last year alone the total number of road victims in the EU capitals was **1,560**.

Dublin, **Lisbon** and **Oslo** scored the best reduction in the number of victims per 100,000 residents, with respectively **12%**, **10%** and **9%** average annual reduction. In **Sofia**, **Dublin** and **Oslo**, road mortality has decreased much faster in the capital than in the rest of the country. Road users in **Oslo**, **Vienna** and **Madrid** enjoy the lowest ratio of mortality in the capital to mortality in the rest of the country.

While the risk of dying on the capital cities' roads is half the risk of dying in a road collision in the rest of the country, vulnerable road users are particularly at risk while using the capital cities' roads. One out of two road victims in capitals is either a pedestrian or a cyclist. Providing safe mobility in particular to those vulnerable road users presents a major challenge - a challenge which has been taken up strongly by authorities in a number of capitals, and particularly vigorously by some mayors. Some of them have gone beyond national efforts and taken the lead in improving road safety of their citizens and visitors. As a result, cities that are looking for ways to make their people safer in traffic can now benefit from a range of successful experience. Only by implementing known countermeasures will it be possible to achieve increases in the use of healthier and more environmentally friendly means of transport and still reduce road deaths and injuries.

EU-27 capitals are safer today than ten years ago

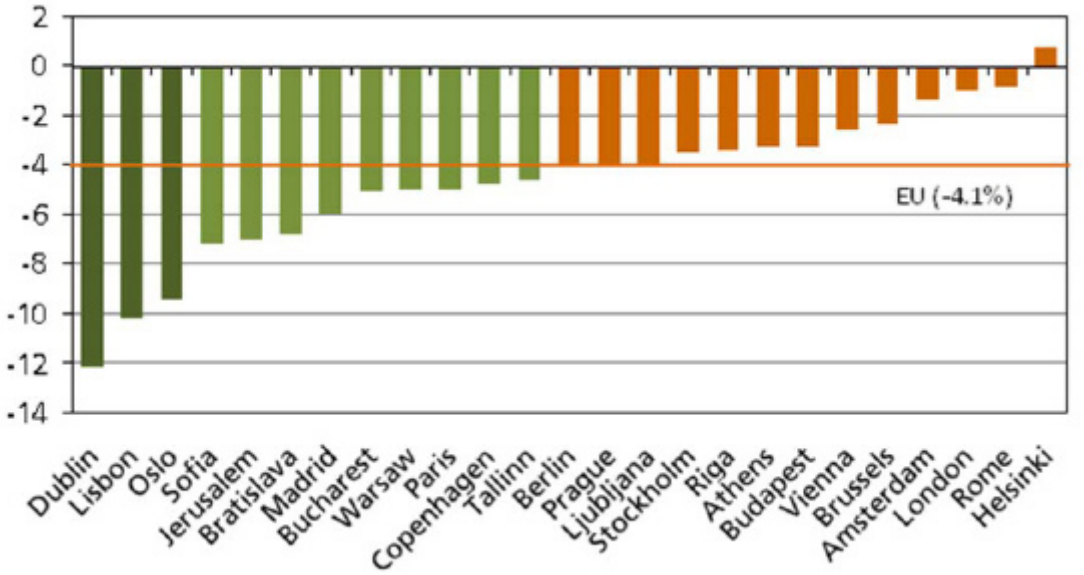

Fig.1: Average annual percentage change in road deaths per 100,000 residents over the period 1997-2007.

Dublin, **Lisbon** and **Oslo** achieved the greatest reductions in the number of road victims per 100,000 residents, with respectively **12**%, **10**% and **9**% average annual reduction. Another nine capitals -**Sofia**, **Jerusalem**, **Bratislava**, **Madrid**, **Bucharest**, **Warsaw**, **Paris**, **Copenhagen** and **Tallin**- follow with better-than-average reductions. On average, over the past decade, road mortality in capital cities has been cut by **4.1**% yearly across Europe. In **Helsinki**, however, the number of people killed on the roads per 100,000 residents has increased slightly (Fig.1).

"The reduction of road deaths in Lisbon followed the good reduction in the total number of deaths observed in Portugal over the past decade. The measures implemented so far to increase citizens' awareness of road safety and to improve the efficiency of the road transport system have had an impact on the capital too.
Safe crossing has been enhanced thanks to infrastructure upgrades and improved parking management. Better integration of different public transport modes (rail-metros-bus) contributed also to less dangerous walking journeys. Furthermore, recent developments in the management of emergency calls and in the emergency services have resulted in increased efficiency of post-crash care and higher survival rates.
Still, there is a huge potential for improvement as the Lisbon City Council has not yet adopted a Road Safety Plan and automatic speed cameras are being slowly installed."

Joao Cardoso, LNEC, Portugal.

"The relative good performance of several Central and Eastern European capitals, notably Sofia, Bucharest and Bratislava, can be partly attributed to the improvements in pedestrian safety through reduced speed and infrastructure improvements. The boom in motorisation has likely had a positive effect too, as it has led to lower travelling speeds. But more improvements could have been achieved had these cities applied road safety policies more systematically and rigorously."

Vojtech Eksler, CDV, Czech Republic.

Faster progress since the EU target was adopted

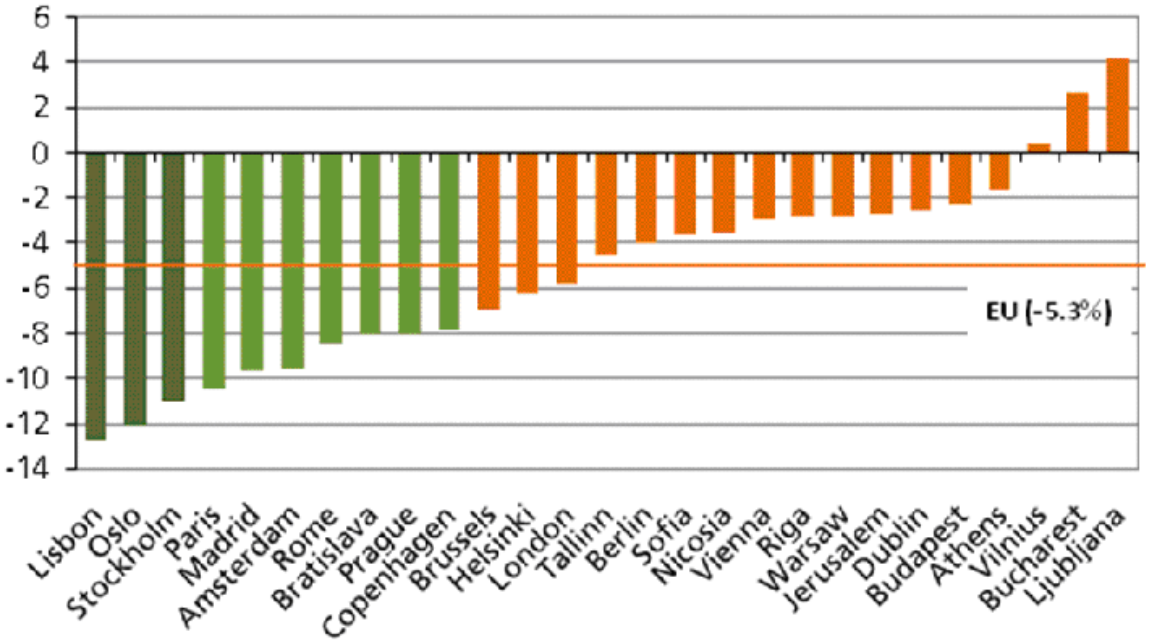

Fig.2: Average annual percentage change in road mortality over the period 2001-2007.

The annual average reduction in road deaths per residents in European capitals since 2001 has been greater, at **5.3%**, compared with about **4.2%** yearly on average across European countries as a whole. But to reach the EU target of halving road deaths between 2001 and 2010, a year-to-year reduction in deaths of at least 7.4% is needed[1]. Altogether 10 capitals have achieved annual reduction of more than 7.4%, thus contributing their fair share towards reaching the EU target. Only France, Luxembourg and Portugal have done so at country level.

Lisbon and **Oslo**, already among the top three for reductions since 1997, are keeping their lead position also over 2001-2007. **Stockholm**, ranking only fifteenth in reducing road mortality over the past decade, is catapulted to the 3rd position. **Paris** and **Amsterdam** also improved their position, the reduction of deaths in these cities following the good reduction of the total number of deaths at the national level. **Dublin**, in contrast, moves to near the bottom of the league.

"The main reason for the good performance of Oslo is the reduction of travelling speeds. Our priority now is to further extend 30 km zones in residential areas.
We run campaigns targeting the three main killers, as well as raising awareness about the vulnerability of pedestrians.
Oslo also conducted a number of road safety inspections and high risk site removal schemes, especially by replacing dangerous crossroads by roundabouts. We have been working actively to make roads near schools safer.
An evaluation study also pointed out that 25% of the decrease in serious accidents between 1996 and 2004 was due to the higher proportion of safer cars[2].
We want to continue to focus on measures that we see work so that we can sustain the positive decline in the number of accidents. Our vision is to make Oslo a safe, attractive and environmentally friendly city."

Arne Hvamstd, Agency for Road and Transport, City of Oslo.

The indicator

So far, no generally accepted methodology has been developed to benchmark differences in safety levels between cities and overcome methodological obstacles such as - among others - differences in size, function and morphology[3].

This Flash therefore takes as a starting point the reduction over time in the number of people killed per 100,000 residents. Percentage changes in death rates over time are comparable across cities in so far as the number of deaths and the number of residents refer to the same administrative area and the recording and reporting practices remained consistent over time.

The reader should bear in mind the limitations of this exercise. We have confined comparisons to changes over time, ratios of capital to rest of the country and proportion of pedestrians and cyclists among those killed because our data does not take into account the differences among capital cities in commuting patterns, public transport availability, settlement structures, modal split or proportion of the administrative area that is urbanised.

Numbers of deaths used in this report come from the national statistics supplied by the PIN Panellist in each country. The full dataset is available in the Background Tables[4]. The number of road deaths

(1) ETSC (2008) 2nd PIN Annual Report Countdown to 2010 – Only two more years to act, p. 9
(2) Sakshaug, Lervåg and Engen: Traffic Safety Development in Oslo: Factors that explain the decrease in serious personal injury accidents since 1996. Report STF50 A06065, SINTEF, Trondheim 2006.
(3) Wegman et al. (2008). SUNFLOWER Next, SWOV, in press.
(4) See Background tables PIN Flash 11 www.etsc.be/PIN-publications.php

is available in Luxembourg and Nicosia since 2000 and in Vilnius since 2001. No one has been killed in road traffic in Valletta since 2000. Luxembourg and Bern are excluded from the rankings presented in Fig. 1 and 2 because the numbers of person killed per year are below 10 and thus subject to substantial annual fluctuation, representing an obstacle which could not be overcome by the method applied[5].

Yet road deaths are only part of the picture. Many more people sustain injuries in collisions occurring in cities. Unfortunately the lack of data for some countries and the different definitions of severe injuries together with differing levels of reporting have prevented us from presenting a ranking. We were able, however, to produce an estimation of the changes over time in serious injuries in 16 EU countries and their capitals applying similar definitions of a severe injury, i.e. spending at least one day as an in-patient[6]. Over the past decade, serious injuries per 100,000 residents decreased by 5.7% yearly on average, while serious injuries decreased by only 3.6% in the rest of those countries taken as a whole. For those 16 countries, there were some 9 seriously injured people for one death in cities and 8 seriously injured for one death in the rest of the country.

Some EU capitals taking the lead in reducing road deaths

On average, across Europe, road mortality decreased faster in capitals than in the rest of the country. In **Sofia**, **Dublin** and **Oslo**, road mortality decreased by more than 6% per year faster than in the rest of the country (Fig. 3).

In **Amsterdam**, **Nicosia**, **Helsinki**, **Bern**, **Rome**, **Paris**, **Berlin**, **Vienna**, **London**, **Athens** and **Brussels**, however, developments in road mortality have not followed the same pace as in the rest of the country.

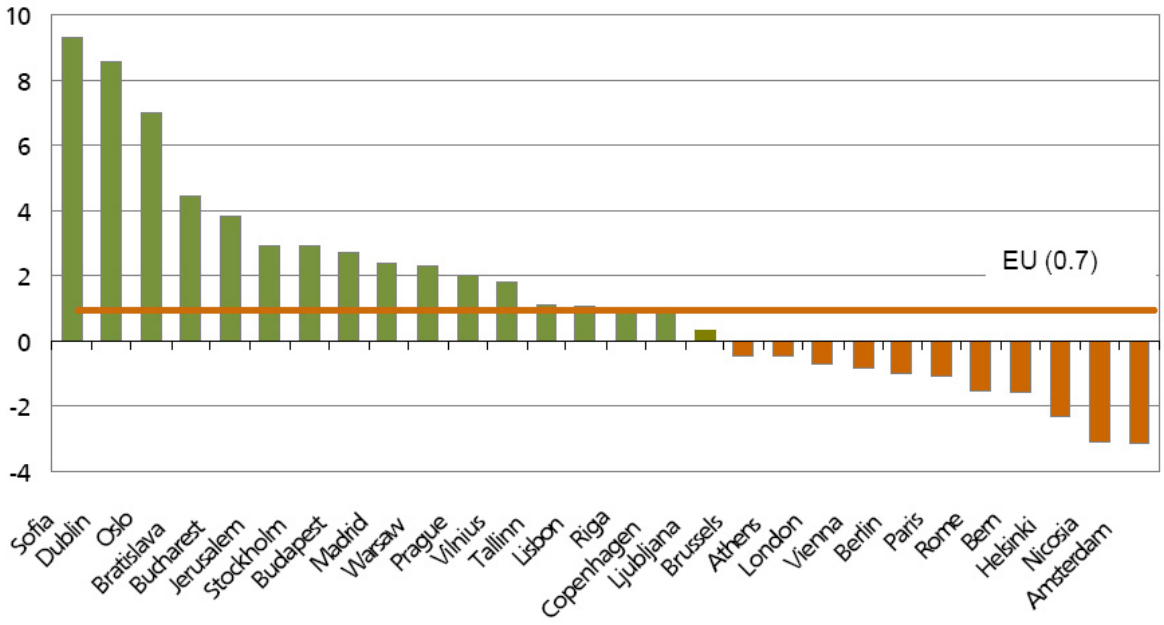

Fig.3: Amount by which the annual average percentage reduction in road mortality in the capital exceeds that in the rest of the country over the period 1997-2007.

[5] See Methodological Note PIN Flash 11 www.etsc.be/PIN-publications.php
[6] Countries considered: AT, BE, CZ, DK, EE, ES, FR, EL, HU, NL, PL, PT, RO, SI, SE and the UK.

An indicator of the level of safety in capitals relative to that in the rest of their countries is provided by the ratio of road mortality in the capital to that in the rest of the country (Fig. 4).

Across Europe the chance of being killed on capital cities' roads is less than half the chance of dying in a road collision in the rest of the country. This is because although road crashes in cities are more frequent than elsewhere, they are less violent due to lower travelling speed and thus result in less fatal injuries[7].

Road users in **Oslo**, **Vienna** and **Madrid** enjoy the lowest ratio of mortality in the capital to mortality in the rest of the country. But the differences described by this ratio should be interpreted with care, given the many kinds of differences already mentioned between the capital cities.

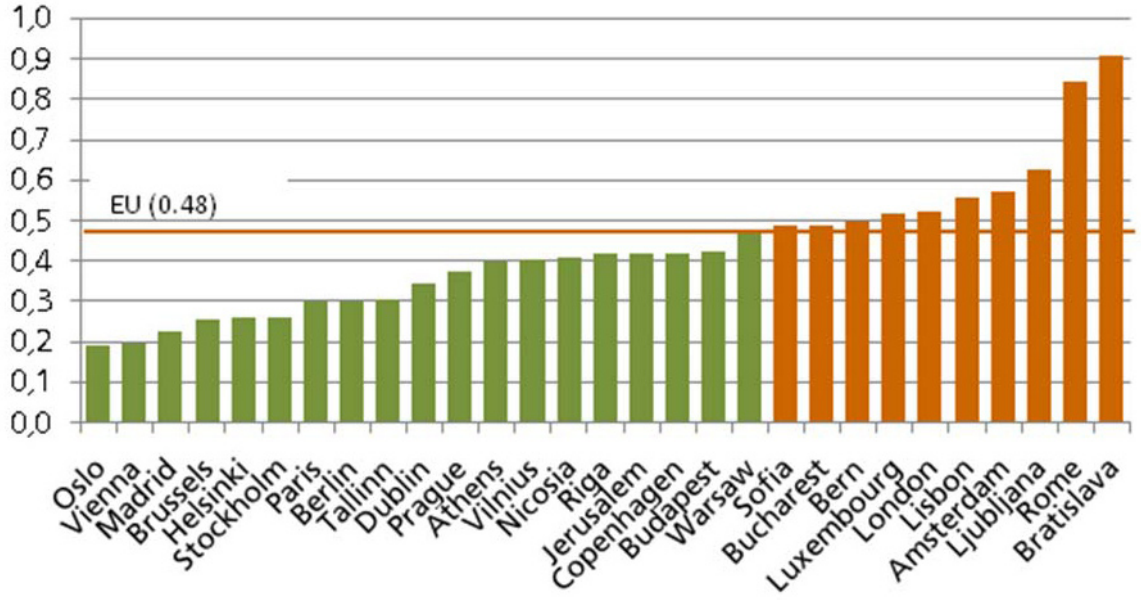

Fig.4: Ratio of road mortality in the capital to road mortality in the rest of the country, based on the average values for the years 2005, 2006 and 2007.

Background

Cities, in particular capital cities, have been focal points in the economic, social and cultural life of Europe throughout its history, since the times of ancient Athens and Rome. The industrial era brought with it a process of urbanisation that has led to a 21st century Europe in which the great majority of its citizens live in cities, and most of those who live elsewhere visit them regularly.

Prospering cities have always been concerned for the safety of their citizens and visitors. In earlier times their main concerns were for safety from marauders and from enemy attacks. More recently, these have been replaced by concerns for security from crime and terrorism and about threats to health. A factor these dangers have in common is that they derive from sources that most people are ready to unite against. But in the cities of 21st century Europe, the greatest everyday threat to life comes from a source that most people rightly regard as one of the very good features of modern life – the use of motor vehicles to extend personal mobility and enhance economic productivity.

Capital cities have always been regarded as showcases for their countries. They have long since come to take the lead in numerous areas of

[7]Severity of injuries is a function of the degree of urbanization or population density. Eksler and Lassarre, 2008.

public life. Many capitals generate a good deal of the national wealth and command relatively large resources for improving quality of life for their citizens. They can therefore be expected to achieve high levels of safety on their roads and take a lead in improving road safety at the local level.

EU capitals are all different, but they face similar challenges and are trying to find common solutions.

1. Making cities safer: the challenges

Since the risk to life and limb in the road system stems very largely from the use of motor vehicles, the most fundamental challenge is to enable cities to enjoy at least as high a level of prosperity, and their people to enjoy at least as high a quality of life, with fewer vehicle-km driven per year, for example by:

• Promoting localisation of some activities so that they can be reached on foot or by bicycle, or at least by shorter car journeys than before;

• Centralising other activities so that they can be served better by public transport;

• Improving the quality of public transport to extend the range of circumstances in which it is chosen in preference to the car; and

• Discouraging access by car where there are reasonable alternatives.

A second and related challenge is that if people are going to walk, cycle and use public transport more as a result of using cars more selectively (and there are environmental and public health reasons for encouraging this) then cities have to reduce the risks of death and injury while walking or cycling, for example by:

• Creating attractive and convenient routes for the journeys on foot or by bicycle that people would actually like to make – routes with less proximity to motor traffic and safer provision for crossing roads; and

• Moderating the speeds of motor vehicles where they still travel in proximity to people walking and cycling.

However successfully alternatives to car use are encouraged, the amount of motor vehicle use in European capitals is still likely to increase a good deal. A third challenge to cities is therefore to reduce the risks of death and injury for the users of motor vehicles themselves, for example by:

• Matching the use of each road to the functions that the road serves in terms of living space, access and through movement;

• Separating faster vehicles from slower ones and lighter vehicles from heavier ones, and separating vehicles that are making conflicting movements;

• Making the road system self-explaining to its users; and

• Achieving high levels of use of protective devices and understanding of how to drive to reduce risk.

Cities cannot address all these challenges by themselves. They need the right planning, traffic management and fiscal powers from central and regional government, they need traffic law that is clearly enacted by central government and enforced with conviction by the police and the courts, and they need the motor vehicle industry and commercial operators to design injury reduction into the vehicles themselves and into operating practices.

But for all that, the challenges to act locally on the road system and its use in each city, and to put concern for traffic safety at least on a par with concerns for access, mobility and the environment – those challenges lie with the cities themselves.

2. ...and the opportunities: the importance of partnership

Cities that want to reduce death and injury on their roads can look to the experience of others across the EU who have done so or are doing so.

With particular reference to roads and their use in towns and cities, Britain has drawn upon a range of its own and other European countries' experience in formulating principles of Urban Safety Management which are also included in our recommendations on page 9.

• Consider all kinds of road user, especially the most vulnerable;

• Consider the functions and use of different kinds of road;

• Formulate a safety strategy for each city as a whole;

• Relate road safety objectives to other policy objectives for the city;

• Encourage all professional groups to help to achieve road safety objectives;

• Guard against adverse effects of other policies upon road safety;

• Translate strategy and objectives into actual local area safety schemes; and

• Monitor and evaluate progress in order to learn from experience and keep the strategy up to date[8].

Polis - European cities and regions networking for innovative transport solutions

Polis brings together local and regional authorities and transport organisations from across Europe, including most of European capitals and big cities. Polis supports the exchange of experiences and the transfer of knowledge about innovative transport solutions to promote sustainable and safe mobility.

Polis, in close collaboration with ACEM, the European Motorcycle Industry, is in the process of setting up a European Urban Road Safety Platform. In a near future, this Platform will provide a common database on road accidents in cities and urban areas and best practices on urban road safety policies and local data collection. Some good practices are already available on www.osmose-os.org

www.polis-online.org
For further information on Polis European Urban Road Safety Platform initiative, please contact ojung@polis-online.org.

EUROCITIES, the network of major European cities

The network brings together the local governments of more than 130 large cities in over 30 European countries. EUROCITIES gives cities a voice in Europe, by engaging in dialogue with the European institutions on all aspects of EU legislation, policies and programmes that have an impact on cities and their citizens. The network is active across a wide range of policy areas including transport and mobility.

EUROCITIES actively motivates its Members to sign up to the European Road Safety Charter. Its Working Group on Road Safety under the Chairmanship of Copenhagen provides a platform for its member cities to share knowledge and ideas, to exchange experiences and develop innovative solutions on local road safety policies.

EUROCITIES also coordinates together with Climate Alliance and Energie-Cités the European Mobility Week with the support of the European Commission. It is meant to influence mobility and urban transport issues for the long-term, improving health and quality of life of European citizens. From 16 to 22 September 2008 the European cities and towns had the opportunity to participate for the 7th time in the European Mobility Week.

Contact person: Barbara Bernardi, Policy Officer Mobility, barbara.bernardi@eurocities.eu
http://www.mobilityweek.eu/

[8]DfT, TRL, The Institution of Highways and Transportation, Urban Safety Management Guidelines, Road Safety Strategies for Urban Communities, www.dft.gov.uk/pgr/roadsafety/laguidance/urbansafetymanagementguidelines

Actions at the EU level

In 2004, the EU launched the initiative of the **European Road Safety Charter**. 21 capitals and more than 300 cities (up to 1 October 2008) have signed the Charter committing to carry out road safety initiatives over three years. The Lisbon City Council, one of the signatories, committed itself among other things to:
- Improve road safety around at least 20 schools;
- Identify and treat at least 20 high risk sites (4 in 2008, 8 in 2009 and 8 in 2010).

To see more commitments from capitals: http://www.erscharter.eu/
Interested in signing the EU Charter? charter@paueducation.com

In 2008, the EU adopted a Green Paper **"Towards a New Culture of Urban Mobility"**. This included recommendations specifically targeting road safety. http://ec.europa.eu/transport/clean/green_paper_urban_transport/index_en.htm. The White Paper is expected this Autumn.

Cities will be able to promote some of their road safety initiatives at the **European Road Safety Day "Road Safety in our cities"** organised by the European Commission in Paris on 13 October. http://ec.europa.eu/transport/roadsafety/road_safety_days/index_2008_en.htm.

3. Vulnerable road users: strong actions needed

It is known that pedestrians and cyclists are particularly vulnerable as road users and much of their travel is in cities. Indeed, one out of two road victims in capitals is either a pedestrian or a cyclist. Providing safe mobility in particular to those vulnerable road users presents a major challenge. Only by implementing known countermeasures will it be possible to achieve increases in the use of healthier and more environmentally friendly means of transport and still reduce road deaths and injuries[9].

On average, 43% of road deaths in capitals are pedestrians, 5% cyclists, 21% PTW users and 26% car occupants (Fig. 6).

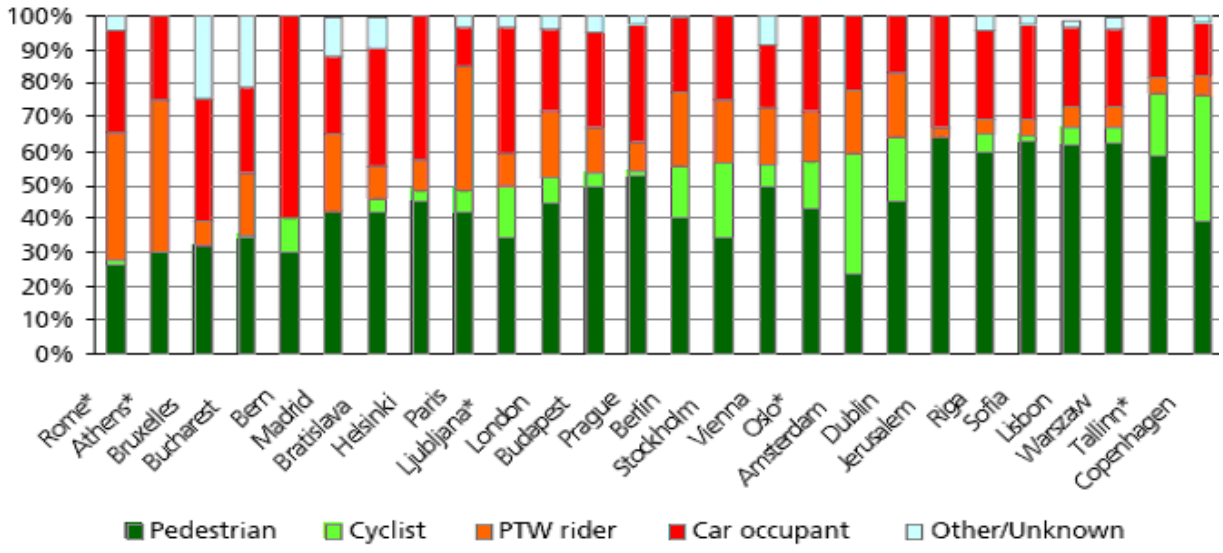

Fig. 5: Distribution of road deaths by road user group.
Based on the average values for the year 2004, 2005 and 2006 and ranked according to the share of pedestrians and cyclists together
* Rome, Oslo, Ljubljana, Tallinn, Athens: average of 2 years used instead of 3 (2005, 2006)

[9]The EU funded project WALCYNG How to enhance WALking and CYcliNG instead of shorter car trips and to make these modes safer proposed a series of recommendations: http://cordis.europa.eu/transport/src/walcyngrep.htm.

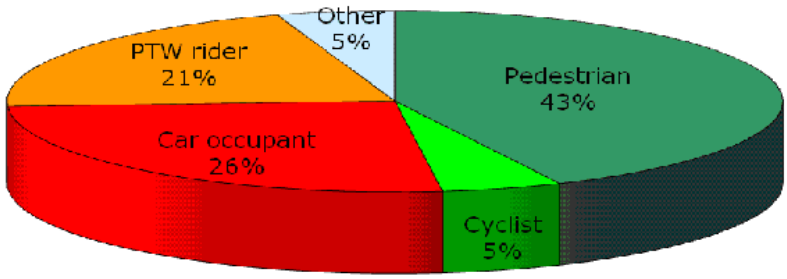

Fig. 6: Distribution of road deaths by road users based on average 2004-2006. Based on the estimation from 23 EU capitals. (EU27 except CY, LT, LU, MT).

Recommendations to capitals (and cities)

Adopt a strategic approach to road safety

- Consider all kinds of road user, especially the most vulnerable;
- Consider the functions and use of different kinds of road;
- Formulate a safety strategy for the city as a whole;
- Relate road safety objectives to other policy objectives for the city;
- Encourage all professional groups to help to achieve road safety objectives;
- Guard against adverse effects of other policies upon road safety;
- Ensure proper enforcement of speed limits through fix and mobile controls;
- Translate strategy and objectives into actual local area safety schemes; and
- Monitor and evaluate progress in order to learn from experience and keep the strategy up to date.

Promote new patterns of mobility

- Promote localisation of some activities so that they can be reached on foot, by bicycle, or by public transport;
- Improve the quality of public transport;
- Create attractive and safe routes for the journeys on foot or by bicycle;
- Moderate the speeds of motor vehicles where there is still travel in proximity to people walking and cycling;
- Promote 30km/h speed limit zones in residential areas.

The Paris experience

A concerted effort initiated by the Mayor Delanoë

The City of Paris and the Prefecture are working closely together on preventive and enforcement actions, treating high risk sites and public information. The City and the Prefecture are sharing information about dangerous sites to better target enforcement and engineering measures.
Enforcement targeted at the three main killers has increased since 2001. The number of fines imposed on careless motorcyclists and cyclists rose sharply between 2006 and 2007.
Following the introduction of the self-service bike hire system Velib in July 2007, the number of daily trips by bikes doubled in 2007 compared to 2006[10] . A 'Monsieur vélo' has been appointed

[10] Préfecture de police de Paris, Sécurité routière et accidentologie à Paris, Bilan 2007 http://www.prefecture-police-paris.interieur.gouv.fr/documentation/bilans.htm

and classes for adults created. A guide of good practices was adopted in partnership with the French Association of Angry Motorcyclists/"Les Motards en colère".

"Car drivers, riders and cyclists have to understand that because of traffic lights and traffic density, it is illusory to speed in Paris. On average speed of cars was 16km/h in 2006. On the bank holiday 15th of August, the average speed was 27km/h[11]. All road users have to integrate this notion of slow traffic and adapt their behavior accordingly",

Philippe Cauvin, Road Safety Referent, City of Paris.

"The priority for 2008 and onward is to sustain the high level of checks for speeding, drink driving, seat belt use and use of mobile phones and increase the probability of being prosecuted for high risk offences. In parallel, we will continue our educational work in schools and enterprises and towards elderly people".

Roland Maucourant, Road safety Advisor for the Paris police.

"With 37 people killed in central Paris and 127 in the larger administrative area with population about 7 million, an historically low level of deaths was reached in 2007. It might be difficult to sustain this good results in the coming years",

Jean Chapelon, National Interministerial Road Safety Observatory, France.

The Dublin experience

Dublin achieved the best reduction in the number of people killed over the past decade. The number of people killed dropped by an outstanding 70% between 1997 and 2007. Unfortunately progress slowed down over the period 2001-2007. What is the background to this? ETSC has spoken to Michael Byrne, Road Safety Development Officer/Road Safety Services Manager at the Dublin City Council.

A coordinated approach to tackling road accidents in Dublin began in 1995 with a period of consultations with all concerned citizens and stakeholders including the Police, engineers, educationalists and City Councillors. This resulted in the 1st road safety Plan in 1996.
Following this, a new Plan (1999-2003) was drawn up to include all the four 'Es' Engineering, Education, Encouragement and Enforcement.

The 2nd Plan (2005-2007) has been developed to provide focus over a 3-year period, in line with the national road safety strategy. In addition to focusing on the areas of speeding, drink-driving and seat-belt wearing, the Strategy proposes a range of measures in the enforcement, engineering, education and legislation areas.

Our aim is to achieve a 25% reduction in the number of people killed and seriously injured over 3 years. Still in 2006, 16 people were killed and 746 injured in road collisions in the City Council area.

(11) Observatoire des déplacements à Paris, Bilan des déplacements en 2006 à Paris, p. 20, http://www.paris.fr/portail/deplacements/Portal.lut?page_id=7627&document_type_id=4&document_id=26324&portlet_id=17647&multileveldocument_sheet_id=6563

ETSC: What measures have been successful that other cities could learn from?

One of the most important measures has been fostering a greater team effort by all stakeholders involved and having an overall road safety strategy linked to key performance indicators. Another factor was that the City Council provided ring fenced funding to undertake engineering and education measures .

> One of the most important measures has been fostering a greater team effort by all stakeholder involved

> Another factor was that the City Council provided ring fenced funding to undertake engineering and education measures.

ETSC: What measures have been taken in particular to protect vulnerable road users?

A strategic network of cycle lanes has been created to provide a safe network for cyclists to commute to work and school. A city wide ban on HGVs in the city has improved safety for PTW users and cyclists and has also improved safety for pedestrians. Additional pedestrian crossings, improvements to junctions to allow pedestrians to cross safely, extra green time and countdown timers were installed.

ETSC: Do inhabitants/commuters find themselves safe to travel in your capital city?

No detailed research has been carried out in this area by the city but feedback received from some road users groups indicate that they have problems in the city, in particular cyclists. We have therefore appointed a Cycling Officer. Some elderly pedestrians find difficulty crossing some areas of the city. Parents still find difficulty allowing their child walk to school alone not because of traffic but fear of strangers.

But, overall, pedestrians do feel safer crossing Dublin City streets while greater improvements are on-going for cyclists. Car drivers are more aware of pedestrians crossing. They are more aware of been caught while drinking and driving and have a far greater change of been caught for exceeding the speed limit.

ETSC: What are your plans for further improving road safety in the near future in your capital city?

The next road safety strategy 2009-2012 for the city will shortly go for public consultation and will include measure to further combat crashes involving vulnerable road users.

Michael Byrne joined the Dublin City Council in 1980 as Road Safety Development Officer/Road Safety Services Manager. Dublin City Council is the democratically elected organisation that governs Dublin City.

More information about the HGV Management Strategy on http://www.dublincity.ie/ROADSANDTRAFFIC/HGV/Pages/HGV%20Management%20Strategy.aspx

More information on road safety in Dublin City on http://www.dublincity.ie/ROADSANDTRAFFIC/ROADSAFETY/Pages/RoadSafety.aspx

The London experience

Although London has done well in terms of reducing Killed and Seriously Injured (KSI), the figures for fatalities alone are not that good. One reason for this is that with the expansion of cycling, walking and motorcycling, there are many more vulnerable road users than 10 years ago. ETSC spoke with Chris Lines, Head of Transport for London's Road Safety Unit.

London has seen a huge modal shift in the past decade with many more vulnerable road users of all sorts: pedestrians, cyclists and Powered Two Wheelers (PTWs). Despite the increase in vulnerable road users, London has already reached the 40% KSI reduction target set to be achieved by 2010. Currently KSIs have fallen 43% lower than the baseline. New targets were set in 2006 to reduce KSIs by 50% by 2010. We are also working to reduce child KSI casualties by 60% by 2010.

ETSC: What happened to improve the reduction in 2001?

Transport for London was set up in 2001 with the Road Safety Unit created in 2002 with a centralised budget. A 1st Road Safety Plan was published in November 2001 with KSI reduction targets and guidance for working with different partners.

Over the last 8 years we received tremendous support from the previous mayor of London who doubled the budget between 2001 and 2004. The mayor also appointed a special ambassador for London on road safety who worked to raise the profile with Londoners and the media. We also started to work much more on involving the press.

Now, we have over 850 safety cameras in London both checking speed and red light running. They are excellent at cutting road death and serious injury and have halved KSIs at the high risk sites they are placed at. They are only placed on roads where other measures such as infrastructure changes are not possible. We have also run campaigns about safety cameras and are now receiving more letters requesting safety cameras to be put in than complaints from London residents about them.

ETSC: What was the impact of the London Congestion Charge on road safety record in London?
Before the Congestion Charge was introduced we were worried about a possible increase in KSIs as a result of expected increase of speeds because of less congestion. However the impact has been broadly neutral within the congestion zone itself. The Congestion Charge has certainly made the inner city a nicer place to be for Londoners. It allows for the management of congestion but there has been no direct impact on road safety.

ETSC: What measures have been successful that others could learn from?

A generous budget and political backing! Key to success is setting up a road safety plan with targets and measures. It's not rocket science. Running a large targeted campaign with a £1 million budget which allows us to get our ads into cinemas and on TV across London makes a huge difference and is much more likely to have an impact than many smaller campaigns on different issues. We also make sure that all our campaigns are data-led.

> Keys to success: political backing, a generous budget and a road safety plan!

ETSC: What measures have been taken to protect vulnerable road users?

There has been a huge increase in cyclists in London. One area of our work on improving cyclist safety is raising the awareness of them on the roads, that is, making sure other road users are keeping an eye out for cyclists. One way we are doing this is with our award-winning advertising campaign called The Moon-Walking Bear. We are also investing more in cycle lanes but this takes time and junctions are our main challenge.

There has also been a rapid increase in the number of powered two-wheelers (PTWs) on London's roads. Since 2003 we have been trying to reduce PTW KSIs against this increasing trend: 1286 KSIs in 2001, reduced to 819 KSIs in 2007 but we are a long way from reaching our target of reducing

PTW KSIs by 40% by 2010. It is very difficult to engineer infrastructure for PTW safety. Our safety cameras are adapted to also detect PTWs.

We've mainly been investing heavily in campaigns. Especially as our analysis of PTW collisions found that many of them occur due to other road users not noticing them. This led us to run campaigns on increasing the understanding of other road users about PTWs and that they should look out for them.

ETSC: How do you work to improve child road safety?

Our work with children starts with their participation in a free Children's Traffic Club for 3 and 4 year olds. We also work to ensure that road safety traffic education is integrated throughout the school curriculum. A special effort is also made to target children when they change schools at 11 years old and then again just before they start driving at around 16. We also run a special award winning campaign targeting teenagers entitled: "Don't die before you've lived" communicating via internet tools they use such as Beebo and Facebook.

ETSC: What are the next priorities?

Pedestrians – improving road safety for this vulnerable road user group is a big focus of our work. A lot of the work we do for pedestrians involves making sure pedestrian facilities on and around London's busiest roads are both accessible and meet safety requirements. Also we are trying to make it more pleasant to walk in London. We were involved in the re-design of Trafalgar Square which had the pedestrian in mind. We have more footbridges across the Thames including the prestigious Millennium Bridge. We've also introduced signage for pedestrians (Legible London) encouraging them to walk more in between major landmarks in London. Many people do not simply know how close different parts of London are on foot and undertake complicated interchanges underground on the tube.

ETSC: What are your plans for further improving London's road safety in the near future?

More use of smart technology. We are now working to introduce more section control cameras. These cameras measure the time it takes a car to enter and exit a road and can therefore measure the average speed and prevent the slow-down/speed-up effect of fixed point safety cameras. These are ideal for busy main roads in and out of the city. Later this year we will be trialling them on the A13 and hope to extend their use. We'd also like to use them to enforce the 20 mph limit in residential areas. We have four pilots ready to start. They offer an excellent alternative to infrastructure measures such as road humps.

> We are now working to introduce section control cameras.

TfL is also keen to encourage drivers in London to use Intelligent Speed Adaptation (ISA). A map of all the speed limits in London is ready. We will upload this onto a web-site where drivers can download the speed limits onto their Sat-Nav systems so that they can show the speed where they are.

TfL is fitting some of its car fleet with voluntary ISA to test it out. We have one car fitted already and aim to have 20 fitted by mid 2009. We also want to inform the media about the benefits of this sort of technology. If a car can tell you the temperature outside then we should also use the technology that allows us to tell the speed limit on the road we are on!

> TfL is fitting some of its car fleet with voluntary Intelligent Speed Adaptation to test it out.

Chris Lines joined Transport for London in 2003 as Head of the London Road Safety Unit. The Unit has 4 main areas of activity – updating and producing casualty figures from the ACCSTATS database; funding and managing road safety engineering works on the TfL road network, and borough roads via the Borough Partnership; developing pan-London Education Training and Publicity initiatives; and managing the London Safety Camera Partnership.

The Road Safety Plan for London is available on http://www.tfl.gov.uk/corporate/projectsandschemes/2289.aspx

European Transport Safety Council

PIN Panel

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Cyprus	George Morfakis, Ministry of Com munication
Czech Rep.	Fric Jindrich, Transport Research Centre (CDV)
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Estonia	Dago Antov, Stratum Consultancy
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