Committee(s):	Date(s):	
Streets & Walkways	16.7.2012	
Subject:		Public
Road Traffic Casualties in the City		
Report of:		For decision
Director of the Built Environment		

### **Summary**

- Members have requested to be kept up to date with the casualty statistics in the City. This report sets out the latest figures up to the end of 2011 and places this information in context. It also reflects on the private paper submitted to Members in May, by Mr Reilly.
- The casualty numbers in the City are relatively small and will fluctuate naturally over time. For this reason, it is essential to consider data covering several years when determining campaigns and programmes of work.
- Casualties have increased over the last two years. The total number
  of casualties in 2011 was 409. The significant increase in casualties
  arises from collisions involving cyclists. However, there has been a
  dramatic increase in cyclist numbers and the overall cycling
  casualty rate appears to be decreasing.
- The trend of increasing casualties, particularly cycling related, is similar within central London. If unabated, this trend will result in the City not achieving the targets set within the current Local Implementation Plan.
- Extensive and respected programmes of enforcement, education, training and publicity have been delivered over the last 5 years. Much of this activity has been copied and used by Transport for London and the Metropolitan Police throughout central London. However, there is still much to do.
- Further investigation of the causes of collisions involving cyclists, through data analysis and interview, is required before appropriate programmes of action can be finalised. The corridor based approach will be important.
- The draft Road Danger Reduction Plan, containing new programmes of activity, will be presented to Members in September/ October 2012. This plan will build upon the current close working with the City of London Police.

#### **Recommendation that Members:**

• Support the conclusion in this report and approve the further programme of work identified in Paragraph 56.

#### **Main Report**

## Background

- 1. The City of London has an agreed Local Implementation Plan (LIP); which contains a number of challenging casualty reduction targets. This report sets out the current casualty numbers and trends. Furthermore, the report sets out the next steps that are needed to deliver a new Road Danger Reduction Plan and the associated programmes of work that will deliver further casualty reduction within the City of London.
- 2. The report draws on the results of collaborative working with Transport for London. It also utilises, where appropriate, output from the report which was sent to Members of this Sub-Committee by Mr Reilly in May 2012. Mr Reilly comments that 'the road casualty reduction targets in the LIP are laudable and ambitious, but substantial support from members will be essential if those targets are to be met'. His paper is attached to this report as Appendix A. Mr Reilly's intention in sending the paper was to make a positive contribution to the discussion on this subject. With this in mind, officers have not sought to critique the conclusions reached by Mr Reilly but have used the analysis, where appropriate, to illustrate significant issues. One important omission from Mr Reilly's paper is the dramatic increase in cyclists in the City. This means that whilst the accident numbers have increased, the overall cyclist accident rate has decreased.
- The data presented within this report covers the period from 2000 to 2011.
   During this period of time, the traffic volume and composition has changed significantly. The physical street environment has also changed significantly.

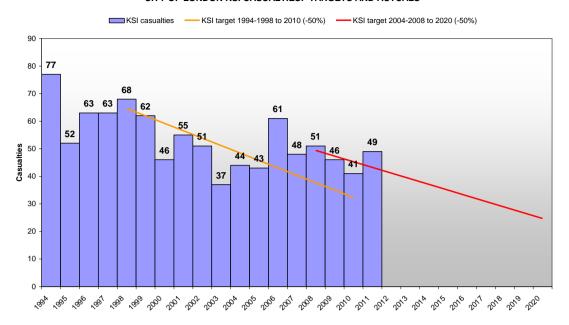
### Data analysis

4. Officers have been working with Transport for London and the City of London Police to analyse and understand the full extent of the current casualty trends. This activity culminated in a workshop on the 17<sup>th</sup> May that was also attended by key external stakeholders. That work is being enhanced and expanded. Further meetings and activity will take place at a local level. Improving road safety within central London is now on the agenda for the Sub-Regional Transport Forum. It will be discussed in September and further analysis and activity is expected to follow.

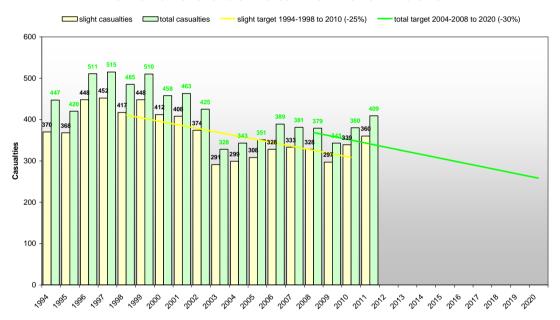
#### Previous and current performance against targets

- 5. The following graphs show the previous and current casualty reduction targets overlaid on the overall casualty numbers. For ease of comparison, the previous and current targets are overlaid onto the actual annual figure. The current targets relate to a three year rolling average, because the annual numbers are so small that any change over a single year will not be statistically significant. Therefore, the reportable outturn LIP figures for 2011 are 45 KSI casualties and 377 total casualties.
- There is a clear picture that the transition from being on track to achieve the targets to not being on track has happened very suddenly with both the new and old targets. This is due in part to the small data sets.

#### CITY OF LONDON KSI CASUALTIES: TARGETS AND ACTUALS



#### CITY OF LONDON SLIGHT/TOTAL CASUALTIES: TARGETS AND ACTUALS



# Previous targets

7. The existing City of London Road Safety Plan was approved in 2007. At that time (using 2005 data) all national targets and two of the three GLA targets for 2010 had already been achieved. However, a significant rise in KSI casualties in 2006 took the numbers above the target line. Although KSI's declined for the remainder of the decade, the target was not met. By 2010 'slight casualties' had begun to increase and, as a result, this target was not met also.

## Current targets

8. The recently approved Local Implementation Plan (LIP2) has targets to reduce casualties over time. The long term target is to reduce the number of persons killed or seriously injured to a three year rolling average of 24.7 by 2020. The

- long term target is to reduce the total number of persons injured to a three year rolling average of 258 by 2020.
- 9. The City of London Police Committee has recently set a new target which is to reduce the number of collisions. This target recognises that not all collisions result in casualties. Officers will be working to harmonise targets with the City of London Police within the Road Accident Reduction Plan. The Department of Built Environment Business Plan incorporates a stretch target for officers to double the reduction set out in the LIP. This is highly challenging but has been adopted with the intention of delivering an outcome that exceeds the Corporate target.

#### Trends in use of the streets

Traffic volume and composition

10. In 2000, approximately 250,000 vehicles used the City's streets each working day (24 hours). In early 2003 Congestion Charging was introduced and since that time approximately 200,000 vehicles now use the City's streets. Over the same 10 year period of time, the number of cyclists has trebled. In 2010, cyclists made up 16% of the total traffic flow throughout the working day. During the morning and evening peak periods cyclists comprise almost 30% of the total traffic. Pedestrian movement is not monitored accurately but their numbers are believed to have remained relatively constant throughout the last decade.

#### Streetworks

11. The intensity of temporary traffic management and disruption to movement has increased greatly. Utility equipment is being renewed. Many major development schemes have been and are being constructed. The importance of ensuring the safety of streetworks sites is recognised and is a particular area that will be addressed in the forthcoming Road Danger Reduction Plan.

## Investment in the City's streets

Traffic and functional changes

12. Over the last 10 years, the traffic management regime within the City has remained relatively stable. The only major change was the introduction of the Western Traffic and Environment Zone in December 2003. Functional safety orientated changes have been made to streets like Ludgate Hill, junctions like London Wall/Moorgate and the Gyratory system by Mansion House Tube Station was removed in 2010. Citywide action programmes such as the removal of guardrailing and introducing two way cycling on one way streets have also taken place. The two way cycling programme is still active and further streets will be changed this year. Our monitoring confirms no reported casualties as a result of these programmes.

## Environmental changes

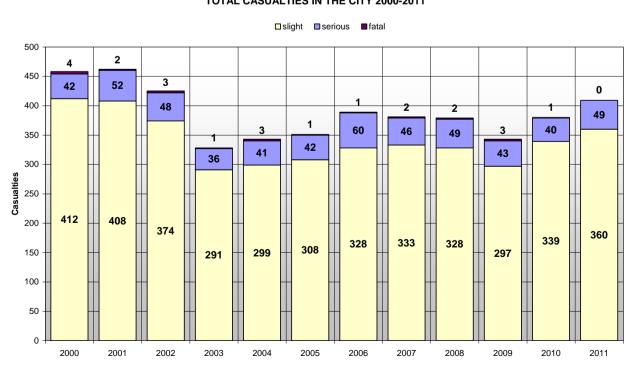
13. Many of the changes to the highway infrastructure have been driven by funding from developments, focussed on environmental enhancement. During the early part of the last decade, this activity took place on the Local Access streets; which have always been relatively safe. This, as Mr Reilly has pointed out, consumed much of the expenditure approved by the Streets and Walkways Sub-Committee to date although it must be emphasised that environmental enhancement and road safety schemes are not mutually exclusive. Indeed, this expenditure and activity did not conflict with the programme of Education Training and Publicity (ETP) activity; as set out in the current Road Safety Plan. During recent years, major environmental enhancement has taken place on more major streets such as Cheapside and St Paul's Churchyard. These type of schemes seek to address a full range of issues, especially road safety.

#### Schemes

- 14. As over recent years, there are currently a number of active major schemes which seek to improve road safety at key casualty locations:
- Strategy consultation is on-going for Bank Junction.
- Holborn Circus is being prepared for implementation in 2012/13
- Strategy seeks to deal with the key corridor of Fleet Street and Ludgate Hill.
- TfL are reviewing their whole highway network and every Cycle Super Highway to ensure that they are as safe for cyclists as they can be. The programme began six months ago and will encompass some 500 junctions throughout London; including the City
- Officers have recently met with TfL and they are now working on a project for Bishopsgate and are working with the City to effect delivery.

#### **Current picture of casualties**

15. To give an overview of casualties in the City, the following graph illustrates the numbers over the last 11 years from 2000 to 2011.



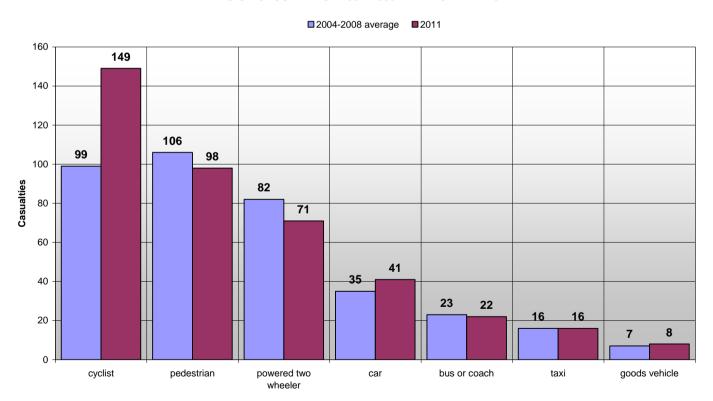
TOTAL CASUALTIES IN THE CITY 2000-2011

- 16. It can be seen that whilst the number of casualties per year has varied over time, there has been a significant recent overall increase. Total casualties in 2011 were 409 (the last full year of data). This is a rise of 7% over 2010.
- 17. The number of slight injuries increased to 360 in 2011. Serious casualties increased to 49 in 2011. Fatalities have remained low, with none occurring last year.
- 18. In 2011 vulnerable road users accounted for the vast majority of the 49 KSI casualties in the City. The relative split amongst user groups is:

Pedal cyclists	47%
Pedestrians	24%
Powered two Wheelers	24 %
Vehicle occupants	4%

19. The following graph shows the 2011 casualty numbers for the various categories of user; compared to the 2004 – 2008 average figures which form the base line for the LIP casualty reduction targets.

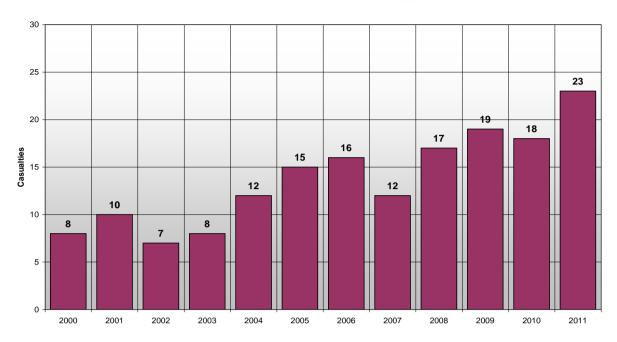
#### TYPES OF CASUALTIES: 2004-2008 AVERAGE AND 2011



20. All casualties to cyclists increased in 2011 to 149. This shows a significant rise when compared to the 2004/8 average of 99. It is most evident that the growth in casualty numbers is due entirely to the growth of cycling and the consequential increase in collisions involving cyclists. The rate of increase in cyclist casualties is less than the increase in the number of cyclists which have increased from 8000 in 1999 to 24000 in 2010,

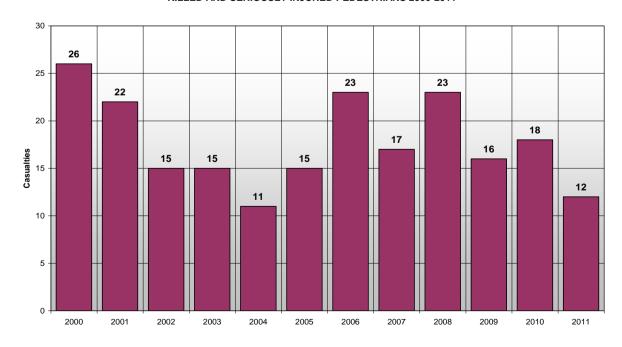
21. Pedal cycle casualties had been increasing since 2007. This has been a key focus for the activity of the Road Safety Team. This figure continues to increase and in 2011 there were 23 KSI casualties. See following.

#### **KILLED AND SERIOUSLY INJURED CYCLISTS 2000-2011**



22. The main contributory factors identified in cyclist casualties attribute "turning right", "changing lanes", "opening vehicle doors" and "undertaking of large vehicles turning left across cyclists path". The last factor being the most significant in KSI casualties. The Road Safety Team tailor their education programme to target these primary causes of accidents.

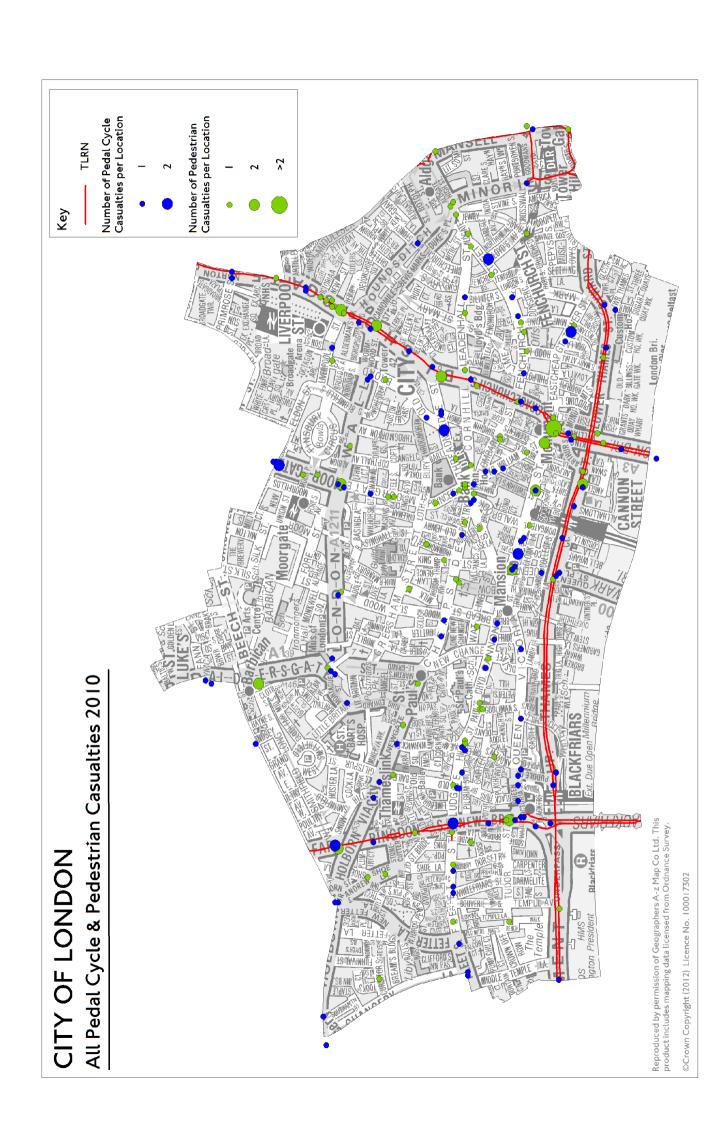
#### **KILLED AND SERIOUSLY INJURED PEDESTRIANS 2000-2011**



- 23. Pedestrian casualties in the City have presented a mixed picture with numbers fluctuating. However, last year saw a reduction to 12 KSI. Again education programmes are shaped to address the primary causes of these accidents. This includes "pedestrian inattention" which has been identified as the main contributory factor for these injuries.
- 24. There is no evidence to suggest that total or KSI pedestrian casualties have increased over the last 10 years.

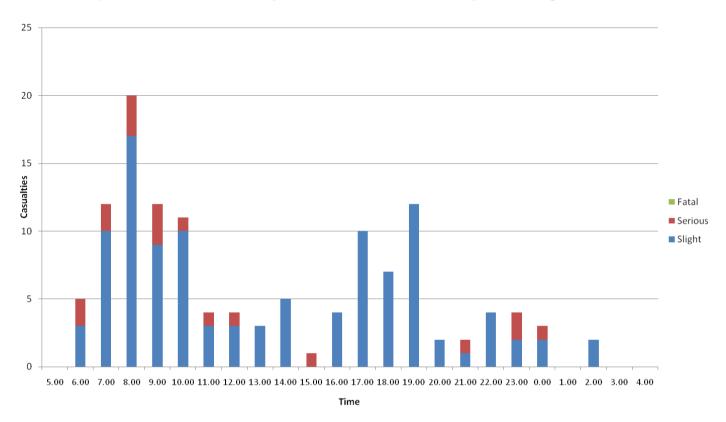
### Emerging patterns

25. The following map shows that cyclist and pedestrian casualties generally occur at different locations in the City which of course makes targeted intervention difficult.. Some clear patterns do however emerge, such as the junction clusters at Bank and Monument. The Fleet St / Ludgate Hill and Bishopsgate / Gracechurch St corridors stand out also. This provides an indicator that the specific corridor based activity that is already underway could deliver significant change. A significant cluster of casualties has emerged around Blackfriars. Three of the 10 most dangerous junctions in 2011 surround the station development. This suggests that the major disruption to the streets surrounding the station development may have introduced extra danger. A correlation of sudden casualty increases associated with major developments is worthy of further in depth analysis. This view is supported by Mr Reilly who suggests an increase in 'roadworks' as being a contributory factor in more collisions (Appendix A Table 9).



### Time of day

26. In analysing data, officers also have specific regard to the time of day that collisions occur. There is evidence of a pronounced spike in casualties occurring during the morning peak period. This is shown in the paper from Mr Reilly (Appendix A Chart 5) and in data from the collaborative work with TfL. The data shows that many of the cyclist KSI collisions occur in the morning peak. This clustering appears to be significant and provides an indicator for possible new ETP activity; which officers are currently examining.



#### **Comparison with others**

27. The paper from Mr Reilly indicated that the City has a growing problem with cyclist and pedestrian casualties. He also asserts that parts of Westminster are performing better than the City of London and that a better performance could be achieved. Based on local and London-wide analysis, officers believe that the only casualty trend disproportionately having an adverse effect on the City is an increase in cycling casualties. The Road Safety team will be working with the central London sub-region to identify common problems and common solutions. It will probably be more meaningful to study streets within other parts of central London that experience similar levels of traffic flow and are of similar width, rather than to crudely compare performance on an area or borough wide basis.

The City casualty rate in the London context

28. Casualties within the City of London comprise one percent of the London total. What happens within the City is important locally but does not impact on the overall London trends. Furthermore, the relatively low number of casualties

- leave the City more vulnerable to 'one off' events distorting the general trend data.
- 29. Casualties have started to increase across London. This is more pronounced within central London. The London wide casualty statistics were released at the end of June. It has not yet been possible to interrogate the information in detail. However, the information is set out in summary form and supports the findings and content of this report. The Transport for London Fact Sheet is attached to this report as Appendix B.
- 30. Cyclist casualties have risen within London since 2005.
- 31. Pedestrian casualties have risen within London since 2008 although Members will note, from the previous table, KSIs have reduced in the City.

### Westminster and Kensington and Chelsea

32. The City of London has been successful in reducing the number of people killed, seriously and slightly injured since the early 1990's though the performance of some other London Councils appears to have been superior, as set out below:

# For KSI injuries

	94-98 average	2010	% change
City of London Westminster Kensington & C London	65 409 171 6,684	41 186 80 2,886	-37% -55% -53% -57%
For slight injuries			
	94-98 average	2010	% change
City of London Westminster Kensington & C London	411 2,384 1,005 38,997	339 1,413 712 26,003	-18% -41% -29% -33%

33. The paper from Mr Reilly shows that for an area of Westminster, comparable with the City, pedestrian casualties have fallen further than in the City during recent times. This is so but, in this case, officers believe this is almost certainly influenced heavily by the changes introduced in and around Trafalgar Square in 2004. Following on from that major scheme, Westminster embarked on a programme to install pedestrian crossing facilities at many more junctions within the comparison area. This is a particular approach the Road Safety team will be discussing with Westminster.

### City of London Road Safety activity

34. Officers are forging closer working relationships with the City of London Police and with Transport for London. This is happening at strategic and operational levels.

35. As well as the current list of active street design projects, major schemes to make the streets safer have been delivered at London Wall/ Moorgate, Cheapside and by the removal of the gyratory at Mansion House Underground Station.

# Education, Training and Publicity

- 36. The Road Safety Team have expanded their activity and manage to deliver a full and demanding programme to the highest standards, despite the recent reduction in team size and the minimal budgetary provision. Within the last year, the team have been commended at the London Transport Awards for their child focussed Happy Feet campaign, received the Laurie Bunn Road Safety Award for outstanding achievement and have just been shortlisted for their caring driver campaign at the National Transport Awards. These are all prestigious awards and recognise the quality of the team's educational work.
- 37. All campaigns and activity being delivered is in accordance with the current Road Safety Plan. The messaging and deployment of their resources is driven by data analysis covering a period of several years. The core activity has been to focus on pedestrian and cyclist campaigns.
- 38. Their current focus is on education and publicity activity. Through this activity, they have engaged in the last month with school children, residents, businesses and workers, drivers, cyclists and pedestrians. During the Olympic and Paralympic period, activity will be focussed exclusively on tourist and cyclist safety. Much of this activity will be delivered jointly with the Police.
- 39. The team analyse causative data and shape their programmes accordingly. This is an ongoing process and current data will be used to shape the 2013/14 programme.

#### **City of London Police activity**

- 40. Typically, the Police and the Road Safety Team work on joint activity for one day a week. Within May, the Police conducted five different operations. Four of these focussed on public safety with one, Atrium, in particular focussing on reducing fatalities and serious injury collisions involving cyclists. Over 200 fixed penalty notices were issued and over 100 people attended the road show as a result and had their notice cancelled.
- 41. The specialist activity around cycling has won numerous awards at a London and national level. The campaigns have been adopted by Transport for London and the Metropolitan Police for the whole of central London.
- 42. The Road Safety team and the City of London Police have enjoyed very good joint operational working for many years. Senior managers are now building upon this work and improving the sharing of data and strategy development. Regular meetings are now being held with the Police to drive the casualty reduction programme

#### **Further analysis**

- 43. Further research and analysis into the contributory factors is needed to identify and explain in fine detail the current trends, patterns and causes of the collisions and casualties in the City. This data will be required to inform the programme of activity within the new Road Danger Reduction Plan. The intention is to use the resources available to the Police or the experts at the Transport Research Laboratory to conduct this analysis.
- 44. Allied to the data analysis, interviews will be conducted with individual cyclists on key routes to determine what specifically they need to help them ride more safely through the City.
- 45. Papers exploring the known issues of 20 MPH and specific high quality routes for cyclist will be brought to Committee later this year.

### National, Corporate & Strategic Implications

- 46. The City has a statutory duty, the Road Traffic Act 1988, to promote road safety and ensure that changes to the highway infrastructure are as safe as possible. This duty is achieved through the programme of Education, Training and Publicity and, through the process of design and safety auditing.
- 47. The City Together Strategy: The Heart of a World Class City 2008 2014 sets out a priority to 'encourage walking and cycling safely'. It highlights that there are 'competing interests in road usage' and that 'the number of cyclists is likely to continue to grow, which is to be encouraged'. It also states that the City should 'encourage improvements to transport safety, especially road safety'.
- 48. The Corporate Plan 2009 12 states that we provide excellent services for our community by 'working to ensure the City residents and businesses enjoy an environment which is safe and, as far as possible, free from risks to health and welfare'.
- 49. The Road Danger Reduction Plan is key to one of the seven programmes in the approved City of London Local Implementation Plan 2011 ("the LIP"). It serves, along with the other six programmes, to deliver on LIP objective LIP 2011.3, which is "To reduce road traffic dangers and casualties in the City, particularly fatal and serious casualties and casualties among vulnerable road users".
- 50. There is no significant negative impact on any of the City's equality target groups.

#### **Next Steps**

Developing the Road Danger Reduction Plan

- 51. These further work items are programmed for action:
- Further causation data analysis will be commissioned shortly.
- Interviews with Cyclists will be undertaken through the summer.
- Engagement with TfL is ongoing and we expect to engage with them specifically around their junction review programme.

- The Draft Road Danger Reduction Plan will be presented to the Streets & Walkways committee in September / October 2012.
- The Final Road Danger Reduction Plan will be presented to the Streets & Walkways Sub-Committee in December 2012.

### Closer working with the Police

- 52. The following activity will take place.
  - Review the targets jointly
  - Continue to deliver jointly staffed campaigns
  - Continue to support the police with their enforcement campaigns
  - Senior Police and City of London officers will meet quarterly to review joint engagement.
  - Reports to the Police Committee and the Streets and Walkways Sub-Committee where possible to be jointly authored, but othewise to be shared between services for consultation.

#### Liaison with other Local Authorities

- 53. The following activity will take place.
  - We will work with our neighbouring authorities through the central London Sub-Regional Forum or bilaterally to share best practise and deliver shared solutions, where appropriate.
  - We will benchmark our activity, as appropriate.

### Conclusion

- 54. A huge and increasing number of cyclists are using the City's streets. This means that whilst the number of casualties per head of the population of cyclists using the City's streets is falling the total number of cycling casualties is increasing.
- 55. There is little discernable change in the number of casualties for any of the other user groups although KSIs for pedestrians appears to show a trend of improvement.
- 56. The activity set out in the current Road Safety Plan has been, and is being, delivered. It appeared that the heavy slant on Enforcement and ETP, in support of the work at major junctions, would enable the casualty reduction targets to be met. This has not proven to be the case and further work is being done to develop a more effective strategy.
- 57. Analysis of the data, particularly the map, shows that most accidents do not occur at particular major junctions, nor do they appear to be associated with any particular street configuration. Therefore, whilst work to improve junctions needs to continue, this will not provide the step change in reducing cyclist casualties that is needed. Collisions now tend to occur more during the morning peak, than

- the evening. There has been a significant change during the last 10 years; where more collisions occurred in the evening peak.
- 58. Moreover, there is a need to look at the nature of particular streets. It is not as simple (as Mr Reilly suggests) to separate street scene improvements from safety issues. Cheapside was deliberately narrowed to make cars and cyclists move together at broadly the same speed. The design reduces the prospect of vehicles stopping on the carriageway; which limits the risk of vehicle doors being opened in front of cyclists. All of these are behavioural issues but they are influenced by the surrounding street environment. This adds weight to the corridor based approach that officers are now engaged on.
- 59. A little more work is required to fully understand the reasons behind the conflicts, particularly for cyclists, and make sound recommendations as to the best interventions required to reduce collisions and casualties.
- 60. The delivery of change will almost certainly require an even more effective working partnership; involving the City, the Police, Transport for London and the campaign/user groups.

## **Appendices:**

- A Road Casualties in the City of London; Ted Reilly May 2012.
- B Casualties in Greater London during 2011; Transport for London 2012.

### **Background Papers:**

- 1. The City of London Road Safety Plan 2007 (Chapter 6 of the Local Implementation Plan 2007)
- 2. The City of London Local Implementation Plan 2011
- 3. Physical Changes to the highway
- 4. Summary of ETP activity 2011
- 5. City of London Road Safety Research; City of London and Transport for London 2012.

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