Transport for London

### **London Streets**



## Mobile phone and seat belt usage rates in London (2007)

### **London Road Safety Unit Research Summary No 12**

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### **Overview**

This summary presents the findings from a survey carried out in March 2007 to measure the levels of seat belt and mobile phone use in London <sup>1</sup>. The survey was also carried out in March 2006 <sup>2</sup>. The results of the current survey are compared to the 2006 results and to urban areas in England. To enable these comparisons, the same methods were used as in the previous surveys.

The key findings were that, since 2006:

 Seat belt wearing rates increased in London for all car occupants but they are still below the rest of urban England;

The use of hand-held mobile phones by London drivers reduced, while the use of hands-free mobile phones increased. Estimates indicate that considerable casualty savings could be achieved if more people wore seat belts and fewer drivers used mobile phones.

## **Background**

To reduce casualties in a collision, the use of seat belts became compulsory in for drivers and front seat passengers in 1983, and for rear seat passengers in 1991. The use of hand-held mobile phones while driving was banned in 2003.

Since the last survey in 2006, two important legislative changes have occurred:

- In September 2006 a new regulation was introduced requiring drivers to ensure that any child travelling in their vehicle uses an appropriate type of restraint.
- In February 2007 the penalties for using a hand-held phone increased to three penalty points and the fine was doubled to £60.

To measure seat belt wearing and mobile phone use and to monitor changes, the Department for Transport (DfT) has commissioned surveys for a number of years. Transport for London (TfL) commissioned the first London survey in 2006. As previously, the London survey was commissioned from Transport Research Laboratory and the data was collected by observers from Count on Us.

## **Objectives**

The objectives of the survey were to:

- Provide a measure of seat belt use by vehicle occupants in London, and to compare usage to both the 2006 survey and to elsewhere in England
- Provide a measure of mobile phone use by drivers in London, and to compare usage with the 2006 survey













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and elsewhere in England.

 To estimate potential casualty savings of increased seat belt wearing and reduced mobile phone use in London.

### **Methods**

The 2007 survey replicated the methods from the 2006 survey.

Survey sites. A total of 33 sites were surveyed: one site in each borough and one in the City of London. Of these sites, 12 sites were on the TfL Road Network, 11 sites were on Borough Principal Roads, and 10 sites were on Minor roads. The sites are not designed to be representative of individual boroughs, but to give a balanced view of seat belt and drivers' mobile phone use in London.

**Survey times.** Each site was surveyed on a weekday during March 2007. Ten sites were also surveyed at the weekend. The survey was carried out during hours of daylight only to ensure reliable observations could be made.

**Data collection.** Data was collected by trained observers using the same procedure at all sites. Stationary vehicles were observed at signalised junctions. The observers recorded vehicle data (e.g., vehicle type, vehicle prefix), driver data (e.g., sex, age, restraint use, mobile phone use) and passenger data (e.g., seating position, sex, age, restraint use).

In 2006 the vehicle categories comprised car, van and hackney carriage (taxi). In 2007 'private hire vehicle' was included as in the taxi category. Taxi (hackney carriage or private hire vehicle) drivers are not required by law to wear a seat belt while carrying a passenger. In total, 30,126 cars, 6,006 vans, and 2,027 taxis and their drivers and passengers were observed, a slight increase in the sample size, compared to 2006.

**Variations.** To ensure surveys are comparable across time and place, survey methods ideally remain

unchanged. Every effort was made to keep the survey sites and data collection methods consistent to last year, however several minor changes were required.

First, two site changes occurred this year (Barnet and Hammersmith & Fulham). Second, minor changes in the DfT's data collection methods were copied in the current London survey. The impact of the sites changes were assessed, it is unlikely that these, or the changes in data collections methods, affected the overall results.

#### Results

The data were weighted to ensure that results were representative of London. All proportions reported have been weighted, while sample sizes have not been weighted.

The results were compared to the identical survey undertaken in London in 2006, and with the results from similar urban areas from the DfT's survey.

The result were analysed identically to the 2006 survey. Therefore the results from the two London surveys are directly comparable. However, the DfT survey was delayed in 2007. This delay meant that the most recent DfT survey to have been carried out was in October 2006. As it was completed shortly after the child restraint regulations took effect and before the penalties for mobile phone were increased, the results of the 2007 London survey and the October 2006 DfT survey are not entirely comparable.

### 1. Seat belt wearing

Seat belt wearing rates in London have increased but they are still lower in London than in other urban areas.

In 2007, 87% of car drivers, 56% of van drivers, and 12% of taxi drivers (largely exempt from wearing seat belts) were wearing seat belts in London. When compared with the 2006 survey, these results indicate that wearing rates have

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increased among car drivers (82%) and van drivers (51%), and decreased among taxi drivers (14%; see Table 1).

The results for vehicle passengers indicated that wearing rates have increased since 2006 (see Table 1). In 2007, 84% of car front seat passengers, 65% of car rear seat passengers were observed wearing seat belts, compared to 80% and 49% for front and rear seat passengers in 2006, respectively. Similarly, 49% of van passengers and 19% of taxi passengers were observed wearing seat belts in 2007, compared to 40% and 17% for van and taxi passengers in 2006, respectively.

However, seat belt wearing is still lower in London than at similar urban sites elsewhere in the country, where 92% of car drivers and 63% of van drivers were observed wearing seat belts (Table 1).

For child restraints, similar patterns were found. The proportion of children travelling unrestrained reduced considerably from 33% in 2006 to 17% in 2007 and appropriate restraint use amongst children rose over the same time period. These results are likely to be due to the child restraint legislation changes in September 2006.

#### 2. Mobile phone use

In London, the use of hand-held mobile phones whilst driving has decreased whilst the use of hands-free mobile phones has increased.

The most recent DfT survey took place in October 2006, before the new mobile phone legislation was introduced in February 2007. Because such an important change took place during this time, the current results are not comparable with the DfT survey. Therefore, the current results will only be compared to the London 2006 survey.

The results showed that the proportion of drivers using hand-held mobile phones fell, while the use of hands-free mobile

phones increased between the 2006 and 2007 surveys (see Table 2). These changes likely to be associated with the new penalties for hand-held mobile phone use while driving.

The increase in use of hands-free phones in conjunction with the decrease in hand-held phones suggests that drivers may have perceived that it is safer to use a hands-free kit while driving. However, there is evidence to suggest that hands-free mobile phones carry the same collision risk as hand-held mobile phones, so while the new penalties have caused the use of hand-held mobile phones to drop, the overall use of mobile phones when driving has not decreased.

### **Conclusions**

The survey found that seat belt wearing rates in London were higher in 2007 than in 2006, while wearing rates remained below the level found in the DfT survey.

Furthermore, the survey found that the use of hand-held mobile phones by London drivers fell between the 2006 and 2007 survey. However, the overall use of mobile phones while driving remained the same.

These marked improvements may in part be attributable to the recent changes in laws and associated campaigns and enforcement activities. Without the same levels of campaigns and enforcement, it remains to be seen whether these improvements can be sustained over the course of one year.

Based on the survey findings and assumptions from other research, the following can be estimated that:

 If seatbelt use in London matched that of the DfT survey, about 350 fewer car occupants would have been injured in 2006, including nearly 100 fewer killed or seriously injured; and

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 If the use of mobile phones by drivers in London matched that of the DfT survey, about 1,200 fewer people would be injured in London in 2006, including 160 fewer people killed or seriously injured.

Therefore, increasing seat belt wearing by vehicle occupants and reducing mobile phone use among drivers has great potential in reducing casualties and improving road safety in London.

### **Next steps**

To further reduce casualties and collisions in London, increasing seat belt use and reducing illegal use of hand-held mobile phones in London remains an essential objective, which can be achieved through increased education, publicity, and enforcement activities.

The survey will be repeated in spring 2008 to establish a good baseline and to monitor future changes in seat belt wearing and mobile phone use across London.

Table 1: Overall proportion of vehicle occupants wearing seat belts

	Car			Taxi		Van		
	DfT 2006	London 2006	London 2007	London 2006	London 2007	DfT 2006	London 2006	London 2007
Drivers	92%	82%	87%	14%	12%	63%	51%	56%
Front seat passengers	93%	80%	84%	17%	19%	55%	40%	49%
Rear seat passengers	83%	49%	65%					
Number of vehicles	15,497	27,638	30,126	1,497	2,027	2,403	4,709	6,006

*Note:* Very few rear seat passengers were observed in vans and front seat passengers in taxis, so they have been combined to form passenger groups.

Table 2: Overall proportion of drivers using mobile phones

		2006		2007			
	Car	Taxi	Van	Car	Taxi	Van	
Hand-held	2.6%	1.1%	3.8%	1.4%	0.7%	1.8%	
Hands-free	1.2%	0.8%	1.0%	2.3%	3.1%	4.9%	
Either	3.8%	1.9%	4.8%	3.7%	3.8%	6.7%	
Number of vehicles	27,640	1,497	4,709	30,126	2,027	6,006	

### Selected references

- Walter, L, Broughton, J, and Buckle, G. (2007). Mobile Phone and Seat Belt Usage Rates in London 2007. TRL Project Report PPR 245. Wokingham: TRL Limited.
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### Summary prepared by:

Claudia Farley (Research Manager)

### Reviewed by:

John Devenport (Head of LAAU)

### Cleared by:

Chris Lines (Head of LRSU)