



Mobile Phones

Legislative Background

- ❖ Victoria was the first Australian State to ban the use of hand-held mobile phones while driving (in 1988). New South Wales then introduced similar legislation (in 1989), followed by all other States and Territories except Western Australia. The legislation requires that a driver must stop his or her vehicle off the road carriageway prior to using a mobile phone. It is an offence to use a hand-held mobile phone while the vehicle is in motion.

(Graham, S. 1999. Cell Phones: To Ban or Not to Ban? *Traffic Safety*, Vol.99, N°1, pp. 10-11).

Mobile Phones and Driving Facts

- ❖ There were 8,560,872 mobile phones connected or in use around Australia at 30 June, 2000. This represented an increase of nearly 500,000 mobiles in just three months. 98.7% of the mobile phones in use are digital.

(Australian Mobile Telecommunications Association, 2000. http://www.amta.org.au/files/media/mr00_6.htm.)

- ❖ Demographic statistics for Western Australia (March, 2000) indicate that there are 1,429,723 persons of legal driving age in WA. Given other research findings, it is reasonable to assume that 60 per cent of drivers in Western Australia have mobile phones. Therefore, it would appear that approximately 860,000 mobile phones are owned by drivers.

(Australian Bureau of Statistics, 2000. Australian Demographic Statistics –March 2000. *Catalogue Number 3101.0*. ABS, Canberra, ACT).

- ❖ The National Highway Traffic Safety Administration in America reported in 1997 that approximately 85 per cent of mobile phone owners made calls while driving. More than 27 per cent use their phones at some time of their trips.

(Graham, S. (1999). Cell Phones: To Ban or Not to Ban? *Traffic Safety*, Vol.99, N°1, pp. 10-11; Goodman, M.J., Tijerina, L., Bents, F.D., & Wierwille, W.W. (1999). Using Cellular Telephones in Vehicles: Safe or Unsafe? *Transportation Human Factors*, Vol.1, N°1, pp.3-42).

- ❖ A 1998 survey in Western Australia indicated 82% of respondents believe using a mobile phone while driving would increase their chances of having a crash. Fifty-eight percent believed their chance of crash involvement would increase a great deal, 24% said it would increase somewhat, and only 5% believed it would not increase at all.

(Donovan Research (1999). *Road Safety Community Attitude Survey –Mobile Phones*. WA Road Safety Council, Perth, WA).

- ❖ Similarly, 91% of survey respondents agreed that banning the use of mobile telephones while driving is a good idea. 83% strongly agreed, while 8% agreed slightly, 6% disagreed and 3% had no opinion. Of those who agreed that use of mobile phones should be banned, 76% said mobile phones can cause inattention and distraction.

(Donovan Research (1999). *Road Safety Community Attitude Survey –Mobile Phones*. WA Road Safety Council, Perth, WA).

- ❖ The risk of being involved in a fatal crash while using a mobile telephone has been said to range between 4 and 9 times higher than when not using a phone.

(Cell Phone use may raise collision risk. (1997). *IIHS Status Report, Vol 32, N°3, March 22, 1997*; Violanti, J.M. (1998). Cellular phones and fatal traffic collisions. *Accident Analysis and Prevention, Vol. 30, N°4, pp. 519-524*).

- ❖ The two most common types of crashes associated with mobile telephone use are "loss of control/run off road" crashes (on freeways and larger highways) and "rear end crashes" (in built up areas). Rear end crashes were more frequent for hand-held mobile use than for hands-free mobile use.

(Bruehning, E., Haas, I., Mäder, H., Pfafferott, I., & Poeppel-Decker, M. (1998). Telephone use while driving and traffic safety. *VTI Konferens, N°10A, Part 9, pp. 69-79; Swedish National Road and Transport Research Institute, Linköping, Sweden*).

- ❖ The frequency with which vehicles with hand-held mobile phones are involved in rear-end crashes in built-up areas is significantly higher than vehicles with hands-free telephones and cars without telephones.

(Bruehning, E., Haas, I., Mäder, H., Pfafferott, I., & Poeppel-Decker, M. (1998). Telephone use while driving and traffic safety. *VTI Konferens, N°10A, Part 9, pp. 69-79; Swedish National Road and Transport Research Institute, Linköping, Sweden*).

- ❖ The results of a study of car-following behaviour while using a mobile phone showed that drivers' detection ability in a closing headway situation was impaired by about 0.5 seconds in terms of brake reaction time, and almost one second in terms of time-to-collision. These results are similar to findings of previous research (eg. Brookhuis, DeVries, & DeWaard, 1991).

(Lamble, D., Kauranen, T., Laasko, M. & Summala, H. (1999). Cognitive load and detection thresholds in car following situations: Safety implications for using mobile (cellular) telephones while driving. *Accident Analysis and Prevention, Vol. 31, pp. 617-623*).