



Vehicle Dynamics – Theme 6: Crashes

Factsheet 6c

Speed and technology

Speed facts:

- 'Inappropriate' speed is a major factor in the majority of all fatal crashes. Research has shown that a 3% reduction in mean traffic speeds can produce a 12% reduction in fatal crashes.
- High speeds are not necessarily dangerous speeds. As an example, motorways are the safest roads when measured by miles driven. Also, in racing, there are fewer crashes per mile driven despite the high speeds involved. The problem is inappropriate speed for the road and consideration of things such as weather conditions.
- Half of all fatal accidents occur at an impact speed of less than 35 mph.
- Every 5 km/h above the legal speed limit, doubles the risk of being involved in an injury crash. So, 10 km/h above speed limit, quadruples the risk and so on.
- Speed cameras have been very successful in reducing traffic speeds and crashes, especially when placed in known frequent-crashes spots.

About GPS Navigational Technology

Global Positioning System (GPS) is a satellite-based navigation system that works accurately in any weather conditions and any time of day or night. It utilises a network of 24 satellites orbiting the Earth, placed by the US Defence Department. Use of the GPS is free and available to anyone.

- An Australian car tracking system uses GPS and mobile phones to give vehicle location and speed to a caller. As well as containing speed, it has security benefits too.
- In France, an invention called A.C.S is a speed-sensitive accelerator pedal which can be used in all traffic situations.
- In the UK, a speed limiter project is being researched at the Institute of Transport Studies (ITS), Leeds University. Preliminary results suggest a 20% reduction in road crashes if mandatory speed limiters are used on vehicles (vehicles cannot exceed set speed limits).