

Front seat belt surveys – general instructions for carrying out surveys.

This is the primary measure of our restraint programme effectiveness. Annual surveys of seatbelt use by front seat adults are carried out in February/ March at sites around the country to provide a national wearing rate figure, and a wearing rate in each Police district. In the national surveys, 100 cars are surveyed at each site, which takes about an hour to an hour and a half (sometimes more) and provides a sample of 120-140 adult occupants.

Choosing a site:

Surveys should be carried out in stationary or slow moving traffic where possible. For urban sites, choose a site in a 50km/h zone where traffic slows down enough for you to see into the cars well. Traffic lights and controlled intersections are usually good locations, but great care must be taken not to be too obvious.

Rural sites are sites where most traffic is coming to or from zones of 80km/h or more. It is difficult and dangerous to observe wearing rates where traffic is travelling at 80-100 km/h. For surveyor safety and to make seeing inside the vehicle practical, open road wearing rates are generally best measured inside 50km/h zones at the edges of towns or close to motorway off-ramps, where most passing traffic has come from 100km/h zones.

Sites should be chosen to reflect the spread of socio-economic and other factors in the town or region to be surveyed. The same sites should be used each time the survey is run, so that results can be compared over time.

All sites should be chosen so that the surveyor can observe vehicles as clearly and discreetly as possible. There must be a safe off-road location for the surveyor to stand in. Surveying from a vehicle is **not** advised as visibility tends to be poor.

Traffic flow to survey: Choose an inconspicuous location to stand and decide which traffic streams the surveyor will have a good view of. Record the decision so that the same lanes can be surveyed each year. Normally it will be practical to survey only the lane nearest the surveyor, unless visibility is particularly good (eg from an overbridge) and/ or traffic volume is low.

Once the traffic streams have been chosen, stick to those; if you can only see northbound traffic well, don't observe any southbound traffic, as this can result in the introduction of unconscious bias or errors. Bias can be introduced by for example choosing only those cars where you can see for certain the driver has a belt on, or only 4wds where the driver sits higher up. Errors are introduced where the surveyor 'almost sees' the seatbelt and unconsciously fills in the blanks, that is makes a guess at the wearing status.

Timing: Ministry of Transport surveys are conducted on weekdays (excluding school and public holidays) between the hours of 10am and 12 noon. The same timeslot should be used for each site in each year.

Sampling frame: Only drivers and front seat adult passenger (nearest the side of the vehicle) in private cars and vans are surveyed. For this survey, we ignore all children, rear seat passengers, adults in the centre front seat, heavy vehicles, light commercial vehicles, taxis and motorcycles. "Adults" surveyed may include older teenagers aged 15 and over. If in doubt whether a passenger is 15 err on the side of caution and do not include them.

Recording of results: Results should be recorded on the survey form provided. Record whether driver or outboard passenger, sex, and whether a seatbelt was worn. Results are to be recorded for every car whose details were wholly or partially observed. Surveyors should record the details of each car as it is observed (i.e. do not attempt to memorise the details of several vehicles). Then the details of the very next vehicle should be recorded. This is to avoid unconscious bias towards observing “interesting” vehicles.

Personal safety and clothing: for personal security, the surveyor should have a cellphone and/ or a vehicle nearby. Surveyors should carry identification and be prepared to explain why they are observing vehicles. Clothing should be fairly inconspicuous and suitable for the weather. Sunglasses can be helpful in reducing glare off windscreens. High visibility gear should **not** be worn. The surveyor must stay on the footpath or in other off-road place at all times.

Briefing surveyors to ensuring a valid survey

- It's very important that surveyors are unobtrusive. It is not uncommon for vehicle occupants to buckle their seatbelts on sighting someone standing at the roadside with a clipboard, so the surveyor must try not to influence the survey in this way.
- If traffic is moderate to heavy it won't be possible to survey all vehicles. Good survey procedure in this case is to observe a vehicle, write down its details, then look up and observe the next one that passes. It is important to write down the results immediately – trying to memorise the results as you go is tempting but unreliable. It may also introduce unconscious bias, as it is easier to remember an “interesting” vehicle and let it overtake an “ordinary” one in your memory. Picking out vehicles to survey also introduces this bias.
- Surveyors must be informed of Health and Safety policies and given adequate training.

For further information contact the Transport Monitoring team at the Ministry of Transport, ph 04 439 9000 or email info@transport.govt.nz.