ROAD SAFETY COMMITTEE

Discuss Pedestrian Safety in Car Parks

Sydney — 5 August 2009

Members

Mr J. Eren  Mr B. Tilley
Mr S. Leane  Mr P. Weller

Chair—Mr J. Eren

Witness

Dr S. Job, director, New South Wales Centre For Road Safety, Roads & Traffic Authority
CHAIRMAN'S WELCOME

Dr JOB—I don't have a presentation. I expected you would be jumping in asking questions. We have, only a little while ago, made a very broad presentation on pedestrian safety to our Parliamentary Stay Safe Committee. They advised me that that now becomes their property. So as I understand it, therefore, it would be suitable for you to ask them for a copy and they could supply you with a copy of our submission.

It actually has a very detailed analyses of pedestrian crash fatality data for New South Wales and then an extensive commentary on all of the activities of the RTA to aid pedestrian safety and quite a bit of analyses of their success.

Mr WELLER—So was there any data in New South Wales on the actual numbers in carparks, separating not pedestrians as a whole but pedestrians in carparks?

Dr JOB—No, there isn't. I actually looked into this question very carefully when I noticed that was the focus of your inquiry. The way the data work in New South Wales is for a crash to enter into our database, it has to involve a vehicle being towed away or a person being injured or a person being killed and reported to police. In addition, it would be excluded unless it is on a public road or road related area.

So that means if it's on footpath or something like that, it's in the road reserve, it would come into our database. If it's on private property like a shopping mall carpark, it would not come into our database. The peculiar consequence of that is that some carparks will be included in our database but the large majority will not.

To give you an idea, I've brought a photograph. For example, there's an aerial photograph of one of our roads and on some of those, like that one where the road corridor was planned to be larger than eventually the need turned out to be, we've put carparks which are public carparks along the middle of the road. So if they're like that, they're associated with the road corridor, then a crash in that carpark would come onto our database, but a crash in a private carpark wouldn't.

The CHAIR—Do you think it should be?

Dr JOB—No, I don't. I actually think it would really be a retrograde step for public policy and road safety. The reason for that isn't simply that the road toll will go up a little bit. It would go up a tiny bit, it's actually that I would argue very strongly that injuries and crashes occurring not on publicly controlled arenas, the road, should not be included as road fatalities. I have a very particular public policy view for that.

I think that we inevitably focus on that which we measure and we should focus on that which we measure and that which we can control. Public policy and public legislation and road regulation relates to public arenas and public roads. So we can control those to a degree. We can't be with every driver, et cetera, but we can regulate speeds, we can regulate that you must wear a seat belt, that you must give way, that you must stop, et cetera.

As soon as it's private property, we don't regulate. So a government has no legislative control through the normal roads act for saying what the speed limit is, what the penalty if you don't travel the speed limit, that you don't have to wear a seat belt, that you have to give way.

As soon as you start including those into the road toll, you run the risk where we start spending a large amount of public resource on arenas where we have very little control. So I think the benefit/cost ratio we would get from activity in those arenas is very poor, compared with areas where we have control. I think we'd just get a negative outcome for doing that.

Mr WELLER—Could we come at it a different way through planning and building regulations for carparks?
**Dr JOB**—I think there are ways that it can be addressed if you're talking about very clearly marked carparks so that they can become the regulatory responsibility of the owner. Then you could apply other regulations to them in terms of OH&S and those kinds of regulations as a piece of private property. I think that would be a suitable way to handle it. I think that's much more suitable than putting them into the general road toll statistics.

**The CHAIR**—But do you think in doing that, that basically there is no need to change anything because it's not on the radar, so to speak? Like we've just previously heard submissions that some fifty odd incidents occurred between pedestrians and vehicles in certain carparks and, as far as I understand, it's not reported.

So there's a huge statistical events that are happening, which is causing injury to people, that obviously is not on the radar of policy makers.

**Dr JOB**—I think that you're right in identifying that there is a value in raising this on the radar for policy makers. I just don't think that the right way to do it is to put it into the road toll. I think that once you put it into the road toll, you run risks in either direction. You either collect those data, but there is no particular notice of the fact that they're in a private carpark.

They just become part of the volume of "we have X many, many thousands of crashes per year in Victoria and New South Wales", or wherever, and the fact that a few hundred of those may occur in a carpark, well actually I think, from a public policy point of view, that's not going to be the focus.

I also think that we overestimate the severity of them if we simply add up the numbers. The chances that those will be severe injuries or fatalities compared with the rest of the roadway is very small because vehicle speeds tends to be dramatically lower. So I think you would actually overestimate them if you simply throw sheer numbers at it.

I think you run the risk in both directions. First that they simply are missed in the total agglomeration of road toll statistics which, for the highly populated states like Victoria and New South Wales in Australia, are very tragically large.

On the other hand, if there is a certain level captured by community groups who focus on it because of a very single high focus case occurs, then you're going to get a situation where governments are going to spends millions and millions of dollars on perhaps one single tragic event, where you don't have millions and millions of dollars to spend on each single tragic event on the road.

So you're then in a position where you're spending your dollars by virtue of that kind of pressure in and around where you actually have less control. So the dollars will do less good and you're treating them as a major problem.

The other thing I would highlight is the most obvious solution we jump to where we can't regulate is education. Indeed, the road safety area is littered with the dead bodies of failed educational campaigns and unless you can also enforce, I think it's very unlikely you would get an education campaign which would succeed in addressing this problem.

Given it's a very difficult to enforce on private property, it's very difficult to educate. I think Victoria's experience, like New South Wales, resplendently shows that.

The big success in Victoria has been mass education about enforcement, we've got 6,000 hours of camera, now going to 9,000 hours. The education around that is what drives the value, rather than education in the areas where there is no consequence.

The reason for that is most people believe they could be caught by camera. They don't believe they're going
to kill someone in a car park. So you start educating them, I'm glad you're going that way, doesn't apply to me, I would never do that. So your actual target audience doesn't listen to your message.

**The CHAIR**—But there are other incidents where public policy do infringe on private areas such as, for example, workplaces?

**Dr JOB**—Yes.

**The CHAIR**—There are certain regulations on private companies on their private property that we have stringent guidelines about the safety of workers. We say to them you know you've got to separate your workers from forklifts. You need identifiable areas. So there are instances where we do make policy around private areas. Why is this any different?

**Dr JOB**—It's not. It's not different and I agree with you, and in fact I think you've really hit upon one of the great successes in safety terms of Work Cover and work safety and occupational, health and safety. That's one of the great successes in the last hundred years. That's been done exactly as you've identified, by forcing the regulation with severe penalties for failing to meet that regulation.

That's why I said I think part of the solution is to regulate, but not to prevent the road toll. So if you regulate it as an entity, acknowledging that it is a different thing because it's private property and regulate it, as you say by analogy just like a workplace OH&S issue, then I think you would get some traction on it and I think we would too. I mean us, in general. We would get traction on it if we regulate it that way, rather than putting it into the road toll.

**Mr LEANE**—And take away the road toll, do you think regulating carparks, especially shopping centre carparks, that type of carpark and small children and maybe some elderly people as well, should be deemed as Shared Zones, similar to what Shared Zones, as you would understand on a road, that would come under your jurisdiction?

**Dr JOB**—I think that is a good, in principle, direction to go. I know that some of our carparks, for example, where you don't get good visibility, will actually dictate a speed limit even lower than the shared area, which is default 10 Ks.

So we have some that regulate 5 Ks. So I would very cautious about the 10 Ks in some instances, in some locations, being too high. But I think the principle of emphasising the Shared Zone and emphasising that pedestrians have right of way and have a very low speed limit is one of the key values and one of the key ways to address the problem.

**Mr TILLEY**—Say again we're talking about the private carpark at West Tigers, for example, just so I've got a clear understanding of the New South Wales experience compared to Victoria, now a carpark in Victoria is a road related area so the legislation applies to road rules, applies to private carparks. Is the experience any different in New South Wales?

**Dr JOB**—The regulation is different. If it's a private carpark, then it doesn't come into our jurisdiction. So it's only if it's a carpark which is associated with a road, as a public entity, that our road rules would apply. So that's what's different. If it's owned by West Tigers as a club and that's private land, then our road rules will apply there.

**Mr TILLEY**—Not even by way of gazetting it, that carpark would bring it under road legislation?

**Dr JOB**—I don't know whether with a change of regulation gazetting, we could do that. I only know we currently don't

**Mr TILLEY**—I'm just trying to separate the experiences between NSW and Victoria here.
Dr JOB—Yes. Victoria is subtly different. I think partly these are cultural things so when I talk about I don't think it's a good idea from a New South Wales perspective, I don't think it would be a wise move in New South Wales because it isn't currently part of the way we do it and it isn't socially seen that way.

If there's already a very strong social perspective in Victoria that that is a road and you get good compliance by virtue of that, then I wouldn't retreat from that position. I think if you already have that in Victoria, and people accept that, great. Then you already have some value there.

But for New South Wales to actually start to do it would be a huge social change where we'd actually start driving an odd outcome.

Mr LEANE—How do NSW Police regard a carpark, considering the road rules don't apply? Is that something you can't answer?

Dr JOB—I think you'd have to ask police.

Mr LEANE—I'm just wondering if two people, forget the pedestrian for a second, if two vehicles have a collision and they can't agree on whose fault it is, so they say well alright, well let's get the cops down here and they'll tell us.

The CHAIR—Unless there's an injury, I don't think the police just attend.

Mr LEANE—Just say that there was a slight injury or a car, let's get the police here and they'll be able to tell us who is. But what you're saying is the road rules don't apply in the carpark anyway?

Dr JOB—On private property, in New South Wales, no.

Mr LEANE—That's interesting.

Dr JOB—It's private land so it's the same as expecting, from our perspective, it would be the same as expecting you to apply the road rules out on the farmer's property.

Mr WELLER—But in the design through planning and building regulations and local government, the state would have a consistent, like across the whole state, and local government would be responsible for seeing that they were designed and built to the design?

Dr JOB—That's correct. So the planning process --

Mr WELLER—So you can build some engineering safety into it?

Dr JOB—You could, and I think you're saying something very important there. In addition to, for example, in the Shared Zone, for a Shared Zone to work effectively you need to engineer it so it's got what we call a self enforcing speed limit.

That means you need speed humps and chicanes and whatever it is to get people to look at that road and say well, that's about a 10 K road, I should be driving at 10 K, and in fact I'll damage my car if I drive much faster.

We have a quite extensive trial of pedestrian shared zones on public streets. So they're not carparks but we have very interesting data set and experience arising from analyses of how close we have to put speed humps together to get people down to a general speed around 10 Ks. So there is some research which could be applied into carparks and carpark design from that.

Mr WELLER—You made an interesting comment before that in some of them, you thought 5
kilometres an hour would be more appropriate.

Dr JOB—Yes.

Mr WELLER—So you could engineer it that they would travel at 5 kilometres an hour?

Dr JOB—Yes, you could. The ones I'm thinking of are ones especially where you're undercover in a carpark so you have a lot of collusion moving around. So you actually get a very poor line of sight in those circumstances. I think you really need very slow speed in those circumstances

Mr TILLEY—It's probably off the subject but talking about legislation, drink driver laws, if for example there is a crash involving two motor vehicles, there's an indication saying prescribed concentration of alcohol and New South Wales have an arrest power, whereas Victoria don't, would a driver of a motor vehicle be arrested in the carpark?

Dr JOB—Again, I think it's one you'd have to ask police. I understand it, if it is actually private property, then you're entitled to do any kind of crazy thing you like, as long as you're not in contravention of OH&S or other things. But on a space which is open to the public though it's private land, I expect there are various other common laws, as well as OH&S and other things which would apply. So I would expect that if you're impaired with alcohol in charge of a vehicle, you could be guilty of various other offences, but perhaps not the road law offences.

Mr LEANE—You can get done in your own driveway in Victoria.

Dr JOB—In New South Wales they could approach you on your driveway, on the basis that they had seen you on the road. But if you're out on your own five acre piece of property, then, no.

Mr TILLEY—It's probably getting off the complete reference but it's interesting to know, thank you. You've certainly covered it pretty well.

The CHAIR—Any further questions? One last one, just in relation to if there was some changes made to private carparks, in terms of those changes and in terms of policing and enforcement issues, in your opinion do you think that, for example, local government should be more involved in the enforcement issues?

Dr JOB—I really don't know. I don't have a clear policy answer in terms of local government, except that what I would say is if you're talking about a broad range of enforcement issues, especially with people who may become aggressive, for example, because they are inebriated, then I think it is almost more appropriate to have someone who is trained to deal with that, trained to defend themselves, and has the power of authority of the police uniform.

I think if you are dealing with those kinds of instances, it is always better to have someone with that level of authority in the public’s eye conducting that kind of enforcement.

The other thing I would emphasise though in considering all of the safety issues around this, is that it is very easy to underestimate the power of the engineering solutions. The engineering solutions are always going to give the big value and I think we also generally underestimate the importance of speed and the reaction time consequences and the severity consequences, especially for pedestrians, even a few kilometres an hour makes a big difference to the severity of injury for pedestrians.

I think it is always valuable to go back to the approval mechanisms, the planning mechanisms, the demand for what engineering features you would put in place to ensure that that speed limit is obeyed. I think there is a lot of value in that arena.

Mr TILLEY—One of the things that is raised in carparks, compatibility of motor vehicles. Earlier in
the day there were concerns for your larger four wheel drive vehicles, being able to see past the B-pillar and head checks and things like that, but the compatibility of a smaller or medium car to the larger vehicles, do you have any thoughts or comments on the compatibility of vehicles?

Dr JOB—I think that the compatibility is a very important issue for road safety, a very important issue.

Part of what we are doing in road safety and part of what we are really succeeding with is getting better and better crash protection effectiveness from vehicles, so we are seeing more and more five star rated Australian new car assessment program vehicles, including our local major manufacturers now having five star vehicles.

The benefit of that though is circumvented to the extent that when the vehicles collide, those crash protection mechanisms overlay each other rather than connect and so there is a significant issue there. Nonetheless, from any point of view, the more of those mechanisms you have the better, in that many serious crashes are not into another vehicle, they are into a pole or into a tree or into a rock or whatever.

I think for carparks there is another very important issue to those higher vehicles, and that is visibility of pedestrians, especially children.

It is not just the B-pillar thing, it is actually they are under the height at which you might see them right in front of or right behind the vehicle and since you get so many slow moving manoeuvres in vehicles, the height of the vehicle has other consequences which are not typically obvious in a higher speed crash for a pedestrian.

It is what we might call a drag effect on the tyres. If you have a bumper sitting low to the ground and you hit a five or six year old child at a low speed, they will bounce. Now that is not a very pleasant thing, but it is not nearly as unpleasant as having the vehicle so high that they connect directly with the tyre and because the tyre is moving, it just drags them straight under and that is almost always going to be a fatal outcome.

So the higher the vehicle, the more risks you have with failing to see the pedestrian and with the outcome of the crash being much more severe, even at a very low speed.

For example, the big difference in speed in actually 50 down to 40 km an hour which is why Victoria and New South Wales have such a strong focus on the 40 km programs in pedestrian risk areas.

The chance of survival for a pedestrian doubles from being hit at 50 km to being hit at 40 km, so just 10 km an hour doubles your chance of survival.

But that really is talking about where the pedestrian is bounced, in effect over the vehicle. So we talk about pedestrians being run over, but in general that is not the case, pedestrians are actually run under in a pedestrian crash but at low speed with a child they are run over and the chances of being run over become higher and higher with the higher point of impact of the vehicle.

So then, even at very low speed you have a very severe crash when you run over rather than run under a pedestrian. So those heights are a problem.

What we are doing in New South Wales now, is we are in the throes of consultation with the four wheel drive clubs and representatives and the vehicle modification industry to examine limiting the height to which you can raise or change by lowering the height on the vehicle.

Part of our concern with that is that you get four wheel drives and they say because of that very casual time I get out in the bush I want to be 10 cm higher, that has a huge impact on pedestrians in the event of a crash and so we want to limit those available levels of changing height of a vehicle and they will have a big impact, even at very low speed crashes, such as you find in carparks.

The CHAIR—Thank you very much.

Committee concluded.