

**ROAD SAFETY COMMITTEE**  
**INQUIRY INTO PEDESTRIAN SAFETY IN CAR PARKS**

**Melbourne — 14 September 2009**

Members

Mr J. Eren  
Mr D. Koch  
Mr C. Langdon  
Mr S. Leane

Mr B. Tilley  
Mr I. Trezise  
Mr P. Weller

Chair: Mr J. Eren  
Deputy Chair: Mr D. Koch

Staff

Executive Officer: Ms A. Douglas  
Research Officer: Mr N. Bunt

Witnesses

Mr I. McLauchlan, transport and parking manager,  
Mr P. Kyrkylis, coordinator, transport and parking, and  
Mr D. Agic, senior transport engineer, Stonnington City Council.



**The CHAIR** — Thank you very much for being here this morning to assist the Parliamentary Road Safety Committee inquiry into pedestrian safety in car parks. As you can see, we are recording the proceedings today. You will get a copy of the Hansard transcript, and you can correct it as appropriate. Anything you say is protected by parliamentary privilege, but that privilege is not afforded to you if you make any comments outside of this area. I ask you to introduce yourselves as you go, and we will ask questions as we go along.

**Overheads shown.**

**Mr McLAUCHLAN** — My name is Ian McLauchlan. I am the transport and parking manager of the Stonnington City Council. To my right is Peter Kyrkylis, our transport and parking coordinator, and Damir Agic, our senior transport engineer. Damir does most of the assessments of planning applications, so I thought it worthwhile to bring him along and you can ask questions later or whatever you like.

Our function at council in relation to parking is to manage on-street parking, determine restrictions and manage off-street car parks sites. We also have a number of commercial car park operators that manage major car park sites for us. As well as that I also have responsibility for the enforcement function of parking, just by way of background.

I will move to the first slide. We have had some discussions with Jason about what you are particularly looking at, and I do not want to waste your time going over things that are in the submission. We thought this was just a good way to give you an idea of the sorts of things we come across. We are going to discuss some problems we experience with our own car parks and then advise on the process we go through to review new car park planning permits and highlight some of the issues with the applications.

Before I start, we are probably slightly different to the City of Melbourne in that the majority of our car parks are council owned and operated. Many of them are smaller pocket-size car parks at the back of strip shopping centres. We tend to get privately operated car parks in the Toorak Road, South Yarra, area; the Jam Factory is another notable one in Chapel Street, just to give you a bit of background. But most of the car parks would be owned and operated by council, and most of them are usually at-grade car parks.

**Mr KOCH** — When you talk about car parks, where do car parks start — three cars, five cars, eight cars, two cars? What is the definition of a public car park?

**Mr McLAUCHLAN** — Good question. The definition of a public car park to my way of thinking would be a car park certainly that is not on the street, so it is accessed off road. It has spaces of any number provided by council for which there is some sort of enforcement of control operated by council. Typically in our area most of our car parks are usually restricted or charged for in some way. We manage those car parks, and we manage them in a way to try to maximise their use to the activity centre concerned. We are able to enforce because the land itself has been brought within the provisions of the Road Safety Act.

**Mr KOCH** — The smallest car park has provision for how many cars?

**Mr McLAUCHLAN** — Probably about 8 to 10, I would say. Moving along, we are going to discuss a couple of car parks, and these are probably our large ones, which is probably the best way to go. The first one is the Cato Street car park, and I am sorry that is not showing up. Cato Street car park is the large 420 space at-grade car park. This is Commercial Road. This is Chapel Street. The Prahran market is just here, just to orient people. North is up the page. It contains about 420-odd spaces, and it is a car park that has a number of issues. It was built in the late 1960s or early 1970s from a separate rate scheme, and it has a shopper access route that is carrying a fair proportion of traffic down here. This is another very busy street going through to Chapel Street, with lights here. This is a one-way system through here and a one-way system through here. It is servicing two supermarkets — a Safeway and a Coles — which has implications in terms of the type of activity that occurs at the northern end of the car park.

**Mr KOCH** — And Dan Murphy's.

**Mr McLAUCHLAN** — Of course; my mistake. The northern third of the car park is operated as free parking with a time limit. The southern portion is operated as unrestricted ticket parking.

If I move to the next slide, that probably gives you an idea of the sort of car park it was until recently. It has a number of problems, both in terms of the long run — there is about a 130-metre run of access aisle, which is not a good idea in car park design. It has a cross aisle. There is an entrance here where sightlines

to the side street are poor, and you have pedestrians mixing it with cars all the way through.

**Mr LEANE** — Do you say the long run is not a good thing because you can pick up speed?

**Mr McLAUCHLAN** — Absolutely. Another aspect of this car park, being near Chapel Street, is that Chapel Street jumps on Friday and Saturday nights, of course, and this has become a congregation point for people to, I suppose, just group — ‘hoon around’, I suppose, for want of a better term. We have been working actively with the police to try to introduce measures to try to control this sort of behaviour. I am not sure if this is the particular issue you are interested in.

**The CHAIR** — I can see the skid marks there.

**Mr KYRKYLIS** — We can also note that vehicle projecting out of the car parking space, and that tends to be an issue as well. That comes up in the design stages further down.

**Mr KOCH** — Is that a bad planning situation where you have not made provision for the length of a motor car? If we look at the fifth one up from the bottom there, we see that that car, irrespective, could not get within the boundaries.

**Mr McLAUCHLAN** — That is the same with the planning scheme. The planning scheme talks about a 4.9-metre vehicle length. I think my Falcon station wagon is about 5.1.

**Mr KOCH** — Yes.

**Mr McLAUCHLAN** — So it is not trying to cater for every vehicle. The design standards are trying to cater for the 85th percentile vehicle or the 99th, or whatever percentile vehicle they are looking at. You would not design a car park space to cater for every vehicle in the potential vehicle fleet. That would eat up too much space for parking. You want a layout as efficient as possible, and the design standards talk about catering for the vehicles most commonly used in the vehicle fleet owned by a private motorist. Having said that, this was built in the late 1960s or early 1970s. Design standards have changed since that time. It would be fair to say that, being a separate rate scheme, typically traders would have been contributing funds to provide parking for the centre, and one of the design imperatives typically at the time would have been to try to maximise the parking available for the centre when the centre has got a critical short supply.

**Mr KOCH** — And it is still happening in 2008?

**Mr McLAUCHLAN** — Yes. This is an example of the sorts of treatments that we were looking at when the police identified safety issues and the council became concerned. This is the sort of layout that was considered by council to try to improve pedestrian safety. In the previous photograph you were looking this way here. Instead of all these aisles coming straight through, it was providing basically a perimeter of aisles with an internal circulation pattern. The blue is pedestrian footpaths through the area and pedestrian crossings direct from the footpath on this side where Safeway is, and also safe crossing points at road humps down the one-way street here. Along the access aisles we were looking at road humps and some raised intersections at certain points mid-block to try to address those safety issues.

The problem from council’s perspective was that it was very wasteful of parking spaces. It chewed up something around 20 per cent of the parking capacity of the car park to introduce that, and that is what you will typically find in car park design. You have a limited amount of space certainly in a private building; it is constantly a balance between trying to get the most out of the space in terms of parking provision and balancing that with the need to design for pedestrian safety, vehicle safety and so on, and that is really the nub of what you are looking at in terms of car park design. So the council ended up saying that because this is a potential site in Chapel Vision for development of either some passive recreation use with car parking or other types of commercial uses, they decided in this instance that they would do the road humps and the raised intersections but not the configuration with the footpaths, because we do not have recorded pedestrian crashes. We hear anecdotal stories about people feeling unsafe within the car park, but we do not have recorded pedestrian crashes because of the low speed environment. We do have vehicle-to-vehicle crashes that are reported to us. Once again they are minor property damage issues; they are not casualty-type crashes. So in that particular case the council opted for what can best be described as an interim solution, trying to address the safety issues that arose.

The lighting has been upgraded in the car park because of the evening issues. We are playing music over a

loudspeaker system in the evening to try to deter people from congregating in the area. It is an interesting exercise to find out what type of music is the most effective.

**The CHAIR** — How do the residents feel about that?

**Mr McLAUCHLAN** — There are some residents, particularly down in Prahran Central down here, who do have some concerns with the level. It is a trick to balance the volume, and I will not comment on what type of music is the most effective, but you can probably guess.

**The CHAIR** — Something classical?

**Mr McLAUCHLAN** — That or country and western.

**Mr LEANE** — That would move me on, country and western. I would get going.

**Mr McLAUCHLAN** — One of the other car parks we wanted to show you was the Prahran market car park. This car park started out as an at-grade car park of about 400 spaces with a one-way flow system, and it got so busy on a Saturday morning you had a guy up in a booth here over a loudspeaker system directing motorists to which aisle to go down to find a parking space. Council replaced this in about 1998 with a 680-space car park. It is operated as a pay facility. It is fully council owned, and there is a management agreement with the car park operator we have in place to operate that.

If I move to the next slide, it will give you an idea. This is an example of where it has been architect designed and it has been checked, and you will still miss things in the design. This is here. Here is a pedestrian footway on the other side. This is at the exit to one of the car parks, and although the motorist can see potentially the pedestrian, there is no clear separation. They would walk down at this point here, so what we have done is provide the walkway through to physically separate pedestrians from vehicles at the point of access.

Another example: this is at the entrance. That is over there. This is at the entrance on the other side. Pedestrians walk through here. This is the lift well. Granted there is not a sight issue here because this is incoming, but this way if someone is running across or something, there is an issue of sightline there. What we have done there is provide a walkway through there and signed it as a pedestrian crossing. Another car park — this is another one of our 360 spaces near the Prahran town hall — is an example of a very highly utilised footpath. This is a direct way through to Chapel Street in the morning. This is only a stone's throw from the Prahran town hall in Chapel Street. You have issues there of limited sightlines.

Typically when you are building to a corner and a right-of-way at the side of sightlines from, say, someone coming out here to pedestrians down here, typically there are openings put in the buildings so that you do get the sightline occurring. Typically there are openings put in the buildings at those sightlines so that you do get the sightline occurring and typically what we have done is provide, again, separate pedestrian entrance and exit, from the vehicle entrance and exit, to the perimeter, so they do not have to go through the vehicle access points, which is a critical feature.

In terms of assessment of applications for private developments, our traffic engineers use their knowledge of having to operate car parks in assessing designs that come before them. Typically most of the designs that come to us for assessment as part of planning applications are not of the magnitude of those car parks that I have shown you.

We apply the planning scheme provisions, which is clause 52.06, and it is helpful that the City of Melbourne has explained the planning scheme, that is good. But where they are silent on design issues and they currently are silent in — we think critical — matters of safety: sightlines at entrances and exits, ramp grades, coming up, that sort of thing; that has been reviewed. There is a report in with the minister, and those issues are being considered as part of the review but that is an issue that we concentrate on fairly heavily.

It would be fair to say that when we are looking at the design of car parks, we do not want to trade off safety, but we may trade off mobility, or in a residential car park with regular users. What we do not like to trade off at all, is the way the car park addresses the street. When people who are unfamiliar with the car park being there, are walking along the street, we would argue that the safety requirements of the various standards should apply.

There is a tendency by the development industry, particularly, you might get an architect that thinks a splay on the corner is going to interfere with the facade design he has for the building, which is a legitimate concern. All of this is a matter of balance. In those cases what we try to look for is, what is the

standard trying to achieve, can we get it another way, and can they come up with another way of doing that?

We would look at, sometimes there would be warning systems in place, if we cannot get the sightline, and that sort of thing. Our first preference would be if it is a new building for physical design to be the remedy to address the safety issue, but we do enter into those sort of debates all the time.

It would be fair to say it is a considerable source of debate between the applicant and the council. The best way to describe that would be: you might get plans submitted, typically the issue of the design of the car park is not a primary concern in the first issue in issuing a planning permit. It is a matter that is seen as a matter of detail designed to be addressed before the permits so that the user can operate the use, and a condition to be complied with, but it is very rarely that it would be a determinative of the planning decision. It does not occupy, in my experience, a lot of time at VCAT and when you are trying to argue issues of design, it is a matter that, in my experience, VCAT would see as something to be resolved between the applicant and the council.

Moving on to some private car parks that have come up before us, this is an example at 670 Chapel Street. There is no particular reason that we have chosen this, there are a number in this category where you get large scale. I should make that point clear. It is not trying to suggest there is anything untoward here, but typically the layer you would get would be a fairly large layer — again, access aisles around a fair number of spaces. I have forgotten the number here, Damir, what would be the number of spaces per level there?

**Mr AGIC** — Around 120 .

**Mr McLAUCHLAN** — About 120, yes, and fairly decent runs. There are no pedestrians going through this car park and it is office and retail?

**Mr AGIC** — Office and retail, and residential, yes.

**Mr McLAUCHLAN** — Yes, so there are potentially customers unfamiliar with the site, wandering through the site, so typically we are looking at how we address pedestrian safety issues. The way it is working there is that pedestrians would be wandering down the access aisles. The risk is greater, the longer the length of the access aisle with no controls, so typically this is the sort of thing that we are looking for here where we are asking for a pedestrian circulation path through the car park as well.

**Mr LEANE** — Would there be signs in there to say ‘Give way to pedestrians’?

**Mr McLAUCHLAN** — We can get onto this when we discuss Chadstone — but yes, typically within this sort of car park, they are looking for line-marked pedestrian crossings, and if it is going to be approved as a pedestrian crossing, you will have all the requisite statutory signage. We would encourage them to put advisory signage in right throughout the car park as part of the exercise, and often it is a condition of the permit.

**Mr AGIC** — We would generally require them to actually apply for VicRoads approval; when you get it VicRoads-approved, they actually require that all signs be implemented.

**Mr McLAUCHLAN** — Moving on to Chadstone, which has been probably the biggest one I have been associated with — —

**Mr LEANE** — Is that at Christmas time?

**Mr McLAUCHLAN** — That was about 2007.

**Mr LEANE** — I can see a few spare car parks there.

**Mr McLAUCHLAN** — This was when the site was under construction, but I think it has upwards of 9000 spaces at the moment.

**Mr AGIC** — It has 9522 spaces.

**Mr LEANE** — Is that enough for Christmas time?

**Mr AGIC** — Just about.

**Mr McLAUCHLAN** — Typically, the car park provision is designed for the 85th percentile design day. We have got patron numbers, we know from door counts, the patron numbers that are coming through on a regular basis. You would not design it for the absolute maximum peak.

**Mr LEANE** — 100 per cent?

**Mr McLAUCHLAN** — But you would design it for the 85th percentile design day and then the other peaks that you are not catering for are probably the absolute maximum of Christmas, the New Year sales, maybe Easter and possibly the financial year sales — that sort of thing.

**The CHAIR** — Purely from a commercial sense, I would imagine that is eating away at their retail space, and clearly they need to accommodate car parking space, but at the same time. The previous submission talked about car stackers.

**Mr McLAUCHLAN** — Car stackers: we do get applications involving car stackers. They tend to be for much smaller car parks where the users are either residents or office tenants, usually regular users familiar with the car stackers. For a customer going shopping, they would not be familiar with it particularly, so you tend to try to employ them in sites where the user is familiar with the site.

The review of 52.06 has got some consideration of that in there, and the provision of car stackers, and there are types of situations where they may be applicable. That has been considered in the review that has gone to the minister.

**Mr TILLEY** — This is the second topic. How long has the review been before the minister?

**Mr McLAUCHLAN** — I think the report was submitted, probably January or February 2008, around that time.

This is another example of showing the car park layout and these are all the extra levels, so as well as at-grade car parking, you have got both above ground and below ground levels; all the issues you have with car park design, you have here.

Another site here, in the design, there is a perimeter road that goes around the site. In our assessment of the design of the layout of the car park, we sought a couple of things. We sought compliance with the planning scheme or the Australian standard — if the planning scheme did not apply. We sought road safety audits being done on the main circulation roads throughout the car park so that there was an independent audit of the design for the council to consider and the applicant to respond to.

We also made it a requirement — a planning permit condition — that any major traffic control item needed the approval of VicRoads. I think the wording we used was ‘Issue of VicRoads, seek a memorandum of consent from VicRoads’, the same as council would have to do on a public road.

I am hoping VicRoads has spoken to you and maybe mentioned the issue of trying to provide approval on private land, because there was an issue there that needed to be resolved between VicRoads and the applicant, but that was eventually resolved the way it was worked through and they did seek VicRoads approval to do that. That is essential when you have got these large private tracts of land, large car parks.

The motorist coming off the street does not see the difference between a residential street to the side coming into a major circulation road within the car park.

A pedestrian crossing in the car park should appear the same as a pedestrian crossing on the road, to have consistency in our transport system. That was the thinking behind it, Rather than having different layouts arising, we wanted to have a consistent approach so that when the motorist is trying to circulate for a parking space, a roundabout would appear the same as it would on the road. The signage would all be exactly the same, approval would be the same. For pedestrian crossings the sightlines would be correct, the signage would be as they would normally expect on the road system, and that sort of thing. That was the standard that we were looking for typically.

**Mr KOCH** — Is it all free car parking at Chadstone?

**Mr McLAUCHLAN** — Yes, it is.

**Mr KOCH** — Is it metered?

**Mr McLAUCHLAN** — No, it is not metered. To be fair what Chadstone sees as their market is typically that there would be a high proportion of people wanting to come and park there. They would see that as one of

their marketing advantages, I suppose, in terms of trying to get people to come into the centre. I will just move on.

**Mr KOCH** — How much of that car parking is multilevel, or is it all just ground-level parking? I am not familiar with Chadstone.

**Mr McLAUCHLAN** — Basically, to be fair the grade layout would probably be as in this picture. These extra bits here would be the ones with different levels on top.

**The CHAIR** — But they are the typical types of car parks where you would probably be most likely to see a lot of frustration build up in people looking for a car park — —

**Mr McLAUCHLAN** — Good point.

**The CHAIR** — Then you get speeding occurring, and the arguments that, ‘That park was mine. I saw it first’ and all of the other associated problems that come along with having such a large car park. There is technology that is available. Did you want to talk on that?

**Mr McLAUCHLAN** — If I could get just answer the question first?

**The CHAIR** — Sure.

**Mr McLAUCHLAN** — As part of the planning application I put forward the council’s view that there needs to be some sort of advisory for motorists entering such a large car park. They have got some type of arrangement like that at Southland, if you go into that smaller deck structure just on the north side of the Nepean Highway. Even if the motorist does not know the number of spaces available, at least if they come to the major entrance of the car park there is some information that gives them the decision about where they should go for the best chance of finding parking.

I do not want to speak for the applicant here, but the applicant presented an alternative point of view about the difficulties in doing that in such an open arrangement because of the number of signs you would need. They tend to adopt a process at the really busy times of having security personnel directing people. From our point of view, I suppose if it was a more compact — —

**The CHAIR** — Multilevel.

**Mr McLAUCHLAN** — If it was not spread out; there were fewer points of access and more multilevel, yes it might be more conducive to doing that sort of arrangement. But certainly it was identified by us as part of the planning process, that if you are a customer coming in, and you want to know where is the best place to go, you might say, ‘I have three ways I can go when I get here. Which way will give me the best chance of getting a parking spot?’. We asked that question, and that was discussed as part of the planning approval.

What we have tried to achieve here in the Chadstone centre is regular pedestrian crossing points in order to formalise the crossing activities and improve safety — typically, a number of signed, formal pedestrian crossings at roundabouts, because the motorist is not required to give way to a pedestrian at a roundabout under the Victorian road rules. Where there was a high pedestrian volume crossing, or you would be likely to get it because of the car park that that pedestrian route is serving, we asked for a crossing and VicRoads approval was sought accordingly.

There is an example there. It is a smaller example. This is an interesting point here. It is on the major circulation road. This is the roundabout, and this pathway here is coming from the residential precinct to the south-east. There was a temporary pedestrian crossing put in as part of the construction, and the residents were arguing about if they wanted to walk to the centre, which naturally you would want them to do rather than drive and take up more parking space.

They said, ‘For our safety because of the volume of traffic using that circulation road, we would argue for a pedestrian crossing’. The council’s assessment was that the volumes were not high enough in pedestrian numbers, but the applicant, I suppose being so familiar with the issues associated with the process, was quite happy to seek VicRoads’ approval to put in a pedestrian crossing at that point. Their attitude was, ‘It is not a big cost item to us. If we can do something to improve safety, we will do it’. That is the sort of approach that we would encourage them to take.

**Mr KOCH** — With something like that you would put in an underpass first as pedestrian crossing there, or you would try to have a clear separation between it from a planning point of view, wouldn't you?

**Mr McLAUCHLAN** — No. I would rather have them crossing at-grade in a safe way where they have priority. I would suggest that what you find with an underpass or an overpass in this sort of environment is that most people still try to cross at-grade. They are not necessarily prepared to go down some stairs. When you are trying to maintain underpasses you have security issues and you have maintenance issues. The most recent one I can point to in our municipality would be the underpass under the railway line at Prahran station on the south side of Greville Street. VicTrack filled that in because of the difficulties of maintaining it, and most people just walk across the railway line at the crossing anyway. It is a difficult issue, but we had not identified it as a major safety point as part of the approval process. The residents expressed a concern about that, and the applicant responded, which was excellent.

**The CHAIR** — We have about 2 minutes more.

**Mr McLAUCHLAN** — Very quickly, these are a couple of smaller examples, which we probably will not go into too much detail about. But typically they are designs where pedestrians can be obstructed by reversing vehicles. I will not go into those then. Here is an example of vehicles coming down a ramp grade, and pedestrians being in the turning path of a vehicle and that sort of thing.

Here is an example where there is a steep ramp which is hard to negotiate particularly when reversing, and there are no lines of sight between vehicles and pedestrians at the entrance and exit points. That is something we try to get the applicant to consider very clearly when we are doing the designs. In terms of improving safety, one of the first things would be the review of the current planning scheme parking provisions. We have a road safety policy which adopts a vision-zero approach for any sort of traffic management works on the road system or any major road construction. We always seek an independent road safety audit of the design. Perhaps one way forward might be to do that for proposals for larger sites. It is not applicable for many sites that we come across, but perhaps for the larger sites where you have high numbers of vehicles and high pedestrian activity. It may be an appropriate way to go. There are expert auditors out there who have VicRoads accreditation to do that sort of work.

**Mr KOCH** — Are there a lot of independent road safety auditors, or there are only a small collective?

**Mr McLAUCHLAN** — Most traffic consultants have people in their firm who are accredited as road safety auditors.

**Mr KOCH** — And do you use various ones, or do you tend to continue to use — —

**Mr McLAUCHLAN** — Yes, we do. We probably use two or three of the consultants. We use whoever is available as long as they are — —

**Mr KOCH** — It goes out to tender, and there is a proper process in there?

**Mr McLAUCHLAN** — Yes.

**The CHAIR** — One last quick question: you suggested that the speed limit in car parks should be 5 kilometres per hour — —

**Mr McLAUCHLAN** — Sorry?

**The CHAIR** — Is there a suggestion by council that there should be a speed limit in car parks?

**Mr McLAUCHLAN** — In our case if speed is an issue, we would rather see the physical design addressing the speed rather than a speed limit. Our experience on the local street system is — certainly with the VicRoads approval process — that the speed limit is probably something in the local street, when you are getting below the urban street limit is something — —

**The CHAIR** — But you must have something that you see — —

**Mr McLAUCHLAN** — Typically somewhere between 10 to 15 kilometres, I would have thought. But I would like to see the physical design encourage that rather than requiring signage that needs to be enforced. I

suppose if you need the signage and you need enforcement, then you would probably argue that the design of the car park is not achieving its job. If you speak to the police, I am sure they would say that it is not a prime area that they would concentrate their enforcement resources on — enforcing speed limits in car parks — when it could be fixed with appropriate design.

**The CHAIR** — Thank you very much for your contribution this morning.

**Mr McLAUCHLAN** — Thank you.

**Witnesses withdrew.**