



**LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL TERRITORY**

**STANDING COMMITTEE ON PLANNING, ENVIRONMENT  
AND TERRITORY AND MUNICIPAL SERVICES**

(Reference: [Vulnerable road users](#))

**Members:**

**MR M GENTLEMAN (Chair)  
MR A COE (Deputy Chair)  
DR C BOURKE  
MR A WALL**

**TRANSCRIPT OF EVIDENCE**

**CANBERRA**

**TUESDAY, 4 MARCH 2014**

**Secretary to the committee:  
Ms M Morrison (Ph: 620 50136)**

**By authority of the Legislative Assembly for the Australian Capital Territory**

Submissions, answers to questions on notice and other documents, including requests for clarification of the transcript of evidence, relevant to this inquiry that have been authorised for publication by the committee may be obtained from the Legislative Assembly website.

**WITNESSES**

**BURTON, Mr ANTHONY, Active Living Coordinator, Heart Foundation (ACT Division) ..... 133**

**CLARKE, Mr NICHOLAS, Chief Executive Officer, ANCAP Australasia Ltd ..... 123**

**KING, Ms GILLIAN, Sustainability Facilitator, Sustainable Jill..... 115**

**STUBBS, Mr TONY, Chief Executive Officer, Heart Foundation (ACT Division) ..... 133**

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*Amended 20 May 2013*

**The committee met at 11 am.**

**KING, Ms GILLIAN**, Sustainability Facilitator, Sustainable Jill

**THE CHAIR:** Good morning everybody, and welcome to this public hearing of the Standing Committee on Planning, Environment and Territory and Municipal Services inquiry into vulnerable road users. On behalf of the committee, I would like to welcome our first witness this morning, Ms Gillian King. I remind you of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement that is before you on the table. Would you please confirm for the record that you understand the privilege implications of that statement?

**Ms King:** I do.

**THE CHAIR:** Thank you. I remind witnesses that the proceedings are being recorded by Hansard for transcription purposes and are being webstreamed and broadcast live. Ms King, the committee has your submission. Would you like to make an opening statement?

**Ms King:** Yes, I would. I am a sustainability facilitator and owner of Sustainable Jill, and a resident of Canberra, which I think helps.

The ACT is a shining light, a beacon, in Australia with its ambitious greenhouse gas emissions reduction targets. About a quarter of ACT's emissions come from the transport sector, and that is because we rely so much on motor vehicles, and particularly private motor vehicles. We have some targets to reduce those emissions, and part of reducing those emissions is around encouraging active transport—walking and cycling in particular. We have targets to increase walking and cycling to 12.5 per cent by 2016 and up to 14 per cent by 2026. But our actual rates for that totalled only 7.5 per cent in 2006—five per cent for people walking to work, and 2.5 per cent for cycling.

How our infrastructure is designed, constructed and maintained can have a huge impact on whether people are actually undertaking active transport—whether that is encouraging people to walk and cycle or other forms of active transport, and therefore whether vulnerable road users are kept relatively safe. My submission was about that. I gave a few examples, particularly focusing on some problem areas.

I do not know whether the problems are at the design stage or the implementation stage, whether it is about communication or whether it is about quality assurance or quality control. The key is that the people who are involved in the design, construction and maintenance of our infrastructure understand the issues from the user's perspective and take care to ensure the best outcome from the user's perspective.

Obviously, it would be best if those people are cyclists and pedestrians frequently—preferably with children, because that really improves the rate at which you are absorbing that information. But even if they are not, there is plenty of experienced

advice that can be obtained by consultation. So rather than just building something, it is about talking to the people who are going to be using it, because they will often be able to point out better ways of doing things or some unintended hazards that might result if things are constructed the way they are.

At least as much, if not more, attention and effort need to be put into the design and construction of infrastructure to help protect vulnerable road users as is put into facilitating movement of motor vehicles. That is my opening statement.

**THE CHAIR:** Thank you very much. Ms King, we had a discussion at the last hearing in regard to infrastructure and road use for all users. I raised the point of the Childers Street area at ANU and the treatments there, and asked that submitter whether they thought that was successful. Can I ask you the same question: is that the sort of design and implementation you would like to see?

**Ms King:** I think that is fairly successful, because it is much more open and because it is not obviously a through-traffic area. I think that helps a lot—and because there are so many pedestrians and it is at the ANU interface. That helps. We see a similar sort of thing in front of the lake, at the bottom of the parliamentary triangle. There are a few “wiggles” there. Experience overseas, and to some extent in Australia, shows that the higher mixing of motor vehicles, pedestrians and cyclists can actually reduce the danger to vulnerable road users, if there is greater mixing. But that is only if the roadway is made to wiggle, so the cars are made to wiggle, and if there is a very low speed limit.

Once the speed of the traffic gets below about 30 kilometres an hour, people in motor vehicles are more aware of what is around them, and they are less intent on getting there fast. So the more obstacles you put in the way of the motor vehicles, the more they are aware of their surroundings, and the better the outcome for the vulnerable road users. The worst situation would be where you have an 80-kilometre-an-hour road, and a pedestrian or a cyclist trying to get across that road or trying to walk along it. We have seen some pretty horrific outcomes around Australia, the most recent being the court case in New South Wales where the truck slammed into two people stopped at the side of the Federal Highway.

**THE CHAIR:** On infrastructure, you mentioned “wiggles” or chicanes. There are other treatments at Childers Street. There are rougher road surfaces, which change the perception in the vehicle as well. Do you have any comment on those?

**Ms King:** Yes, that can be very successful. When we were designing the cycle route around Melbourne university in the 1970s, where cyclists were going to start coming in contact with pedestrians—I do not think it is still there now—the original design was to put in some cobblestones to slow down the cyclists, so that the cyclists would not be crashing into the pedestrians.

It certainly is helpful. It has to be done very carefully, though, so that you are not making it dangerous for the cyclists or very difficult for people with, say, prams, particularly those with small pram wheels which can get caught very easily, and people who are not terribly firm on their feet, through some sort of disability or particularly women with high heels. So it is a balance between making it rough

enough to alert the vehicles that they need to slow down and being smooth enough so that it does not create an extra hazard.

**DR BOURKE:** Do you think there is a significant benefit in having different road surfaces, providing a signal to drivers in these situations?

**Ms King:** Absolutely, and that has been shown all over the place. When you come to the big roundabouts in Tuggeranong or on Gungahlin Drive where it meets the highway, you have those bumps that vehicles have to go over, that alert people. Along the sides of our major highways we have the rumble strips. In Victoria they have added the extra-big ones. If you are falling asleep, if you get past the rumble strip, you hit much bigger ones. Having some sort of sensory device other than just relying on people's eyes certainly helps to wake people up.

**DR BOURKE:** Ms King, you have demonstrated in your submission a lot of problems in trying to retrofit cycle lanes to old roads. Are you looking forward to better planning of roads and cycle networks in, say, the new suburbs in Gungahlin or the developments happening in Molonglo?

**Ms King:** Hopefully. It is obviously much easier if you are designing the infrastructure from the beginning. You can design it so that motor vehicles are kept completely separate from cyclists, who are kept completely separate from pedestrians. You can design that from the beginning because you have got more space, and you are working with a greenfields site. So it is much easier to build something from scratch than it is to dig up what is already there, cut or otherwise modify existing infrastructure.

**DR BOURKE:** But wouldn't there come a point where traffic levels are so low on a particular piece of road that it is not sustainable?

**Ms King:** Yes. I was thinking about the bigger, major roads. At the residential level, the suburban level, you can design that from the beginning. There was an attempt to do that with the East Lake development. With the plans that were released last time, I am not sure where they are at at the moment, because activity comes and goes, but they were certainly proposing much more of these wiggly streets, so that there is still vehicle access for people who need to get vehicles in, but the emphasis is on everybody sharing the space. It is a public space. It is not just reserved for motor vehicles.

**DR BOURKE:** Looking at the design for planning and completion of footpaths, you are thinking that better guidelines would be helpful there. You also talked a little about input from local activists such as yourself. Would you be proposing some formal mechanism for that?

**Ms King:** I think that would help a lot. For example, in Yarralumla, they have just completed a new piece of cycling infrastructure. It is a little better than some other cycling infrastructure, in that the bars that go across the culverts are not quite so much of a pinch point, but they are still there, and they have still put a bollard right in the middle of that. They have put a little strip up the middle, with a little traffic island about this wide, which helps to direct the cyclists' attention to the fact that there is

something there that they need to get around. But that is a raised marking, which creates another hazard.

The way the bollard is constructed, the materials it is made from and its placement actually create an extra hazard. It is only a few metres from a roadway. I presume it is designed to stop cars going along there but it has still created a hazard for cyclists, and that is something that has just been completed very recently. If that had been done in consultation with the cyclists, I am sure the cyclists would have been able to work with the designers to come up with a solution that both prevents motor vehicle access and provides a safe environment for cyclists.

**DR BOURKE:** With these issues—and there are quite a few that you identify in your paper—have you tried to use Canberra Connect’s fix my street to notify the problem and seek a solution?

**Ms King:** Yes.

**DR BOURKE:** What happened?

**Ms King:** The first one was when my eldest child was a baby and I was trying to push her in a pram, which was interesting when you were dealing with no ramps whatsoever. Luckily, my pram had big wheels, but if it was a more modern pram with smaller wheels it would have been an absolute nightmare. That time it took nine years for those ramps to be installed, by which time, of course, I did not need to use a pram. I have subsequently been advised—

**DR BOURKE:** How old is your child?

**Ms King:** That daughter is now 19, so it was about 20 years ago. About 10 years ago, some more knowledgeable people in my area suggested that the way to get more frequent action was to point out what a hazard it was for older people, and that tended to speed things up a bit. You are still not guaranteed a speedy result. The current arrangements in terms of broken footpaths and things like that are much faster. Generally, they will arrive within days or weeks, but it is still haphazard. We have a major broken footpath near us, still not fixed.

When I pointed out the difficulty with the bike path along Captain Cook Crescent and the new bike path that runs along Canberra Avenue, and how you cannot get from one to the other at the intersection at Manuka, I received a phone call fairly quickly—and there were some other issues associated with that as well. The other issues were dealt with fairly swiftly, but with the particular issue concerning the bike path, and concerning the bike path and parking lane on Captain Cook Crescent, I was contacted by a traffic engineer that was contracted to the ACT government, and that all looked like it was moving. We then had an election, and I am not sure what has happened there.

There have been some improvements in how the government deals with immediate hazards. On the design side it has probably improved. It has sped up a little bit but it is still haphazard. It does not seem to be systematic, and you never know what the outcome is until something appears or does not appear.

**DR BOURKE:** You got some initial feedback around your design issue on that cycle path; you were told that something was going to happen but you have not heard anything more?

**Ms King:** There were some recommendations. For Captain Cook Crescent?

**DR BOURKE:** Yes.

**Ms King:** There were some recommendations that would be going forward. With the intersection of Captain Cook Crescent and Canberra Avenue at Manuka Circle, cyclists cannot actually get from one cycle path to the other, even though they are only this far apart, just because of the design of the existing infrastructure. The last time I spoke to someone, that was in the too-hard basket.

**DR BOURKE:** That is what they told you?

**Ms King:** They did not tell me that, but that was the gist of it, because it would require digging up the curbing and the footpath and there would be disruption to the traffic flow. I presume there would be some disruption to the traffic flow. Having said that, it happens in other parts of the city and in other cities.

**THE CHAIR:** Colleagues?

**MR COE:** Ms King, can we just get your thoughts on the safety of on-road bike paths in general, and whether the non-segregated ones that we have across Canberra really are safe at their core. I mean something like the Northbourne Avenue paths, where you have got such a busy street having no separation whatsoever between the cycle path and the three lanes of traffic. Do you think they are a reasonable approach for cyclists?

**Ms King:** Before we had cycle paths, cyclists were just on the road. People who have learnt to ride on a road and who are confident riders can usually cope with that. As the traffic increases, the level of skill you need, and the confidence you need to continue doing that, increases. So the busier it is, the fewer cyclists there are who are willing to put themselves in that situation.

It can be compounded if there is parking alongside the road as well, because, at least in Australia, the way we grow up and learn about getting in and out of cars is that we put our roadside leg out first—open the door and put out our roadside leg. We open it with our roadside hand. In Europe I understand they are taught to open it with their other hand, which automatically makes them at least look a bit. It is not very far—it might only be a metre or two—but that might be the difference between someone hitting them or not. So there is a problem with car doors just opening. A lot of cyclists are hurt or even killed by smashing into car doors, particularly if they are on a commuting run at 60 kilometres an hour, say. I would say that there must be separation from parked cars and cyclists.

The issue with cyclists and moving vehicles arises when the two road travellers are not actually aware of the other side. It applies also to motorcyclists. A person on their



feet, on a scooter, on a bicycle or on a motorcycle is a much smaller thing to see than a car or a truck.

Having said that, there has been some recent evidence to suggest that the more frequently you see whatever it is, be it cars, pedestrians or cyclists, the more aware of it you are. There has just been some recent research released, some psychological study, I think done here in Australia.

So there is that. It is a chicken and egg situation. The more cyclists you have, the more the drivers are aware of them. But the drivers have to be aware of them or separated from them to make it safe for the cyclists, pedestrians and motorcyclists.

If you have not actually ridden in heavy traffic or walked in heavy traffic, it can be pretty hairy, particularly if your skill level is not high or, if you are a pedestrian, you are not fast.

My preferred way would be to have a complete separation. That can be done by raised kerbs. I noticed recently in Melbourne, along Princes Bridge, between the gallery precinct and past Flinders Street Station, they have increased the separation just by putting in a painted traffic island. It is about a foot or 18 inches wide, 30 to 45 centimetres—not very far. That was being respected. That was being respected by everybody, including the taxi drivers; it was just part of the flow. It seemed to be quite successful. I was only there a few days, so I do not know how good it will be in the long term. It does not have to be terribly much.

I live close to Captain Cook Crescent. There it has been a parking lane, a cycle lane, and then just a single continuous line. That is on one side. So we have got a parking lane, a cycling lane and a driving lane on one side. On the other side it is two driving lanes and one parking lane. On the side with the cycle lane, most drivers respect that, but some do not. It is used a lot by school students. When you see children riding, you see that their skill level is a lot lower, they will often ride in the left part of the cycle lane, and they will often ride very close to parked cars. They are not looking because they are not aware of that. But they are clearly wanting to get away from the drivers.

On the other side, where it is only a parking lane, most cyclists tend to ride in the parking lane, but the problem arises when you have to get around a parked car. And it is a hill both ways. Ideally it would be better to separate them. And even though a cyclist is entitled to a whole lane to themselves, you can be harassed out of that. The last time I did that, it was at night. I was deliberately riding in the left-hand lane, on the side of the park lane, so that I would be more visible, because the park lane was under the trees and very much shaded. There was hardly any traffic. What traffic there was was mainly in the right lane, because that is what they tend to use on that part of Captain Cook Crescent. If they came up in the left lane, they went around me, except for one car, which went out of its way to go from the right lane into the left lane very close to me at speed and then apply its horn.

So even for somebody who is fairly competent and who is lit up like a beacon, it can be pretty scary. This harassment or lack of awareness of drivers is why so many cyclists now are riding with cameras on their helmets to record what has happened—(a) to spread the word of near misses or what has happened in an accident and (b) so

that there is some evidence if the worst does come.

**MR COE:** Given the scenario on Captain Cook Crescent—I am talking about the engineering as opposed to the driver behaviour—that sort of conflict and that sort of issue should have been foreseen. What do you make of that? How does it come about? Is it just irresponsible? Is it just giving lip service to the requirement?

**Ms King:** I think on the side where there is the parking lane and the bike lane they have tried to make an effort. On the other side, I do not know. I do not know why there have been two approaches to the two different carriageways. Questions have been asked over the years. I am one of the people who have been asking them. Pedal Power, I am aware, also asked about them. I do not know. I have no idea—just like I have no idea why cycle paths suddenly end.

**MR COE:** All over the city, even recently, there have been re-marked roads. I am sure that there have been roads this year that have been re-marked, that have those paths.

**Ms King:** Yes.

**MR COE:** They just stop.

**Ms King:** They end. If motorists were driving along and the road suddenly ended, what would happen? If it was the other way around, and the footpath and cycle path continued but the road ended, what would happen?

**THE CHAIR:** Thank you, Ms King. Any further questions for our witnesses?

**MR WALL:** I want Ms King to draw a bit more on the example on Captain Cook Crescent where you have got a traffic lane, a cycle lane and then kerb-side parking.

**Ms King:** Yes.

**MR WALL:** You were talking about some of the inherent risks, particularly for cyclists travelling down the cycle lane and being more focused on the traffic risk than the risk posed by the parked cars. Do you think there is an alternative way that they could be arranged or a better way of designing the travel paths to minimise these sorts of risks?

**Ms King:** Yes, it is tricky. I have thought about it a lot. I think it would be easier for cyclists if the cycle path was along the kerb side, then the parking, and then the driving lane. That would have the added benefit that the people who like to consider the cycle and parking lanes as their own private overtaking, turning or merging lanes—that would probably disappear. However, it could also create an extra hazard if there are parked cars there and someone is coming to turn into a driveway. I am just trying to think. I think it would be better on balance, because if there was a parked car in the parking lane, the person driving would have to slow down further because they would have a sharper curve that they have got to turn around.

It would be interesting engineering. It would have to be carefully measured out. At the

moment, the parking lanes do not include car door space. On the kerb side the car door opens onto the verge. On the driver's side, it opens into the cycle path. If it was in the middle, between the cycle path and the driving path, the parking lane would have to be considerably wider to include car door space on both sides.

**THE CHAIR:** Thank you for your time this morning. It has been very interesting.

**Ms King:** Thank you.

**THE CHAIR:** The secretary will send you a copy of the transcript over the next few days so you can check for any transcription errors.

**CLARKE, Mr NICHOLAS**, Chief Executive Officer, ANCAP Australasia Ltd

**THE CHAIR:** I welcome Mr Nicholas Clarke from the Australasian New Car Assessment Program, ANCAP. Thanks for coming in, Mr Clarke. I remind you of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement before you on the table, the pink card. Could you please confirm for the record that you understand the privilege implications of the statement.

**Mr Clarke:** Yes, I do.

**THE CHAIR:** Thank you. Can you state your name and the capacity in which you appear today?

**Mr Clarke:** My name is Nicholas Clarke. I am the Chief Executive Officer of ANCAP Australasia Ltd. ANCAP is a company that does crash testing of new motor vehicles.

**THE CHAIR:** Before we begin questions from the committee, can I say that we do not have a submission from ANCAP. Would you like to make an opening statement?

**Mr Clarke:** Yes, thank you. I mentioned briefly that ANCAP is a crash test organisation. It is a federation of 23 member organisations, which include all of the state governments, the federal government, and all of the motoring clubs—by those, I mean NRMA, RACV, RACQ and so forth. We also have the TAC from Victoria, NRMA Insurance, the New Zealand government and New Zealand AA amongst our membership. We are a not-for-profit, limited by guarantee Australian public company. As such, we operate under the normal corporations law, as any public company does.

Our role is to test new cars and to put them through a range of very difficult and demanding physical tests. We do a number of those tests—front-on tests, side tests, side-pole tests, pedestrian tests, whiplash tests and a whole range of assessments—to form a star rating for the safety of the car. Initially those star ratings were based essentially on the physical tests, but over time, with vehicle structures improving, we are turning to technology to make assessments on which cars are safer.

Before I go on to the technology, I want to mention also that an important part about our physical testing is pedestrian testing. We project various adult and child head and leg forms, upper leg forms and lower leg forms to the front of a vehicle at 40 kilometres an hour to test how pedestrian-friendly the front of a vehicle might be. Over time, we have found that vehicle design has gone a long way to lowering the risk to pedestrians should they be hit by a car. This is all about the design of the bonnet area and removing stiff components from underneath. I am sure you are aware of those sorts of things.

Moving to technology, the future of safety for motorists of any kind will come through technology. For cars, pedestrians, motorcyclists, cyclists and the whole suite—bus drivers, truck drivers—it will all be very much dependent on technology. We are already seeing today increasing levels of technology that will prevent a car

from crashing. There are things like lane keeping with active assist, which will stop the vehicle leaving the main driving lane if you fall asleep: it will steer the car back into the lane. Autonomous emergency braking will stop a car automatically if it sees an obstruction in front and the driver is not aware of that obstruction, or drifts off to sleep or whatever: when you get closer to that obstruction the car will act autonomously and brake the car. At lower speeds it will not hit the obstacle in front; at higher speeds it will mitigate the risk of impact so that you might have a lower speed crash and a survivable crash.

We have got blind-spot monitoring; we have got cross-traffic alerts. We have got any number of things. We have got cameras, radar and lidar that will pick up pedestrians and cyclists and know which ones are active and which ones are more likely to come into the field of view and thus increase the risk. Longer term, we will see much more complex systems that deal with vehicle-to-vehicle communication, so there will be better active communication between the car you might be driving and the cyclist that might be coming up on your left or right, or from any other direction, as well as pedestrians. Vehicle to infrastructure will be important in that sense, too: the traffic lights and other things will be aware of everybody in that vicinity.

Longer term, a lot of the problems that are apparent today with vulnerable road users will be largely solved by technology, but that is not going to happen any time soon. It will probably be another 10 or 20 years before we see considerable penetration of that sort of technology in the market.

That is by way of background on ANCAP. If I can just turn to the subject of this inquiry more fully, I have read through most of the submissions that have come in, and I must say that I am a bit confused. What is the debate that is happening at the moment? It seems to me that there is a very active and somewhat irritated cyclist lobby that is keen on more regulation, more penalties and more awareness and really is almost anti-car and anti-motorist. I do not see that as helpful. On the flipside, we have got motorists that are very much anti-cycling, and that is not helpful in this debate at all.

I do not think the debate should be about driver education, tougher laws and sentences, more penalties and all the rest of it. It should be about risk, and reducing risk to save lives. That is something that is often overlooked in these sorts of debates. At a committee like this, what we want is big picture stuff. I do not think we need to be focusing on the minutiae of what is happening out there on the roads. It is the big picture design; it is the big picture policies.

If you look at it from the vehicle side, the main traffic administration authority in the US federal government is the National Highway Traffic Safety Administration. The former head of that—he has just recently gone—has made public statements for a long time that 90 per cent of car crashes actually involve human error. When we think about human error, we ask who are making the errors, why are they making those errors, and what can we do to fix those errors? The answer is that you probably cannot. No amount of education, marketing or television advertisements will really shift that behaviour. Yes, you need to constantly reinforce that we need to act within a boundary, or a set of rules or principles, but shifting behaviour has proved for decades to be extremely hard across the masses.

If we look at that figure of 90 per cent of accidents involving human error, what do we do about that? We do not do so much on trying to shift behaviour. What we do is encourage increased technology, better infrastructure—better roads, better cars, more appropriate speeds for those better roads and cars, and a whole suite of policy implications.

Every single person on the road today, be they a motorist, a truck driver, a pedestrian, a cyclist or whatever, at some point is a bad driver. We are all bad drivers. How many times have you, on a Saturday morning, got up and headed off down one road thinking that you are going to take the kids to footy but actually heading to work. You do not realise until you have got halfway there, and you think, “I have gone the wrong way.” That happens to a lot of people. Or when you travel from Sydney to Canberra, you get to the outskirts of Canberra, and then you pull up in your drive and think: “Hang on a minute; I was at Watson a minute ago and now I am at home. What has happened there?” Are you concentrating? Was I concentrating in that period? Absolutely not. Was I lucky that nothing came up in that time while I was not really concentrating to increase my risk and involve me in a crash? Absolutely; I was lucky. It is the people who are unlucky at the times when they are not concentrating that end up being road statistics.

If we can accept that these events are going to occur, it becomes easier to understand the policy directions you should take. It is about infrastructure, which is costly. It is about cars, which is less costly. It is about education and a whole lot of other things. Each of them comes at a cost; we need to understand the risk and then develop the policy within those cost constraints, mitigating the risk as far as we can.

That is all I have got to say by way of introduction. I have got many more thoughts, but I have probably taken up enough time. I will let you ask any questions you might want to ask.

**THE CHAIR:** Thank you very much. I go to the point you made about education and changing behaviour. You said that it is very hard. But it has occurred in the past. If we look at seat belts, for example, I can remember a time when we did not have to wear seatbelts. I have a vehicle that does not have seatbelts fitted. I think differently when I drive that vehicle. That did change behaviour. People are wearing seatbelts now.

**Mr Clarke:** Yes. When it is followed by obvious action and obvious enforcement I think then you can get a shift. I am not so sure it is a shift in behaviour so much. When I talk about behaviour, the thread that comes through the submissions is the attitude of the respective individuals, and it is the attitude that is very difficult to change.

You can say, “Well, you have got to drive with your lights on.” We have got cars which now automatically put your lights on, but that has not shifted the person from behind the wheel. From a car perspective, we are trying to engineer the drivers out, because they are the biggest dummy in the car. Remove them from the equation and let the car, let the technology, take over and your risk profile drops spectacularly, because the car does those things at that critical juncture that drivers either cannot or will not be able to respond to, or very few can respond to.

**THE CHAIR:** You mentioned that there is some time before all of that technology will be in-built in most cars. Can you tell us where we are up to now with that technology?

**Mr Clarke:** I think the most important one happening right now is autonomous emergency braking, which can be a mix of radar, lidar and video. It projects forward of the car and sees obstacles in front of the car, including pedestrians, cyclists, cars and other obstructions. It will calculate the speed of your car and then the speed and the distance between you and the next car. As the risk of a collision increases, the car does the calculation, and if there is enough time it will dab on the breaks or shake the steering wheel or somehow alert the driver that you need to take action. If the driver does not take action, it will hit the brakes at maximum force, and of course when you do that, all the new systems take over and give you maximum breaking.

So autonomous emergency braking is coming into cars now. Our sister organisation, Euro NCAP, where we get a lot of our ratings from, has effectively made autonomous emergency braking mandatory in their assessment this year, and that is a big step. So all of the European cars that we get new, essentially from this year, if they have not had it already, will have autonomous emergency braking.

Other technologies are also included, but we have not included those, nor have Euro NCAP in their ratings yet, because it is a bit too early, things like cross-traffic monitoring and vehicle to vehicle and vehicle to infrastructure. Those sorts of things are a few more years away.

But to put some time scale on it, most of the major manufacturers have said they will have pretty well full-autonomous vehicles available for the market in 2020 or the next few years afterwards. That would be the big start of this technology really taking over.

**THE CHAIR:** By “full-autonomous”, you mean that the driver does not have to take any action?

**Mr Clarke:** That is a good question, because nobody has really defined what “full-autonomous” is. What we would really like is a car like the Jetsons had, which just flew around in space and took you wherever you wanted. I think practically, incrementally, year by year we get new technology coming into the cars. So by 2020 the major brands will have an effectively autonomous car, whatever that might mean, but certainly GPS direction to drive you to where you want to go, certainly all of the front, side, rear and so forth collision warnings and ability to stop, certainly communication with other vehicles.

The committee may have heard of platooning, which is something that is coming out of Volvo in Sweden. Platooning on highways is all about a truck that might constantly go back and forward from here to Sydney. The routine of that truck is plugged into a system that anybody going to Sydney can find out about and find out what the routine is. There is a computer on the truck that allows people to follow along behind, and basically you have got a truck connected to cars in a road train, if you like, where the truck actually is leading the way, and the car is still driving, it is still on and going and moving autonomously but it is linked to that truck. So wherever the truck goes, it

follows it like a train. That improves safety, improves fuel economy, improves a whole lot of efficiency of the transport and a whole lot of other things.

They are great technologies, and they are not that far away. But again, you have got to add another decade before it becomes ubiquitous in the market.

**DR BOURKE:** I am a little concerned about the number of times a GPS has told me I was driving through a paddock on the side of the road or other more interesting places, and I was not. I was on the road, thank you very much. There are always limits to the capacity of technology to deliver what we would like.

**Mr Clarke:** Yes, that is probably true today. But if you cast forward another seven, eight, 10 years, those problems will be resolved. I think also the systems will be smart enough to recognise that you are not going the right way and other systems will come into play, like, as I said, vehicle infrastructure. If you are starting to leave the road because the GPS is directing you that way, the vehicle infrastructure or the vehicle will stop you doing that. Yes, there are risks but I think those risks by that time will be fully mitigated.

**DR BOURKE:** And what about opening up car doors in front of cyclists?

**Mr Clarke:** Yes, that is a big issue actually. It was something that I had noted here.

**DR BOURKE:** It is when it happens to you.

**Mr Clarke:** Precisely. Mind you, there are some policy things that I think we need to consider here. I gave a submission and evidence to a Victorian parliamentary inquiry on serious injuries late last year, and I commend the submissions and so forth in that inquiry to this committee, if they wish to have a look at some of those, because this is overlapping some of the issues. And dooring was one of those issues that were raised.

I see that there is a big push to have a metre gap between vehicles and cyclists. I am sort of ambivalent about that. I think that is probably okay. It is done elsewhere in the world. I am not sure of the effect of it. But I think if it applies to cars going past cyclists, why should it not apply to the cyclists going past cars, to mitigate that risk? I am not saying because the motorists have to have it, then the cyclists do; I do not mean it like that. It just means that, if it is common sense or it is seen as a good risk mitigation device to have cars going past by a metre, then it seems to me the flipside of that is that the bicycles should also be going at least a metre from the cars and thus avoid the dooring. But that creates problems.

If you are in a busy street—King Street in Newton is a classic example. What they do there is: the cyclists ride down the middle of the road; they just become part of the traffic, which is fine in that environment, because it is busy and the traffic is only going 10 or 20 kilometres an hour anyway.

But if I can just go back to risk policy, I think when you look at vulnerable road users, every user of the road, not just vulnerable road users, needs to think every time they get out on the road, “Am I going to put myself in a position risk-wise where my action or the action of another will result in a seriously bad consequence for me?” I do not



think there is enough of that consideration, because we all make mistakes. Who does that? Who gets in a car thinking, “Man, I hope I don’t get run over today or have a crash at the corner of this street and that street”? You just do not think about it because it is automatic.

It goes back to my example earlier: on a Saturday morning you end up driving on auto. You might want to go to the shops and you end up driving to work and those sorts of things. This sort of stuff happens all the time, and I think policy has to respond to that. We cannot rely on individuals acting rationally. They will not.

We can have all the great policies and all the great advertising and marketing and all the rest of it, but we still get up in the morning thinking, “Gee, I’ve got to come to this committee today,” and I’m going through my head all the things I want to say, and I was lucky that I did not get run over or lucky that I did not hit the young woman that crossed in front of me against the lights, with her baby in a pram, because I was paying attention. But if I had not been paying attention, I had the green light and there we go.

But I think it is the risk assessment that you need to consider, particularly when you are considering cyclists on roads, where there is a big speed differential. The question was asked by Mr Coe earlier about Northbourne Avenue. I think when it comes to cars and cycles, you have to take into account the speed differential, the energy and mass differential, and it is a no-brainer when it comes to what you have to do risk-wise. You have got to separate the two. You cannot separate those two with paint.

Every time I drive down the highway and I see the green separation lines, I feel frightened for those that think they should be using those lines, because they are fundamentally dangerous, both in terms of the message they send but also in terms of the massive risk they create to riders. You might say, “We are a small jurisdiction; we don’t kill that many people,” but does it matter? We do not have to kill anybody or injure anybody. I think giving cyclists a somewhat false sense of security by painting the road green is just silly.

**MR COE:** On that issue, a question I asked of a witness at a previous hearing was about shared zones. The crux of the scenario was that the reason we are told that shared zones are safer is that there are vulnerable road users there and that forces the dominant road users, cars, to slow down—that simply because there is that forced conflict, therefore, the thinking is that it will force motorists to slow down. But that is, in effect, dependent upon putting vulnerable road users in a vulnerable situation deliberately to therefore create a situation whereby motorists slow down. Is that responsible from a policy point of view? It might be similar to the Northbourne Avenue situation. The more cyclists there are there, perhaps the safer it is. Is putting them in a vulnerable situation a responsible direction for a government to take?

**Mr Clarke:** I do not know that I am in a position to answer a question about responsibility because I think all governments make mistakes from time to time. So I think what is more important is to assess it from a risk point of view. My own view is that cars and vulnerable road users do not tend to mix very well. A good example of that is the trams going through Bourke Street Mall in Melbourne. There is still a risk to pedestrians there and other vulnerable road users. Yes, the tram drivers take care;

they ring their bells. But my 26-year-old son is profoundly deaf; he cannot hear the bell. So he will walk out in front of them, and lots of other vulnerable people will walk out in front of the trams and maybe be pulled back by others.

My preference in those circumstances would be to ban the cars from those areas and just have pedestrians and get cyclists to walk their bikes and so forth, because I think you should keep those bigger vehicles away from pedestrians. Maybe that is not practical.

I think you have got to look at it from a risk perspective and look at it in the context of the thing that I mentioned about 90 per cent of crashes involving human error. It does not have to be at speed; it can be at low speed. The human error could be on the part of the pedestrian or on the part of the cyclist or the mum with the pram that walked against the traffic lights. From a risk perspective, I would keep them all separate. Any motorised or moving form of transport should be separate from pedestrians, and that includes the cyclists as well. They should be walking rather than riding.

**MR WALL:** Mr Clarke, you mentioned that we as a committee should be looking at the bigger picture and things that we can actually control and you mentioned driver attitude and driver behaviour. That is obviously one area where improvement can always be made. Do you think that the road training and the road preparedness that young drivers undertake before getting behind the wheel on their own is sufficient or are there areas of improvement there, alternative approaches that should be considered?

**Mr Clarke:** I think what I said was that you should continue to educate and continue to tell a message, but just do not expect too much, because there are a whole range of factors that go into people's attitudes. The story that the previous speaker told about being abused—you are not going to stop that. That person is predisposed to that attitude and you are not going to stop it.

When it comes to kids' education, I think we do a pretty good job. It is not all about education; it is a lot about attitude, family circumstances and other things, peer group pressure and all the rest of it. I think we do a reasonable job. I think the death figures and injury figures are actually reducing in the 17 to 24-year-old group. I think that is pretty good.

We have graduated licensing systems in most of the jurisdictions. I think they are quite reasonable, but they too have flaws. Again, I do not think it is about the need to educate the kids more. I think one of the submissions says we need to come back every five years and make sure we understand about cyclists. To me, those things are just folly; they are tiny little issues that really do not help the situation. It is not about one particular thing; it is about a combination of all those things.

If I could draw reference to the previous speaker: the issue about Captain Cook Crescent is really insignificant in the context of what this inquiry is about. The issue that someone got a banana thrown at them or a beer can is really inconsequential to this inquiry. They are just isolated anecdotes. The importance here—if I may be so bold—is for government to say, “What are those big ticket items we can do to actually shift the risk profile, lower the risk profile, where people can go out and do their

things?”

Another submission that I read said, “I’ve got a right to ride my bicycle wherever I want.” Absolutely, you have got a right. I would love people to do that. But when you get on your bike, because you are vulnerable, or when you go for a walk or a run, you have to think about the risk. You do not go running at night wearing a black T-shirt—but people do, so maybe they have not thought about the risk. You do not go riding your bike in areas where your risk is high. That would be my judgement. I would not get on a bicycle or a motorbike where the risk was very high.

I think that sort of big picture stuff is much more important than the individual anecdotal incidences. They will always happen. Someone will always run you off the road, the same way as someone will always cut you off and so forth, but I do not think they are critical in terms of the overall picture that the government should be looking at.

**DR BOURKE:** Are you able to quantify that risk?

**Mr Clarke:** There are models to quantify the risk, absolutely. The US National Highway Traffic Safety Administration did the calculations. NHTSA is actually the chief federal regulator and rule maker, as well as the crash-testing organisation. There would be plenty of information on the NHTSA site to demonstrate the background for those sorts of statements.

In terms of quantifying risk for public policy making, there are a thousand models you can use for risk assessment. Every business runs a risk plan, if you like, and uses a standard risk model. The key is just to put in the key elements of that risk model, which are speed differential, mass and energy differential, visibility, obstructions, weather, human error, risk-taking behaviour, infrastructure, road surface: the whole shebang.

Once you put all those elements in, you can draw a big profile of the risk and you can make individual assessments and rate them in relative importance, which then feeds into a position where you say, “The number one priority is to get rid of the cycle lane on Northbourne Avenue and make one whole lane on Northbourne Avenue for cyclists,” or whatever it might be. That guides you to the policy.

**DR BOURKE:** The fact is that people are still going to ride up Northbourne Avenue whether there is a cycleway there or not.

**Mr Clarke:** Exactly, but that is a behavioural thing. You cannot change that. They are going to do that. That is why I say, longer term, the vehicles will be so intelligent and the bicycles will be more intelligent that the risk will be mitigated because it is not just the driver and the cyclist; the devices they are riding on or riding in will communicate by saying, “There’s a cyclist coming up on your left.”

**DR BOURKE:** Coming back to cyclists, we have had a couple of people come in and talk to us about cycle helmets. Do you have any thoughts about that?

**Mr Clarke:** No, not from ANCAP. We do not deal in that. From a personal point of

view, I think helmets are a good idea. Our kids have always used helmets. When I go down the coast and go for a little ride along the foreshore of Tuross beach there it drives me mad that I have to wear a helmet—I will not tell you if I do or not—if I am cruising along on a Saturday afternoon bike ride at five kilometres an hour, but that is a personal view. Officially, I do not have any view on helmets. I think they are a good idea.

**MR COE:** With regard to this risk concept by way of road user behaviour, if you are simply looking to minimise risk, the answer is not to drive. You get to zero risk by not driving.

**Mr Clarke:** That is the illogical end.

**MR COE:** No, that is what risk minimisation is; you get to zero. But that is not acceptable so you have to manage the risk.

**Mr Clarke:** I do not think the premise is right, to be frank. I do not think the aim of risk management is to get to zero.

**MR COE:** I agree; risk management is not that, but risk minimisation is to get to zero.

**Mr Clarke:** No, I do not agree with that.

**MR COE:** Risk management is different.

**Mr Clarke:** No, I do not agree with that premise, I am sorry.

**MR COE:** Well—

**Mr Clarke:** I think it gets in the way of you being able to do your job. Whether we call it risk management, risk assessment or risk mitigation, they are all bound into the one thing, and the end is not zero. That is not right.

**MR COE:** No. I agree with risk management, mitigation et cetera, as distinct from risk minimisation, but risk management means that there is always going to be an acceptable level of risk. We try to lower it as much as possible, but there is going to be an acceptable level. With that in mind, does our society just accept that some people are going to die on roads and that is just the way it is, and you hope it is not going to be you? Or can you see us getting to a point whereby any death on the road is absolutely unacceptable?

**Mr Clarke:** We have started talking about risk mitigation and risk management, and I think the two are so inextricably entwined as to not be distinct. In answer to your question, the second question, most road safety agencies around the world tend towards vision zero, which means exactly what it says. There should be no circumstance where someone should be in a situation on our roads where because of someone's mistake or their own mistake they should die. Is that achievable? I think it is. We had zero fatalities in Canberra two or three years ago.

There are systems we can put in place, particularly in the car spaces I have described,

that will actually get us to that vision zero. There are abundant examples in Europe, particularly in Sweden, and other countries where they have absolutely slaughtered their road toll statistics because of these big overarching programs—separation, better lane definition, safer cars: a whole host of things. There are governments in Europe that pour huge amounts of money into research to improve their systems.

You will have heard—I know I talked about it briefly without naming it—of the safe system approach. I think the government’s own road safety policy covers that. We talk about safe cars, safe drivers and safe vehicles. Some talk about safe speeds as well. It is a whole program and we need to deal with the whole program from a policy context to look right across the spectrum.

What falls out, though, from time to time is that one stream of that program might rise in order of priority. I think that is where we are at today with vehicles. I do not think we should be spending so much time on roads today because we are not building the roads for the cars of tomorrow. We are just building the same roads and painting the same paint and all the rest of it. The cars of tomorrow will read the roads and maybe we do not need the significant infrastructure and the significant cost that we have got today.

To go back to the risk, I think we can have a country where we do not kill anybody on the road. Longer term, I think that would go to serious injury as well. We do not expect to be killed flying in a commercial plane in Australia. I cannot remember the last time there was a large commercial jet crash. It was probably when Mick and I were kids—a long time ago. I think if we can expect trains, trucks, planes, ships and all the rest of it to be fully automated, cars should be as well, and we should not kill anybody or hurt anybody. That would be my answer.

**THE CHAIR:** Thank you, Mr Clarke, for your time this morning. The secretary will send you a copy of the transcript over the next few days so you can check for any transcriptional errors.

**BURTON, Mr ANTHONY**, Active Living Coordinator, Heart Foundation (ACT Division)

**STUBBS, Mr TONY**, Chief Executive Officer, Heart Foundation (ACT Division)

**THE CHAIR:** The committee will now hear from our next witnesses, Mr Anthony Burton and Mr Tony Stubbs, from the Heart Foundation. Welcome, Mr Burton and Mr Stubbs. Before we begin can I remind you of the protections and obligations afforded by parliamentary privilege and draw your attention to the privilege statement that is before you on the table. Could you please confirm for the record that you understand the privilege implications of the statement?

**Mr Stubbs:** I do.

**Mr Burton:** I do.

**THE CHAIR:** Thank you. We have received your submission. Would you like to make an opening statement?

**Mr Stubbs:** Yes, I am very happy to do so. The Heart Foundation thanks the committee for the invitation to appear today. We believe we can make a valuable contribution to this discussion around vulnerable road users.

In the ACT nearly 30 per cent of deaths in 2011 were attributable to cardiovascular disease. Heart disease is the leading cause of death in the ACT. In 2011-12 3.7 million Australians had long-term cardiovascular disease. One Australian dies every 12 minutes as a result of cardiovascular disease. Obviously, it would be remiss of us, as the Heart Foundation, not to mention the issue of cardiovascular disease and the impact on the community, but it has very strong links and correlations around how we design our cities to ensure that we look after vulnerable road users and ensure that we get more physical activity embedded into our city.

Obesity, which is very much linked also, is largely as a result of sedentary behaviour and it is a major risk factor for cardiovascular disease. Excluding the overweight, it has been estimated to cost Australia \$58.2 billion annually.

We may think that the very nature of Canberra, with our open spaces and clean environment, allows us to lead an active lifestyle, thus reducing our risk of things like cardiovascular disease and other chronic conditions. But the reality is that Canberra has been planned around physical inactivity. The latest results from the ABS Australian health survey show that, for Canberrans over the age of 18, 63 per cent are overweight or obese, 59.2 per cent are sedentary or do low levels of exercise, 31.6 per cent have high cholesterol levels, 20.1 per cent have high blood pressure and 18 per cent show prevalence of cardiovascular disease.

Canberra has been planned for the car. It seems that all other forms of transport are seen as faddish pursuits, are perilous and should be mistrusted. All must pay homage to the car and its narrowly defined set of interests.

We have created a sprawling city with poor land use patterns. We have an established

and well-designed road system; however, a continued focus on road building for transport is not sustainable. We need to be planning for how we will move people around our city in the future, with a view to having active transport that supports and protects those people who are most vulnerable.

While we have had the lowest number of road fatalities for 50 years, we are now facing an unprecedented obesity epidemic that already kills thousands of people a year. Our love affair with the car has inadvertently made us one of the most overweight and obese cities in Australia. We have, quite literally, engineered physical activity out of most people's daily routines. Active living through more cycling and walking solves a swathe of problems. Through active living and active transport we can, over time, build activity back into people's daily routines.

The Heart Foundation has been a strong advocate for building active living into everyday lives. That is why in 2009 we, in partnership with the Planning Institute of Australia and the Local Government Association, developed a national guide to promote healthy living, called *Healthy spaces and places*, and subsequently developed the *Active living impact checklist* to plan, design and create sustainable communities that encourage healthy living. In fact, that checklist has now been enacted in the loop out at the Belconnen markets. We acknowledged and recognised the developers out there recently for their work in incorporating 75 per cent of the *Active living impact checklist* into that development. We hope to see more developers take up that opportunity.

We know the environment can have a significant influence on each person's level of physical activity. To this end we applaud the integrated approach of the transport for Canberra policy and believe it will have a strong impact on improving active transport participation rates. Implementing the policy aims of a safe, integrated, active, cost-effective, sustainable and socially inclusive transport system can only lead to positive outcomes for the Canberra community.

But for this approach to be successful, it must be backed with concrete actions that help to protect vulnerable road users, pedestrians and people who ride bikes. Improving the safety of vulnerable road users will lead to increased levels of walking and cycling and will also be a driver for economic growth.

More walking and cycling increases the accessibility of local businesses and provides a diverse and interesting streetscape. The continued prioritisation of through-traffic and the obsession with parking in front of businesses above all other considerations only results in an environment that is debilitating for someone who prefers to walk, browse and also shop in urban environments.

Instead of places to drive through, we want our streets to be destinations—destinations on foot, on bike and destinations for people. The iconic city cycle loop is already making a difference and the transformation of Bunda Street this year into a shared space will make a bustling precinct a safer and more functional space for people.

Walking and cycling infrastructure which incorporates appropriate traffic calming measures will encourage more active transport, particularly local walking and cycling.

This approach to infrastructure is not extravagant; rather, it forms part of an appropriate-scale integrated transport network that focuses on people rather than on cars.

The most important aspect of active travel is developing facilities for people and not for cars. The road is not for those cars passing through; it is for everyday local users. Thus the Heart Foundation advocates for the reduction of speed limits to 30 kilometres an hour in local group and town centres, for schools and also, in time, on residential streets. This safe speed is often conceptualised in terms of vehicle speeds that minimise the risk of injury, but in the light of multiple benefits of active transport, it may be more appropriate to think of it as something which delivers injury prevention outcomes as well as many additional health and social benefits.

The focus needs to be on removing traffic danger from people, not people from the hazardous environments we have inadvertently created. Reducing traffic speed is an effective way of righting this balance.

The formation of capital metro and the development of the city to Gungahlin transit corridor have the potential to be transformative for Canberra. By reducing speed, car use and congestion on one of the busiest transport corridors in Canberra, there is a potential to build in mixed-use developments that increase residential density, increase use of active transport options and improve pedestrian and cycling safety.

By coupling capital metro with this form of development, there will be an improvement in the walkability of all of these particular areas along that corridor. This development is the future of the city, but we need to ensure we work out how people will walk and cycle to and from the environment surrounding the capital metro as it is designed from the beginning. As capital metro is being built and developed we need to look at how people can walk and cycle to actually get to those hubs, to ensure that it is used effectively and that it is something that people want to be a part of.

There is no one-fit solution for everyone's transport needs. We cannot expect every user to accept the same infrastructure. This is, however, an opportunity to discuss how we can make our transport infrastructure fit for people to get around by foot and bicycle, improving our nation's health, the environment and cutting through greenhouse gas emissions as well.

This refocusing of the transport agenda towards active living and active transport will deliver benefits for everyone; not just for people walking and riding bikes. To do it, we will need to transform infrastructure, tackle dangerous junctions and encourage people to use their bodies or their bikes to get around.

There are some specific planning recommendations which are in our submission. Consistent and coherent network planning for active travel—walking, bicycling and access to public transport—with an increased annual budget allocation is essential for better treatment of vulnerable road users. There needs to be a strong commitment to implementation under innovative and flexible new design standard guidelines 13 for walking and cycling. There should be infrastructure projects such as the city cycle loop that can be rolled out in all town centres, community destinations and employment hubs. A review of existing TAMS standards not just for walking and



bicycling infrastructure but also for public realm design, development and works processes should be considered.

The distance between people's homes, workplaces, schools, shops and other facilities is an important factor in the amount of time we spend on the roads and influences mode choice. Through quality urban densification with access to high quality green open space within easy walking and bicycling distance, we can enable more opportunities to live and play close to work, with access to good active travel infrastructure. This will create a more inclusive, safe and healthier environment for all.

Reviews of the territory plan codes and inclusion of the active living design principles in master planning and concept planning precinct codes will help to enable better environments for vulnerable road users. Lastly, I refer to design for all: structure society in such a way that everyone can function in it. Everyone has a right to safe mobility and independent mobility must be no more restricted than is absolutely necessary.

To paraphrase Jan Gehl, cities are changing. Whereas previously cities competed on parking spaces and office spaces, cities should now be more focused on liveability, and be about people. People do not want urban freeways or trucks driving through their streets; they want outdoor cafes and safe and convenient walking and cycling environments.

**THE CHAIR:** Thank you, Mr Stubbs. I will go to your points on *Healthy Spaces & Places* and the guidelines there. Do you have any examples of where those guidelines have been implemented in other jurisdictions and the outcomes of that implementation?

**Mr Stubbs:** With healthy spaces and places, there are 10 principles that are associated with that. The idea is to get those 10 principles incorporated into some of the codes and other developments. It is a work in progress in terms of a lot of states and territories enacting healthy spaces and places. Anthony may have some examples locally.

**Mr Burton:** In terms of those 10 points that Tony was talking about, they are arranged around active transport, aesthetics, connectivity, environments for people, mixed density, mixed land use, parks and open space, safety and surveillance, social inclusion, and supportive infrastructure.

In terms of areas where you can see *Healthy spaces and places* being implemented, I can point to areas in and around inner city Brisbane and works that have been going on around there, in and around the redevelopment of South Bank and things like that. Also it has certainly been picked up in Melbourne and other major capital cities like Perth. Also, in some of the smaller regional cities, aspects of *Healthy spaces and places* are being picked up. In places like Wagga Wagga, they have looked at their streetscapes. They have been working with *Healthy spaces and places*.

**THE CHAIR:** You said on planning opportunities that international research has shown that social inclusion can improve if there is more pedestrian and cycling activity rather than motor vehicle use. Can you give us some examples of where that

has occurred?

**Mr Stubbs:** Again, the research shows—it is intuitive as well—that if there are more people who are walking and cycling and are part of the environment, it reduces crime and it also increases social inclusion through that process. Again, Anthony might have some evidence and research around that.

**Mr Burton:** There have been a number of articles written, particularly in and around Europe, and certainly focusing on Europe—not only in mainland Europe but in the UK as well. There has been some work done by the Department for Transport in the UK which focused on drivers' perceptions of cyclists. In some of that work they have referenced some other material. Some of that certainly revolves around how people interact in their environment and when they are on foot or cycling it is a more human-scale environment, as it has been described. That allows for much more social interaction.

Some other studies recently done here in Australia—one PhD that I am thinking of in particular—indicated that when people get into their motor vehicles, they get into their own little world. They focus on what is on the radio, they prepare themselves for their workday or wind down from their workday. They use that as a bubble, I suppose, to get away from social interaction. So there are two sides to the coin.

**DR BOURKE:** Could you tell me more about the *Making walking count* audit and how transport funding might be allocated?

**Mr Stubbs:** The count was done, I think, two years ago in the ACT and was linked to an international guest speaker who came out. It is actually linked to a number of other international walking audits that have been conducted around the country. It escapes me now who is in the country at the moment going around talking about walking and the infrastructure in this particular environment.

**Mr Burton:** The making walking count was conducted in late 2010. Essentially, what it came down to was that when people were surveyed about it, 43 per cent of those people said they would like to see more funding allocated towards active forms of transport. That could be as simple as putting a sidewalk or a footpath next to their house or close to their house so they feel the streetscape is able to be used.

The other area would be the community paths that we all know and love here in the ACT. This would encourage more people to get out and utilise those not only for recreational purposes but also for commuting and, I guess, more active forms of transport—that is, getting to and from the shops in a safe and pleasant environment.

**DR BOURKE:** How many people were surveyed?

**Mr Burton:** I would have to go back and check that. I am more than happy to do that for you. I do not have those figures on me at the moment.

**DR BOURKE:** Sure. You talked about the transport for Canberra strategy, bearing in mind this desire from a significant number of people for more active travel. You are saying that these things can actually be quite simple?

**Mr Burton:** Relatively, certainly. It is about providing an environment that people want to use. It can be as simple as providing appropriate lighting and making a journey an interesting place. There are no silver bullets and there is no one single solution. It is about providing an active mixed-use environment which has appropriate facilities. By “mixed-use”, I mean places where people can walk, stop at a cafe and do some shopping. It is not a single-use suburban street, for example.

**DR BOURKE:** It is people identifying what would be more likely to make them want to actively travel. Is there much international experience to indicate that, once those desires have been met, people do more actively travel?

**Mr Burton:** Yes, there are quite a few. I will not use the poster child of Portland—it is certainly one—but I will use the poster child of Boston and Vancouver, both of which have been very active in reinventing their cities, Vancouver in particular. In the mid-80s, there was some large pressure to build enormous freeways through the centre of Vancouver to get cars through the centre of Vancouver. There were massive protests and changes as a result of that.

Despite some buildings being knocked down for the freeway to go through, the freeway was never built. Instead the space was changed. It is called Robson Street in central Vancouver. The space was changed and made into an active, vibrant location. You will see there that the vast majority of people (a) catch public transport, (b) walk, or (c) cycle to that area. There are still cars that drive through there, but the vast majority of people who utilise that space are now doing so in a much more active way. They are doing so because those freeways are not there and because the pre-eminence of the car was taken away.

**DR BOURKE:** That is at a fairly high level broadbrush view of what people want, that has been delivered and then they have used it. We have also talked a little bit today about getting into the minutia in Canberra around the fix my street element of Canberra Connect. You have said that people in the *Making walking count* audit were starting to identify things that might make them more interested in walking. Just coming back to that sort of micro level, is there anything out there that can give us some evidence to say that if we give people what they want, they will actually use it?

**Mr Burton:** If I could take that on notice and provide some detailed feedback that would be fantastic. I would be more than happy to do that for the committee at a Canberra-based level.

**DR BOURKE:** Not necessarily Canberra based—anywhere internationally—but where that very local, very specific, very fine granular kind of change is asked for and is delivered, does it make a change to behaviour?

**Mr Burton:** Does it make a difference to behaviour? It is very hard to say that it is going to make a big difference for a specific street which does not have a footpath and then a footpath is built because we do not often go back and survey after that. They often do surveys where there are large pieces of infrastructure put in, so there would be more information about things like that. As to that finer grain, at-the-street level, it would be reasonably rare, I think, that there would be much work done post putting it

in. But I can certainly look for some detailed information, if that would help the committee.

**THE CHAIR:** We do find out when constituents write to us and tell us the footpath is cracked.

**Mr Stubbs:** Just to add a comment to that: as you are probably aware, the healthy weight action plan was launched last year. That is a very comprehensive approach to looking at how we address the issue of obesity, and increased physical activity is part of that. There is an urban design element to it. It is creating the environment that obviously we are looking to get which makes it an easier choice for people to become more physically active and incorporate it into their daily lives.

I think the other component which we have been pushing for as well is the social marketing campaign or behaviour change campaign around that. In this instance, if you build it, people will not necessarily come unless they are provided with the benefits and the information around why you are making those changes.

On a smaller level, from my understanding—and we will provide you some more detail on a more suburban level—if you are creating an environment where it is easier to walk down to the local shops or public transport then there is an increase in people’s physical activity levels. They want to be engaged with the community and there is that social inclusion. We can provide some more detail around some of that evidence, if you like.

**Mr Burton:** I have here two studies which indicate that. One is from the *Journal of Epidemiology and Community Health* by Morrison, Thomson and Petticrew on the “Evaluation of the health effects of a neighbourhood traffic calming scheme” The other is by Ogilvie, Egan, Hamilton and Petticrew: “Promoting walking and cycling as an alternative to using cars: systematic review”. That is from the *British Medical Journal* in 2004. So there are two peer-reviewed articles that could certainly provide some information.

**DR BOURKE:** Thank you.

**MR COE:** I have a question following on from your opening statement, Mr Stubbs, about capital metro and the ability for public transport to create communities along the way. I was wondering whether the Heart Foundation has done any work or is aware of any work on whether road level public transport ever gets the density that you require or whether it needs to be elevated or subterranean so that you get the fewer stops but higher speeds and therefore you get more people on it and then you can get the transit-oriented development that is more likely. An example would be St Kilda Road in Melbourne. It has reasonable density all the way along but there are not too many places along the road that you would say are real precincts. Part of that, as it has been described to me, is because the trams go relatively slowly along there and, therefore, they still do not attract a huge deal of patronage, whereas when you have elevated or subterranean and you get high speeds and travel quickly, the stops become real precincts. Have you done any work in this space as to what precincts are going to be created with capital metro?

**Mr Stubbs:** I will get Anthony to answer from a technical point of view, but in terms of a broader Heart Foundation approach, clearly we need to plan for our future. Obviously that is a very busy hub, Northbourne, and we are obviously building a bigger town centre out at Gungahlin. So how do we ensure in the future that we have flow both ways in terms of work and other things? I think the critical thing is it is not actually building the infrastructure per se in terms of the actual physical track above or underground. It is really about—and we encourage capital metro to take this on board—how we ensure that people within close proximity of that corridor are able to walk and cycle or have easy access to stations along that particular area.

Part of the answer, I guess, is to ensure that in the planning and design we have easy access and identify those spaces so it is the easiest choice for people and they can then walk out onto the transport. If we make it difficult for people to access those stops, if they have not got a mechanism for a park and ride, if they cannot cycle or they are not within walking distance, within a few kilometres of that, then it will not be as utilised as it potentially could be. So, in terms of the development and master planning, we need to really seriously consider those implications.

**Mr Burton:** In terms of should it be a subway or an elevated rail or an on-ground network, you can actually have your cake and eat it too with an on-ground network. I can use the example of Portland in Oregon. I have utilised that network quite extensively. In areas of higher density you can have more frequent stops where patronage desires it. Those trains, or trams or light rail network can actually travel at quite fast speeds between different nodes and the trams can use the same network. For example, the light rail network in Portland runs to the airport. The airport is quite some distance away from the centre of the city, but you can get on your light rail piece of infrastructure in the centre of the city and within 35 minutes you can get to the airport via a relatively fast transport network.

I am not sure if I have answered your question, but you can certainly utilise an on-ground transportation system. It does not need to be elevated. It does not need to be subterranean either. That being said, capital metro, I think, will need to form part of an integrated transport network. It will not be the solution to get everybody there, but it will form part of an integrated network. It will need to link in with the existing bus network but, as Tony was saying, most importantly, it will need to be able to integrate with the existing walking and cycling infrastructure, and new walking and cycling infrastructure as well.

**MR COE:** Are we achieving that at present with the buses down Northbourne?

**Mr Burton:** Are we achieving that? I think one of the issues with buses down Northbourne Avenue at the moment is that they are part of the traffic; they are not separated from the traffic. So we are not getting the potential speeds and movement down Northbourne Avenue that we could with a separated transport corridor.

**MR COE:** But in terms of the linkages to the thoroughfare—the pedestrian and cycling and car and park infrastructure, for instance—are we achieving that at present?

**Mr Burton:** I think there is work that could be done on that, certainly. At the moment

along Northbourne Avenue there are very large blocks. There are several walking laneways down there, but they are not necessarily well lit. They are not going to or from a destination. They are going to Northbourne Avenue, but they are supplying suburban streets. Those long distances between roads, for example, make for a difficult pedestrian journey. There are several papers that have been written on that. A finer grain of pedestrian network is required than what we have at the moment.

**MR WALL:** Obviously the Heart Foundation's main focus behind the submission is to see more active lifestyles. Often the infrastructure or lack of infrastructure is cited as a reason why people do not seek active modes of transport. How much of it do you think is an excuse—"We'll blame the infrastructure; it's not reflective of me"—and how much of it is more lifestyle driven, both work-life balance in the territory, and also climatic?

**Mr Stubbs:** We asked ourselves the same question. In fact, that was one of the things we wanted to answer first up. We actually developed a document around walking and the built environment and looked at that very question and the impact that that has. There is some evidence, and we can provide that position statement for you. There is good evidence, basically, that the infrastructure and the design of a particular environment impacts on people's motivation and also their ability to be able to walk and cycle within that. There is some evidence, and Anthony might add a bit more. We can provide that paper to you, if you would like to have a look at that, because it is an important question.

**Mr Burton:** We have a pretty mild climate here in the ACT, in reality. Compare it to some of those amazing cities where active transport is a big part of their lives. You look at many cities in Europe, northern Europe in particular. There is a saying which I like to use often: there is no bad weather; there is only bad clothing. Climate plays a role, but we can certainly get around that. In terms of walking and the built environment, as Tony said, this position statement that we have here was written by a range of experts in the field. We are more than happy to provide that to the committee for their reference as well.

**THE CHAIR:** Thank you very much for your time today. A copy of the transcript will be available on the committee's web page in a few days time. We will send you a copy also to check for any typographical or other transcriptional errors. This concludes the committee's proceedings for today.

**The committee adjourned at 12.36 pm.**