C O R R E C T E D V E R S I O N

STANDING COMMITTEE ON ENVIRONMENT AND PLANNING

REFERENCES COMMITTEE

Inquiry into environmental design and public health

Melbourne — 23 August 2011

Members

Mr A. Elsbury	Mrs I. Peulich
Mrs J. Kronberg	Mr J. Scheffer
Mr C. Ondarchie	Mr B. Tee
Mr S. Pennicuik	Ms G. Tierney

Substituted members

Chair: Ms G. Tierney
Deputy Chair: Mrs I. Peulich

Staff

Secretary: Mr K. Delaney

Witnesses

Dr E. Kayak, Victorian chair, Doctors for the Environment; and

Dr M. Carey, senior research fellow, Monash Sustainability Institute, Monash University.

The CHAIR — Firstly, welcome to this committee's inquiry. Thank you for your submission, and thank you in advance for your presentation this afternoon. I need to go through some quick formalities with you. You need to know that you are covered by parliamentary privilege during the course of giving evidence; however, if you say things outside of this hearing, you are not covered by parliamentary privilege. You will also receive proof versions of the transcript in the next week or so, and if there are issues, could you please contact us to resolve them.

We have about 5 to 10 minutes allocated for a presentation, and then we would like to ask you some questions, drill down and get some of the issues onto the record. Speaking of Hansard, what we need you to do now before you start your presentation is to state your names, addresses and the organisations that you represent.

Dr CAREY — My name is Dr Marion Carey. I am a public health physician. I am a senior research fellow at the Monash Sustainability Institute, but I am here representing Doctors for the Environment Australia, and I will allow my colleague Eugenie Kayak to introduce herself and DEA.

Dr KAYAK — I am Eugenie Kayak. I am an anaesthetist, and I am also the Victorian chair of Doctors for the Environment Australia, and I also represent Victoria on its national management committee. For address purposes, for a copy of the transcript, we do have a temporary Victorian post office address, which is P. O. Box 2557, Kew 3101. Do you want our South Australian address, which is a more permanent address as well?

The CHAIR — Yes.

Dr KAYAK — That is 5 Fitzgerald Road, Pasadena, South Australia 5042, which is where our administrative officer works from.

The CHAIR — Thank you.

Dr KAYAK — Dr Carey is going to present on our behalf today, but before she begins I would like to say a few words about Doctors for the Environment Australia and explain who we are. We are a national advocacy organisation. All our members are medical professionals or medical students. We aim to utilise our professional skills and knowledge to educate policy-makers, industry, colleagues and the public about the dependence of health and humanity, on a healthy environment.

Human health and in fact humanity is absolutely dependent on healthy, natural and stable environments and built environments, and by ensuring health is a primary consideration in the design of our built environments, there are many gains to be made. There is a great potential to influence in profoundly positive ways the state of our health, how we can manage to maintain a high standard of health care, and also the continuous state of a healthy environment. Dr Carey is going to present for us. Thank you, Marion.

Overheads shown.

Dr CAREY — Thank you for allowing us to talk to you today. As Eugenie says, DEA believes that a healthy, natural and well-designed built environment is integral to the prevention of disease and the promotion of good health and wellbeing. We believe there is a very large body of evidence to support this. There is also a large range of excellent guidelines that implement some of those areas of information, such as the Healthy Spaces and Places national guidelines, and amongst those guidelines there are a number of key design components that appear to be very important, including active transport connectivity, mixed density and mixed land use, parks and open space, safety, and social inclusion. We believe that poor urban design and transport can result in lower levels of physical activity, unhealthy food choices, overreliance on cars, loss of contact with nature, social isolation, noise and air pollution.

I am glad some of you are smiling at the picture, which is actually not mine, but it is not that extreme when you think about our lives where we tend to get into cars, drive to work, sit in an office all day, get back into our cars, drive home and think, 'Gosh, I have got to do my 30 minutes of exercise. I will get in the car. I will drive to the gym and then I will drive home again'. This is one of the problems with the way our lifestyles and our cities are currently structured. So all of these factors produce what we call obesogenic environments, and our argument would be that we cannot afford not to put health at the very centre of environmental design.

Why is this? We are in the middle of an epidemic of obesity and chronic disease in Australia and other developing countries. Almost two out of three adults and one in four children are now overweight or obese, and just directing individual lifestyle information to people does not work. It is too difficult the way our lives are structured, so unhealthy eating and low levels of physical activity are related to a whole range of chronic disease. Obesity relates to ischaemic heart disease, stroke, gall bladder disease, high blood pressure, high blood cholesterol, osteoarthritis, and the list goes on. In terms of Victoria's burden of disease, which is put out by the health department, cardiovascular disease accounts for 18 per cent of that, and the cost of physical activity Australia-wide is estimated to be about $1.5 billion.

A recent visiting professor, who some of you may have heard talk, Professor Ellen Dunham-Jones came out from Atlanta recently, and she actually said that urban sprawl is related to body sprawl, and I think that is quite a good way of putting it. There is a paper from the United States that shows that for every hour that we spend sitting in the car, we have about a 6 per cent likelihood of an increase in obesity, whereas conversely for every kilometre we walk each day, our risk of obesity is reduced by approximately that much. Also in terms of our health, clean air is very important, so transport and land use contribute to air pollution, air pollution contributes to premature death and chronic disease — we know that air pollution causes inflammation of the lungs, it can trigger asthma attacks, it can affect the electrical conductivity of the heart, and there is new evidence now emerging out of the United States that air pollution not only can trigger asthma but may be involved in the generation or the aetiology of asthma, which is very significant, because if you think about it, 1 in 10 people in Australia suffers from asthma. The CSIRO actually worked out that it is the tail end of the car that may be even more dangerous than the front end, because air pollution is related to more deaths in Australia annually than the road toll.

We need to also think about the challenges under climate change, so that predictions are that there will be increasing problems from urban smog and heat-related illness and death. This is because of the urban heat island which is generated over cities, and we only have to think back to what happened in January 2009 with the heatwave in Melbourne. A report was produced by the chief health officer looking at that particular week where there were three consecutive days over 43 degrees Celsius, and that is not even taking into account the day of Black Saturday, and what happened there had a huge impact on health services, so there was a 25 per cent increase in emergency ambulance call-outs in Melbourne; there was a 12 per cent increase in hospital presentations, and the death rate for that week compared to previous periods of time for the same week was a 62 per cent increase and the predictions are we are going to have to keep dealing with these sorts of events. Keeping water in our cities, recycling it, using it to cool and green our cities is very important in design. We do not have time to go into this diagram, but it attempts to show a bit of the connection between greenhouse gases and the pollutants that affect health, how urban design and transport impact upon motor vehicle use, which impacts on air pollution and then physical inactivity impacting on chronic disease.

What do we do about this? We have to make healthy choices easier. We have to embed physical activity in things we do every day. So if we are walking to the train, we get our exercise that way, or if we are walking to work and so forth. I think the concept is to actually not get rid of the car but to tame it and to re-establish the balance between the car and the human being basically. Of course in that we have to get other sectors to take responsibility for health, not just the health sector. Natural capital and social capital are very important to design of cities and of course low-carbon ways of living can be healthy ways of living because we know that mitigation activities for climate change have benefits for health around active transport and so on, better design of buildings and renewable energy reducing the risk of air pollution.

Let us not forget mental health, which is very important; it contributes to 14 per cent of Victoria's burden of disease. We know that contact with nature — and it does not have to be a wild national park, although that would be great — but even small urban parks have an effect on people's mental health. Contact with nature helps people to recover from stress, helps to improve concentration, reduces anxiety and depression, and even open space itself gives people the opportunity to have social connections and also to engage in physical activity, and we know that physical activity reduces the risk of mental illness as well.

To conclude now, well-designed, well-connected, people-friendly cities are what we would like to see leading to improved physical and mental health, reductions in chronic disease and a synergy with lower carbon ways of living. This means they have to be more walkable, bike-able, have better public transport, less traffic congestion, noise and pollution and greater opportunities for public space and social interaction. Thank you.

Mr SCHEFFER — Thank you very much for that. A number of our witnesses have talked about climate change, and I know that the vigorous public debate around climate change is not necessarily about the existence of climate change but about how it is addressed, so I just want to leave that to one side. When you talk about the issue of climate change being better for health, and you touched on some of the things there, do you mean directly or do you mean a community where there is greater conservation of energy or a less polluting atmosphere? Could you just specify a bit more precisely what you mean by that?

Dr CAREY — Yes. There is quite a lot of literature now around what is called the health co-benefits of acting to reduce climate change. For instance, we know that encouraging people to use their cars less means that there are lower greenhouse gas emissions as a result of that activity, but by encouraging people to use cars less, as long as we are getting them to pick up on active transport, that also has a benefit for health. So there are four main areas in which there can be benefits for acting to reduce the risk of climate change, which is also a benefit for health. The main one is active transport, but there are also benefits, for instance, in terms of food choices. We know that there is a proportion of greenhouse gases that come from agriculture and animal products, so if we are reducing some of those inputs, that is acting towards climate change. But also the sorts of dietary information we give to people for their health is consistent with that, because we are telling people, 'Reduce the animal products, reduce the fat in your diet and have a much healthier diet with more vegetable matter'.

So there are consistent messages between the climate change mitigation message and the message for people's health as well as the fact that designing healthy buildings is important and that there can be synergies between, say, energy efficiency with using natural lighting, natural ventilation, not using air conditioning and not using toxic products and substances that help in terms of emission and in terms of health.

The last main area would be greater use of renewable energy rather than fossil fuel combustion, which reduces the use of those sorts of pollutants that end up in the atmosphere and damage people's health through their heart and lungs. So that is an overview of how there can be this synergy between acting on climate change and acting to improve health.

Mr SCHEFFER — So you talk about a synergy and an interrelation of factors that come under an umbrella of climate change — —

Dr CAREY — Yes, it is often called a win-win situation. They are not in conflict. You have a win for health when you are acting for the environment and vice versa.

Dr KAYAK — One phrase that is often used is what is good for climate is good for health, generally speaking, and that has been used internationally.

Ms PENNICUIK — I have a philosophical question. In your submission and in many of the submissions we have received there is a lot of talk about the need to get all departments of government together — a whole-of-government approach to health — and put health in the planning scheme et cetera, which we have all taken as pretty well given. You are obviously medical practitioners, so you have a lot to do with the health department. It seems to me that the health departments around Australia and at the commonwealth level are probably better called illness departments because they deal with people being ill rather than people being healthy. How do you get some change in the health departments towards the things we are talking about — a prevention focus rather than dealing with illness, which is where it seems all the dollars go and the focus is?

Dr KAYAK — What you say is quite true, and there is no doubt that, generally speaking, prevention is better and more cost effective than cure. A lot of the implementations necessary for a safe environment and climate and safe, good quality air, are also preventive measures. So how do you do that? I guess we need to fund prevention rather than just cure, and I think there has been some federal funding in the last year going towards that. But we probably need to make it far more of a priority. We need to realise that there are actually going to be significant cost savings in putting money into prevention rather than cure. I think we need to educate the public on that too so that they give you a mandate to be able to do that. Marion, being in a public health position, will probably have more to say on that as well.

Dr CAREY — Yes, I think I accept what you are saying, but I do think there is hope on the horizon. I do think things are changing slowly, and I think the national Preventative Health Taskforce and the Australian National Preventive Health Agency is a step in the right direction. I think that is because governments are perhaps coming to the realisation that we actually cannot afford to do it (status quo) anyway. It is not working,

and it is not cost-effective. I think even though they are the minority — yes, a tiny minority — there are quite strong public health streams within health departments that often struggle with resources. They are often asked to do more and more with less and less but no doubt still have enormous capacity to do work in the prevention space.

Ms PENNICUIK — So in terms of our recommendations to the government should we be recommending that health departments take on more of this as well? Should they be taking on even more than they are?

Dr KAYAK — I think definitely. I think health departments, and what is more — as has been written in the submission — all departments need to consider health and the decisions they make, because so many of these risk factors are outside of the health sector, so the health sector almost does not have a choice in a way then to attempt to treat the effects. The actual risk factors are so dependent on how our cities are planned, how our public transport is planned and our lifestyle and infrastructure choices. So all departments need to think or consider health in the decisions they make.

Dr CAREY — I think often responses are crisis driven. Something like air pollution, for instance, is not a crisis, so it is always going to drop to the bottom of the list. So someone needs to make it a priority, and sometimes those priorities have to filter down from on high. I think also there can be difficulties where there is a split responsibility between departments. Obviously the EPA has some responsibility for air pollution. How much responsibility does the health department actually have? I think there is a lack of clarity there upon which governments could help improve.

Mr TEE — I have just a couple of areas that I wanted to pick up on. The first one is that your submission talks about the Healthy Urban Development Checklist, which is the New South Wales government checklist. I was thinking about how we would apply that here. Is that the sort of thing that the government could ask the Growth Areas Authority to use when they work with councils to design new communities — or indeed the urban renewal authority in terms of designing inner urban communities? Is that one of the ways it can be used? In addition, if developers are building communities, can it be operated as a sort of a checklist so the public buying into a new development can identify where they sit in terms of those physical activities on housing, transport and those sorts of things? I just want to get a sense as to whether that is how it is designed and how it works or whether it can be modified to work in that way in Victoria.

Dr CAREY — I am aware of that particular resource. I have not had extensive involvement with it, so I am just going off a general knowledge of it. But I think the issue is between a formal health impact assessment, andsomething that maybe is a little bit less formal and more practical. I think that is potentially what that document is trying to do in that space. So ideally we would have health impact assessments for everything, but that is not necessarily going to happen. So the next best thing is to recognise that health is just a key component within that, and that, I think, gives a framework around what to think of within those sorts of constraints. It does not have to be exactly that document, but I think that document demonstrates what could be done. Victoria could develop its own. As I was saying, there are a variety of these sorts of documents around, and you could probably pick the best from all of those.

Mr TEE — Yes. I was not suggesting you should not necessarily have more mandatory elements. I thought to complement that or to fill in the gaps it seemed like a good way forward to me.

Dr CAREY — I think it works both ways. It is a way for people who are perhaps not familiar with health issues, like developers, to have some sort of logical framework to go through that also works the other way for health personnel to look at planning and development applications to see whether they are adequately addressing areas of health promotion and preventive health.

Mr TEE — For the consumer it might be a 4 or 5-star rating. In the same way that we rate the energy use of our fridge you might be able to rate the health impact of a community in which you are looking to buy.

Dr CAREY — That is certainly an option, I would think.

Mr TEE — I want to ask about the other issue in your submission where you talked about municipal public health plans. I think we have had a fair bit of evidence about the fact that whereas all the councils do them there is not much of an evaluation in terms of whether they are being delivered, nor is there any cross-learning, as it were, so that the fact that one council might have the benchmark is not necessarily known or recognised by

other councils. I am wondering whether government should be looking at those sorts of areas in terms of benchmarking the best and evaluating them to make sure they are being implemented so we can learn from them. You picked up on that. Are they the kinds of things we should get government to look at?

Dr CAREY — Yes, I think we put that in our submission because, again, it had come to our attention from other sources that there were some problems in that area; it is not something we have a lot of expertise in ourselves. But I think anything that the government can do to say, 'Let's go to the next step. Let's just not stop at the planning stage; we have to take this further', would be a really important step to take.

Mrs PEULICH — Being a bit of an individualist, what I am going to tease out is the fact that health professionals operate on whole-of-population indicators, and obviously they are very important, because that is what we are dealing with. What I am interested in are also the exceptions, not the averages but the ends of the bell curve. My interest is in your comments about how we can help those who perhaps do not have the means and the opportunity to enjoy higher levels of health and wellbeing because they are time poor, particularly working mothers, those who travel long distances, the less affluent and perhaps people from multicultural communities in particular with regard to their knowledge about food preparation and all of that. Many of them have lived in refugee camps, and many in my electorate struggle with knowing how to purchase food, let alone prepare it and then impart those things to their families.

How can we help those who are perhaps not in the main part of the bell curve for whom perhaps those health indicators are less positive? Do you have any particular ideas? Are there any particular programs or initiatives you could point to? If you are living on a public transport route, all that you and previous submitters have said about walking is good, but if you don't, you have got few options. If it is a 6-kilometre walk to the nearest railway station, it is going to be an issue if you start work at 5 o'clock in the morning and you have got to pick up the kids on the way back, so you have fewer options as well. Do you have any ideas about how we can help those who might be captured by the two ends of the bell curve?

Dr CAREY — I think you are absolutely right there. There is certainly a very strong relationship between social disadvantage and health indicators, as you would be aware. What poor urban planning can often do is exacerbate that. We tend to find people with lower incomes and greater disadvantages going to the fringes of our cities and spending a lot of time and a lot of money on transport. Interestingly, the American architect I mentioned earlier who came out here was saying that in America what they are finding now is that people will travel out to find housing that they can afford, but they do not do the sums and realise that over a lifetime the amount they spend on transport cancels out the savings.

Mrs PEULICH — But they are not thinking about their lifetime; they are thinking about next month's bills.

Dr CAREY — Yes, so I guess one of the functions of government is to try to address some of those imbalances. As you say, a lot of people do not have the luxury of being able to walk or cycle or whatever, but if we designed our cities so that perhaps there was less urban sprawl and there was much better public transport and if we had those people being able to access high-quality, fast public transport — —

Mrs PEULICH — With all due respect, I went back to work when my son was six weeks old. There was no way in high heaven that I would have been taking public transport, managing full-time work and raising a baby in child care.

Dr KAYAK — I put it to you a different way. It is almost impossible to properly maintain healthy lifestyles and low-carbon lifestyles in poorly designed environments, so we need to start at the design stage. Once we have already had poorly designed environments, then it so much harder to bring it back in.

Mrs PEULICH — I accept what you say in terms of it not helping to have badly designed environments, but there are obviously going to be people who are very time poor.

Dr KAYAK — They have no option.

Mrs PEULICH — I am particularly interested in seeing what we can do to even make the recommendations of this reference relevant, rather than just talking about whole of population.

Dr CAREY — For instance, if you use your example of a mother of young children, if that mother did not have to travel a long way, if you could devolve employment, for instance, to an area that they could participate in; if they had social supports, employment, health care, child care and those sorts of things within their local communities, these sorts of things which are part of planning would be of great benefit to those sorts of people. It is not easy, but there are ways of working through some of those issues. If you start by recognising those disadvantages and then look at the specific needs of those people and how they might be addressed, there are ways of doing that to improve their health.

Mr ELSBURY — Picking up on one of the themes that was discussed just then, if we increase the density of the population, we are able to provide better public transport and the like. In your submission you have said that urban living disengages people from the natural environment and can be detrimental to health and wellbeing. I am wondering if there are any studies you are aware of that go into the danger that can come with overdoing the density of a population and whether or not there is a tipping point at which you can be cramming too many people into too small a space or where there is sufficient space still available for people to still be able to feel they are not being boxed in.

Dr CAREY — I think that is a good question, and certainly there are carrying capacities ultimately to population and cities, but my understanding of mixed density and mixed land use is that you may increase density in certain areas that are associated with transport, for instance, but that does not necessarily detract from your ability to provide, say, green spaces. What you might be doing is having an area where you have X amount of green space and X amount of housing, but you are actually increasing the density of the housing without detracting from the amount of green space. I think there are innovative ways of looking at it.

For instance, a particular talk I went to recently was about what they call retrofitting suburbia and talking about how, particularly on the fringes of cities, there are now dead spaces with economic decline that are totally underutilised — for instance, very extensive open car parks that are extremely underutilised. What they do is reclaim those, maybe turning some of those spaces into green spaces, uncovering creeks from canals and tunnels and making them into little wetlands.

I think we just have to be an awful lot more creative with what we have. Ultimately you are right; there are limits to how many people can be packed into an area. The more people, the more strain there is on the environment. But I just think there are enormous ways you can be creative and innovative to do better with what we already have.

Mr ELSBURY — What I was actually seeking was whether there were any studies to suggest what is too much and what is not. Are you aware of any studies around actually saying, 'Five people per 3 square metres' or something like that?

Dr CAREY — I think it is very site dependent. I think it is probably very complex. It would be contingent on your environment, your economic systems and your cultural system, for instance. We have different sorts of cultural ideas about what we want in terms of our housing and our land use than, maybe, another country. I do not think we can put a magic number on it; I have not seen a magic number. If I did, I would probably be a bit suspicious of it, I think.

Mr TEE — On that, the number of submissions we have seen have suggested that sort of around 30 or 35 dwellings per hectare has been an optimal level of density to promote things like bike paths, open space, public transport and shops. Do you know anything inconsistent with that?

Dr CAREY — No, I have heard those figures, but that is probably more in the expertise of urban planners than the expertise of doctors. We are actually reliant — —

Mr TEE — There is an impression that maybe you were disagreeing with those sorts of results.

Dr CAREY — No, you are quite right. I am aware of that. But how they actually derive those figures, I am not sure. I would probably have to look at that.

Mr TEE — Defer to them.

Dr CAREY — Yes.

The CHAIR — Thank you very much for your presentation today, your answering of questions that were fairly broad, as you could tell, and your excellent submission. As I said at the beginning, a transcript will be provided to you in about a week and if you could liaise with Keir, we would appreciate that.

Witnesses withdrew.