

# CORRECTED VERSION

## STANDING COMMITTEE ON ENVIRONMENT AND PLANNING

### REFERENCES COMMITTEE

#### **Inquiry into environmental design and public health**

Melbourne — 4 August 2011

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#### Witness

Professor B. Giles-Corti, director, McCaughey Centre, VicHealth Centre for the Promotion of Mental Health and Community Wellbeing.

**The CHAIR** — Welcome, Professor. There are formalities that we need to go through right at the beginning. Essentially this is to signify to Hansard your name, Professor Billie Giles-Corti; and are you representing a particular organisation today or are you appearing as a private individual?

**Prof. GILES-CORTI** — I am representing the McCaughey VicHealth centre. Previously I was with the Centre for the Built Environment and Health at UWA; so I have just moved here.

**The CHAIR** — Welcome to Melbourne.

**Prof. GILES-CORTI** — Thank you.

**The CHAIR** — All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and is further subject to the provisions of the Legislative Council standing orders. Therefore you are protected against any action for what you may say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege. All evidence is being recorded by Hansard, and you will be provided with a proof version of the transcript in the next couple of days. We have allowed about 5 to 10 minutes for you to make a presentation, if you would like, with the rest of the time being spent on questions, because we really want this opportunity to be able to tease out some ideas as well as further answers. I would also ask for Hansard that you introduce yourself correctly and also provide your mailing address so that we can send you a copy of the transcript. Thank you.

**Prof. GILES-CORTI** — Thank you very much for the opportunity to present to you today. My name is Professor Billie Giles-Corti. I am currently the director of the McCaughey Centre, the VicHealth Centre for the Promotion of Mental Health and Community Wellbeing. I have just arrived from Perth, where I was the director for the Centre for the Built Environment and Health at the University of Western Australia. It is in that context that I am giving my evidence, because for the last almost 20 years I have been involved in examining the impact of the built environment on health. For around 10 years I have worked very closely with the state government on evaluating its Liveable Neighbourhood guidelines, which are somewhat similar to your Precinct Structure Plans. We have been establishing a program of work that has been evaluating the impact of the Liveable Neighbourhood guidelines on study participants; we have been surveying people and have set up a longitudinal study. So I bring a lot of experience in doing the sorts of things that you are trying to do, evaluating the impact of those and working with government to give feedback on how to actually finetune policy.

I have decided to focus on two of your terms of reference because I knew it was such a short time to present. The first one is about the evidence related to health. I wanted to point out to you that globally there is a whole range of reports coming out. Even the US Transportation Research Board has done a report, *Does the Built Environment Influence Physical Activity?*. Of course this is related to not only mental health but also obesity, cardiovascular disease and cancers. The Heart Foundation, which I know you are seeing this afternoon, have now got a guideline on it, a position statement, and have been working with PIA, the Planning Institute of Australia, to put together some guidelines for planners.

There is now a well-established relationship between the impact of the built environment on physical activity. I guess the overall conclusions of all these reports are saying that compared to high-density neighbourhoods urban sprawl is associated with lower levels of walking, fewer people using active modes of transport, such as, cycling, walking and public transport; more vehicle miles travelled, which has a sustainability outcome; more sedentary behaviour, which is also an independent risk factor for diabetes, which we know is on the rise, as well as obesity; and with increased levels of obesity. I guess there is also the relationship with increased environmental pollution and greenhouse gas emissions, because a lot of the urban sprawl is on the urban fringe, and because it is so low density out there it is not possible to provide a public transport system that would encourage people to use alternatives.

In fact we looked at this: people would have to travel almost twice the time using public transport as they would driving when they live on the urban fringe. That is some of the work we have been doing with the state government. So for activities of daily living we have decreased our human energy expenditure and we are increasing our fossil fuel energy expenditure, which has both a bad impact for health but also a bad impact for the environment.

I just wanted to show this to you, because I think these are really quite amazing results that have been published relatively recently. For example, looking at levels of obesity in Australia compared to Switzerland what you see

on the other side of the axis is levels of walking, cycling and public transport trips. In Australia we have a relatively low proportion of walking, cycling and public transport trips and we have got high levels of obesity, which is exactly the opposite of what you see in a country like Switzerland in Europe. Lower levels of obesity are associated with more active daily living. The reason why that is beneficial is because people incorporate it into the day. It is not something that you have to go to the gym to do; it is just a daily activity and it is just part of life. I am experiencing this because I am living at Ormond College and working at the University of Melbourne, so I walk every day, in fact doing about 17 000 steps, which is really great.

So what is required? I want this to be really clear, because it is really important: we need to have higher densities. Peter Newman is a sustainability academic in Western Australia, and his research shows that we need at least 35 houses per hectare to be able to achieve good mixed-use development that is supported by public transport. We need more of this sort of housing — that is, the sort of thing you get in inner-city Melbourne, and much less of this (lower density housing). We talk about affordable housing on the fringe, but the problem with that is that you cannot get enough public transport out there because the densities are low. I notice, looking at the new growth area, that we are trying to get about 15 houses per hectare out there; it will not be enough to support good public transport, which means that people will still be having to drive, while fuel prices are increasing. The estimates by CSIRO are that they could go up to \$8 a litre. That is going to put enormous pressure on people living on the fringe in terms of affordable living, not just affordable housing.

The other thing is about considering age when you are planning. We have seen a very big decrease in the number of children who do any sort of active transport. You can see up the top of the graph that the Australian figures show a decline. The idea now is that we are creating bubble-wrapped children who have no independent mobility and are unable to get around by themselves. This is important from your point of view and in terms of a policy perspective when thinking about how we site schools. We have just published a paper this year looking at children attending government primary schools. We looked at how connected street networks were around them and how much exposure to traffic they had. Strictly speaking connectivity is a very good thing, because if you have got connected street networks, it increases the proximity from the child's home to school, which is actually good — that is, rather than having the cul-de-sacs. But if you combine that with busy streets, children are 62 per cent less likely to be able to walk to school.

Parents will let children walk from about 800 metres to 1 kilometre. While this is not the solution to the obesity epidemic, it is one part of the overall strategy to get kids to be able to participate. What is required is an emphasis on child-friendly planning in precinct structure planning and siting schools on the edge of neighbourhoods — rather than on the connector roads, and away from busy roads. That seems to be something that has worked.

I do not have time to talk about older adults. We are doing work with them of course. With an ageing population how we house people is going to be incredibly important, but we need to be thinking that we are housing older adults located in walkable neighbourhoods with proximate activities for daily living and reduced traffic exposure. Older adults are the same as children; it is all very well when people are young and can still drive, but as people age they are going to be less reliant on their car to maintain their mobility and their health. We need to be thinking about where we are locating housing for older adults.

I want to cover briefly public open space — and it was interesting for me to hear the end of the previous submission to you — just to emphasise how important public open space is in terms of promoting good health, in terms of both physical activity and mental health. This is some evidence we have. If people use public open space, they are three times as likely to achieve recommended levels of walking, which is obviously important from a health perspective.

I also want to emphasise how important public open spaces are from a child's perspective. I am not going to go through all the studies, but there have been a number of studies showing that children who have good access to nearby parks and parks with facilities are more active out of school, so parents are more likely to allow them to go and use the parks if they are close by to achieve more physical activity, which, as we know, is a major issue with our children.

I also want to emphasise, just building on the point of the people before, that it is not just about the quantity of public open space — it is also about its quality. This slide is just looking at it: we had students going out and observing people using public open space, and we found that in terms of low-quality public open space only

30 per cent of people we observed were using the low-quality public open space, but in the high-quality public open space about 70 per cent of people were using it. We all know that well-designed public open space is used; poorly designed public open space is not used. If we are going to be designing ovals — and I want to emphasise how important it is to have ovals from a sports perspective in terms of building community — I think we have the potential to think about putting some undulation around the edges to make it sort of interesting so it is not just for sport but also can be used by people going for walks, to add a bit of play equipment for kids to go and play on or for the community garden, as we heard before. I think there is the potential to make better use of the public open space we have available, but we have to emphasise how important the quality is, not just the quantity.

On that score, one of my students did a Ph.D. looking at mental health. This slide was looking at how people who reported access to high-quality parks were nearly twice as likely to visit the park frequently. In terms of the attributes that make a park ‘high quality’: reticulated lawns, having a water feature, lighting, shade and walking paths. All of this creates a sense of community and a sense of control, which is very important in terms of people being confident to use space.

I also want to emphasise the area that gets covered probably a little less in the literature, which is around mental health. Mental health is one of the leading causes of disability. It is estimated that by 2020 it is going to be the second leading cause of disability globally, so it is a really important issue, and it is becoming more of an issue. Compared with people living with low-quality parks in their neighbourhood, those with medium-quality parks are almost twice as likely to have low psychological distress. That is a measure of depression. Those who had high-quality public open space were 2.3 times more likely to have low psychological distress. What this is suggesting is that having access, even if you do not use it — if it is in your neighbourhood and it is high quality, it is well-maintained and it does not give people a cause for concern if there is disorder — people are likely to have better mental health.

On that score there is a very big gradient. This is actually Melbourne data collected by one of my colleagues, David Crawford at Deakin University. Access to public open space with quality features varies across socioeconomic status significantly across all the things that we looked at. Just to give you a sense in terms of walking paths, if you live in the lowest quintile of socioeconomic status in Melbourne, 52 per cent of the parks have walking paths; 70 per cent do in high quintile areas. You have a gradient, and we always know that the burden of disease always falls on those of lower advantage. My colleague Gavin Turrell and I are doing some work in Brisbane and we found that if you could control some of the environmental attributes, you would actually lose some of the socioeconomic status disadvantage that people have. People behave better when they live in better environments. If we were able to think about improving the environments in which people live, we could see a decrease which would have a big impact on health problems.

This slide is just a sense of the problem. When we went around and did the audits of public open space to know what was going on in Melbourne — this is David Crawford’s work — you can see from these slides that there is a very big difference in the quality of parks. Why is that important? One of my students has also looked at this. The likelihood of doing any recreational activity varies by park maintenance and amenity. In terms of disorder — this is comparing with people who have no disorder — those who have all the sorts of disorder that we collected, which were to do with graffiti, broken bottles and that sort of thing, are half as likely to use a park for recreational walking. Similarly on the other side — this is looking at if you had all the amenities compared to no amenities — you are almost two and a half times as likely to do recreational walking.

I just want to emphasise how important this is. The money that is spent by local government in terms of maintaining parks is very important, and I think the point you raised earlier about how we manage the maintenance of parks is really important. On that score I guess we have looked at how, rather than providing lots of small public open spaces, it may be better to provide a smaller number of high-quality public open spaces in neighbourhoods, that they cater for multiple users. That would help increase the use of public open space, which makes it safer, and it would help increase the levels of activity, walking and also sport. I really want to emphasise how important that is to protect mental health, to increase children’s activity and also in terms of building community and increasing social capital and a sense of community.

**Mrs PEULICH** — And for safety.

**Prof. GILES-CORTI** — Yes. I also wanted to emphasise that as we move towards what I think is really important — a higher density environment — it is going to be very important from a public health perspective and also from a sustainability perspective that residents of high-density housing have access to a hierarchy of public open space. When we are thinking about where we are locating high-density housing I do want to emphasise that public open space does substitute for private space, that we need to be thinking about how we can co-locate high-density housing not only with transport and all the amenity that is required, but also with public open space.

In summary, environmental designs that increase active transportation have the potential to deliver co-benefits for the health budget, for the climate change budget, for traffic congestion — I know Transport is very concerned about this — for road safety and for the economy, because all of those other things cost money. To optimise health we need a really comprehensive approach to structure planning. We need densities of up to 35 houses per hectare to support public transport and shops.

I will not go through this slide now, but I put this slide together for the World Health Organisation. We really need a comprehensive approach. I have not talked about crime prevention through environmental design. We have evidence on that and on how important it is. It is the sort of thing you can put into design guidelines and incorporate into the way houses are built. They are the building blocks of healthy urban development, and we need all of those to make it work. One or other of them without everything is not going to be as effective.

Even that score, I want to make my last point, which is a plug for research. Good policy is difficult to develop. It is harder to implement. We have the experience of working with government to create the evidence base to monitor the impacts on health and sustainability outcomes. I like the idea that we are doing some work on economics. It is very difficult, but we are doing it. We need to provide early warning signs. When the policy is not going quite right, it is not about having a go at government or at the policy-makers. It is very hard to do this, but we can help put early warning systems in place and help build policy that is going to maximise outcomes for the community. Thank you for listening; that is my submission.

**The CHAIR** — Thank you. That was an excellent presentation, particularly the hard evidence and comparative statistics. That is really worthwhile information and will provide greater depth for this committee to deliberate upon.

**Mr ONDARCHIE** — Thank you for your presentation. I have to say that I am suffering from my own urban sprawl at the moment, and I am working on that. I have a couple of questions to ask you. Was your research done in Western Australia?

**Prof. GILES-CORTI** — It was. I have done research in Melbourne, Brisbane and also overseas, but the work on evaluating the government policy was in Western Australia, yes.

**Mr ONDARCHIE** — You quoted numbers on the use of public space. I am just wondering what the relationship is between the use of public space and weather conditions of the local environment.

**Prof. GILES-CORTI** — To be honest, even in the winter we find that weather does not make a difference. People still use public open space. In Western Australia we have looked at seasonal effects and we have not found a huge difference. It is not as cold of course in Western Australia, but the cold period is actually relatively short in Australia across the board. I do not imagine it is a factor.

**Mr ONDARCHIE** — You have not spent enough time in Melbourne.

**Prof. GILES-CORTI** — I am not quite sure where your question is going. Are you suggesting that if it is cold, then you do not need to have public open space?

**Mr ONDARCHIE** — No, I am just wondering whether people are reluctant to use it because it is cold.

**Prof. GILES-CORTI** — I do not think that is the case. I think they use it at different times of day, and darkness is probably a bigger issue than the cold, especially for dog owners. It seems that you can trivialise it, but dog ownership is actually one of the biggest things that gets people to be active. About 40 per cent of people have dogs. If you have a dog or gain a dog, you are likely to do 32 minutes per week extra walking, which is a

really big public health impact. If you lose a dog, you drop your activity by about 42 minutes a week. For dog owners at least the season does not have much of an impact, but I take your point.

**Mrs PEULICH** — But safety may.

**Prof. GILES-CORTI** — Yes, safety may. The other thing is to do with children. For children after school it probably does not have a big impact, although rain would of course.

**Mr ONDARCHIE** — When you talk about children and their use of nearby parks, what does ‘nearby’ mean?

**Prof. GILES-CORTI** — It depends on the parents, but Anna Timperio from Melbourne has done some work on this. Parents will allow their child to walk about 800 metres. What is really important about the design of public open space is that it is well surveilled. One of the guidelines that has gone into the Western Australian data to make parks safer is to make sure that all the houses look over the park, and that makes the space more safe than if the houses back onto the park. Taking those sorts of things into account — putting a road around the park with all the houses facing the park makes it safer — will build parents’ confidence in allowing their children to use the park. The whole issue of safety and children is a big issue. We did some work for VicHealth — *Nothing but Fear Itself* is the name of the report — in which we wrote about the heightened level of fear that parents have about allowing their children to be active. One of the antidotes to that is having more people out and about and more surveillance. We are hoping to continue some of the work we are doing for VicHealth on that very topic.

**Mr ELSBURY** — Thank you very much again for your presentation. Especially out in the western suburbs of Melbourne there is a mentality that is very pervasive of having a two-car garage and a backyard. In fact at the moment there are some major redevelopments being proposed out through the western suburbs that completely throw that idea out the back door and get on with the idea of increasing population densities, but we are finding that the local community is riling against those particular developments because they do not fit into their view of what their neighbourhood should be. Is there any evidence that you have found, any studies that you have found, on the effects of population density for mental health?

**Prof. GILES-CORTI** — Yes, I have just done a very big report. I did not have enough time, but the Heart Foundation may present it this afternoon. The very thing I was concerned about is that we are talking about increasing densities. I have done a report for the Heart Foundation looking at how to maximise the benefit and minimise the harm. As a public health person I want to be able to say confidently what we need to do about density. I have been out to the west and looked at the Growth Areas Authority guidelines, which are about 15 houses a hectare.

**Mr ELSBURY** — I am not talking about out in the growth areas; I am talking about more established areas where we have redevelopment occurring.

**Prof. GILES-CORTI** — I understand.

**Mr ELSBURY** — You have a public backlash against those developments because they are seen to be these concrete megaliths.

**Prof. GILES-CORTI** — I can help you with that. For that very reason I wanted to be on top of this issue; I wanted to be confident about what I can tell you. There are three factors that I think are important in terms of density. There is the building practice — how you build it; the noise abatement, and controls on noise; and how it is built and whether the balconies overlook the roads, because if they overlook the roads, people cannot open their windows, and if they do and they are on a transport route, they will be exposed to air pollution increasing the risk of respiratory problems because of traffic. But it could be designed differently; it is just a design issue.

Then there are the governance and maintenance issues. They affect people’s mental health, because if a building is allowed to degrade in terms of antisocial behaviour or anything or there is noise — —

**Mr ELSBURY** — Paint starts peeling or the windows get cracked.

**Prof. GILES-CORTI** — That is right. You get a cycle of deprivation, and people who can, move out and then you have a problem. Then there are the socioeconomic factors, the social and cultural factors, which are

really important. Then there are the environmental factors — partly about where it is located and the amenity in the area. Along the public transports routes in inner Melbourne is going to be quite good in terms of amenity and location for public transport; that is good.

But what is really important is the public open space. We have to build that into the buildings, so that if parents are going to be living there, they can actually see their children playing, because if families start to live there, we need to be making sure that these buildings can accommodate families as well. There have been some suggestions from work in Sydney by Bill Randolph that we need to be ensuring that 25 per cent of a building has family accommodation. The evidence suggests that really three to five storeys should be where we are going. I see that Harry Triguboff is proposing to do buildings of 74 storeys in Brisbane. I really query whether we can say with confidence that that is not going to have some impact. What the evidence tells us is that three to five storeys is what we need. For parents, having the ability to be able to have their children go outside and have some surveillance is a design issue.

I made 23 recommendations to the Heart Foundation, and we are just starting now to do a consultation with planners, architects and transportation planners to get some sense of how we actually do this. What I have suggested to them is that they have a design competition for young up-and-coming architects to take on board these principles that we have outlined in the report and to come up with designs that are actually going to work, which are going to produce a better outcome for us as a community and which will overcome some of the concerns so that territoriality is built in so it is safer and all the sorts of things that are needed are there.

Crime prevention through environmental design goes into the building up front, and that is the sort of thing that as a government you could start to stipulate as being what is required in terms of buildings, so it is not just left up to someone's professional opinion. You could start using the evidence to come up with some guidelines about what might minimise any harm that we can have to ameliorate the concerns of the public.

**Mrs PEULICH** — First of all, may I thank you. I have found that very beneficial, because it has reinforced a lot of what we know but in a way that can actually be fairly readily implemented — obviously as resources become available — and that is not an unachievable objective. I think we can make progressive improvements where they are needed.

The question I would like to ask is in relation to density. You have said we need high density but not too much density. In particular, could you comment on what you think that density ought to be, particularly in relation to urban infill where perhaps access to open space may not necessarily exist in relation to the density that we are building up? On another related matter, the density of public housing, again that comes to the issue of, say, those who are suffering from mental health issues and how we can minimise the risk of entrenching intergenerational disadvantage and that daily trauma of having conflict with your neighbours.

**Prof. GILES-CORTI** — Yes. The evidence is interesting, actually. There are examples of buildings being imploded because of the disadvantage they create by putting in high density, when the planners tell me you could achieve the same density — because of the setbacks associated with high-density housing — using low rise. When you have really high apartments you have to have a lot of open space all around them. There are ways of achieving density without going high. You can have low rise but smaller accommodation.

**Mrs PEULICH** — Optimal height?

**Prof. GILES-CORTI** — Optimal height. For disadvantaged people the evidence suggests no more than around three storeys. There is a very famous book that was written in the 1970s by Oscar Newman. He talks about territoriality. It is also about the way a building is designed so you do not get lots of people going through the same door. You might have three or four apartments going into the same area. There are lots of ways of building in territoriality and protecting people from one another, in a sense, and not doing it really high, particularly when you have lots of children living there. That is really important.

In terms of the inner city where there are going to be a lot of office workers working, you can go higher; that is not the issue really. It is when it is going to be the general public living there. There do need to be some provisions. If you go to New York City — and I know people say that Melbourne is not New York — it is a city that is really designed for people. In Manhattan you will see there are not manicured open spaces.

**Mrs PEULICH** — No.

**Prof. GILES-CORTI** — You will see a basketball court where the kids can go and play. You see little pocket parks where someone can sit and get the sun. You see it in London as well. I think that is where we have to stop thinking only about manicured space but actually thinking about space where people can live and about the families that are going to be living there. The other area they have developed in terms of density is creating spaces in the buildings for what they called selective interaction. For example, what they are doing in New Zealand is putting in some community gardens, as was mentioned, which bring people together when they want to, but they do not have to be forced to be with one another. The idea that you can have selective interaction in the design of these buildings seems to be important as well, but not forcing people to interact. That is why thinking about only a few apartments going into the one landing creates a better vibe and less conflict.

**Mrs PEULICH** — I agree with you about the New York parks and gardens in particular. One little thing that I think is sensible is that a lot of the New York parks have a little plaque outlining the rules of behaviour at every entry point just as a reminder.

**Prof. GILES-CORTI** — But in New York it is interesting because at dusk you will see kids going home with their skateboards, and I think, ‘God, in Perth they wouldn’t do that’, because parents are afraid. Yet in a city like New York, with so many people, there are 10 or 12-year-olds walking home with their skateboards. I think that is really a successful city when children are allowed to go out. I think that is where, in terms of age-friendly planning, we need to get to the point where there is enough surveillance and people feel confident enough to allow their children to be out and about. We all got around when we were children.

**Mr ELSBURY** — Without improving law and order.

**Prof. GILES-CORTI** — Partly, yes.

**Mr TEE** — Thank you for your presentation and your submission, which has some I suppose compelling statistics. I want to again focus on the role that the state government plays. Ultimately the state government does not design the pocket parks but it has an Urban Renewal Authority and a Growth Areas Authority that ultimately do. I suppose the question is: in terms of what goes in their precinct structure plans, is the government’s role around directing those authorities on the issue of it being around 800 metres, I think you said, to nearby parks and on the densities? Would that achieve the sorts of outcomes that you think will make a difference? In addition to those things, what else should the government be using its influence to achieve, I suppose in a way you can measure? Again, I suspect everybody agrees in the broad with what you are saying. It is about how you deliver it on the ground and how a state government that is so far removed from the delivery achieves that and makes that difference.

**Prof. GILES-CORTI** — I bring my experience from working with the Western Australian government; I do not have the experience in Victoria, so I apologise for that. From my experience from working with the state government there, my recommendation to them has been that they consider mandating for things that are essential. For example, things that are essential, if you want to achieve these outcomes — that is, increase public transport and make it possible to deliver public transport — are things like mandating for density around activity centres. To make public transport more viable, it would seem to be really important.

What is happening with, for example, the Livable Neighbourhoods is that the policy is right, but if you do not have some things that are mandated, then it does not get delivered. I think that is a problem. The policy is very good, but we have actually evaluated it. We have unpicked it, and we are actually measuring, using a geographic information system, which is a spatial dataset, whether or not and where it is being delivered. It is unfortunate, because the policy is really good but it is not being delivered. If the industry cannot deliver, then I think that means that government has to look at it in terms of saying, ‘What things are essential to be able to deliver?’. You can never deliver public transport and you can never deliver enough shops and services if you do not have the density.

I have not mentioned, but I should, that that is one of the things that we are finding. We have been doing this long-term study of these new neighbourhoods. The problem also is that it takes a long time for the businesses to be developed to provide shops and services nearby. So you have a transit-oriented development that is being delivered but none of the shops are there. So it will be transit-oriented in maybe 20 years, but not for a long time. In the States — and I am going to follow up on this the next time I go to the States — the government is playing a role in activating and working with local government, perhaps, to look at strategies for business

development and economic development in those areas to get the business happening. Unless you have that, then the principles might be right but there is nowhere to walk to. You might have the parks and things, but —

**Mr TEE** — You talked about mandating for things that are essential, and you mentioned density. What else is it essential to mandate for?

**Prof. GILES-CORTI** — I just mentioned the second one, which is actually: how do we activate to get business development? That is not easy, I realise that, but there are examples of that work being done.

**Mr TEE** — You cannot force businesses to go.

**Prof. GILES-CORTI** — No, but you can have incentivisation, and different policies have been developed in the States. I am sorry; I am not on top of that literature, but it is something I am conscious I need to be on top of and I will be. Strategies have been put in place in other parts of the world to activate businesses. It happens in Europe. In The Netherlands the density has gone in but the public transport is already there, the shops are already there — or at least some temporary shops — and temporary schools are there. So that when people move in they do not think, ‘Oh, well, I’ve got to get another car to be able to drive everywhere’. They can actually get in and start living.

**Mr TEE** — Is it around density but also around mandating for parks or bike paths?

**Prof. GILES-COURT** — I looked at the policy that you have in the structure plans, and the sorts of things that are in there are about getting the mobility network right. So that is about putting in the cycle paths and the footpaths. If there is nowhere to walk to, you do not need footpaths on both sides of the street; you need one footpath.

**Mr TEE** — I suppose the question really is: in the structure plan, is that all, or is it your view that as a community we need to look at recommendations that progress that, and if so, how?

**Prof. GILES-CORTI** — Certainly my experience from looking at Livable Neighbourhoods — I cannot comment on what happens here — is that in terms of the implementation there needs to be some mandating for some of those attributes that are actually going to be essential for the delivery on the ground, because you cannot rely on the fact that it will be delivered. If you just set a framework which is all voluntary, there is no guarantee it is going to be delivered.

On what was raised earlier about affordable housing and the cost to the consumer of buying a house, a lot of the costs are actually externalised. They move into a house where there is nothing and suddenly realise that to live there is actually quite expensive because they do need to get the extra car and they do have to drive their children everywhere. In terms of the cost of living it is actually quite high.

**Mrs PEULICH** — People think in a fairly short time frame, do they not?

**Prof. GILES-CORTI** — Yes. I do not know if I have answered your question very well.

**Mr TEE** — I am just not sure what it is that governments should mandate for.

**Prof. GILES-CORTI** — I think they should be mandating for density around all the public transport routes. I think there should be some work to look at how businesses can be activated, whether that is lower taxes on land or whatever — —

**Mr TEE** — But if we got those two, that would be it?

**Prof. GILES-CORTI** — That would be it — and public transport.

**Mr SCHEFFER** — Just on that last point you mentioned, that was a matter I was going to raise with regard to things like access to cinemas, theatres, music venues, dance facilities, all those kinds of things in communities that are really important and hard to get up as part of that business. If you could send us something else on that, that would be fabulous. The question I want to ask is: you were talking about the ‘nothing to fear but fear itself’ project. The all-important factor in that is about agendas of community safety, law and order

agendas and the media's promotion of community danger day by day. Has any work being done on that that could assist us?

**Prof. GILES-CORTI** — We have a report that we did for VicHealth which I can arrange to have sent to you. What it shows is that law and order is one thing but there is also an elevated level of fear which is probably generated by the media and also the social norms of people judging one another: if you let your child walk to school, then you are a bad parent. There is a sort of social normative factor going on. I can send you the report, which might be helpful.

**Mr SCHEFFER** — That would be great.

**The CHAIR** — Thank you very much. As I said before, the transcript will be forwarded to you for checking. We look forward to having an ongoing relationship with you and your work.

**Prof. GILES-CORTI** — Thanks, Ms Tierney; I would love to.

**Mrs PEULICH** — I think there were other documents to which you referred. If you could forward those too, that would be great.

**Prof. GILES-CORTI** — Yes, I can send those through. Thank you very much.

**The CHAIR** — Thank you.

**Witness withdrew.**