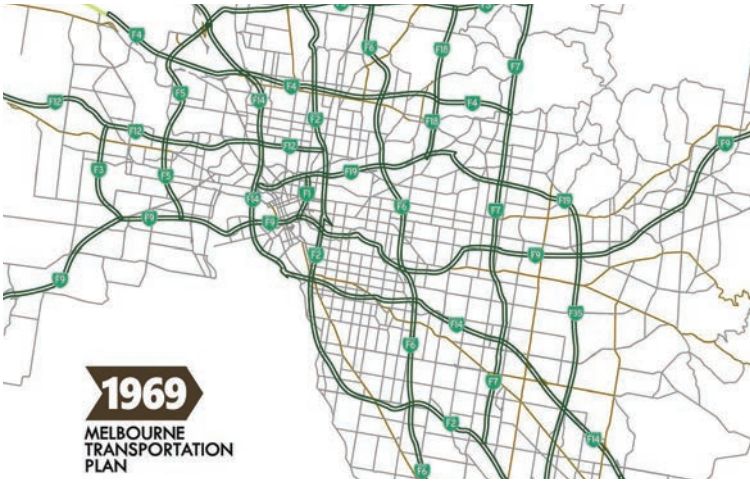
GTAconsultants

Discussion with Peter Jones

Peter Jones, Professor of Transport and Sustainable Development at UCL (University College London) and pioneer of the Movement and Place transport approach, came to Australia in March to meet with state road agencies and present at the Smart Urban Futures, Victoria Walks Conference. While in Melbourne, Peter also met with GTA's team to discuss transport planning matters of common interest.

This is what we talked about.

Transport planning has for many years been based on the idea of predicting future demand and providing infrastructure to meet that demand. Melbourne's 1969 Transport Plan is a good example of the outcome of this approach, with a network of freeways planned to criss-cross the city.



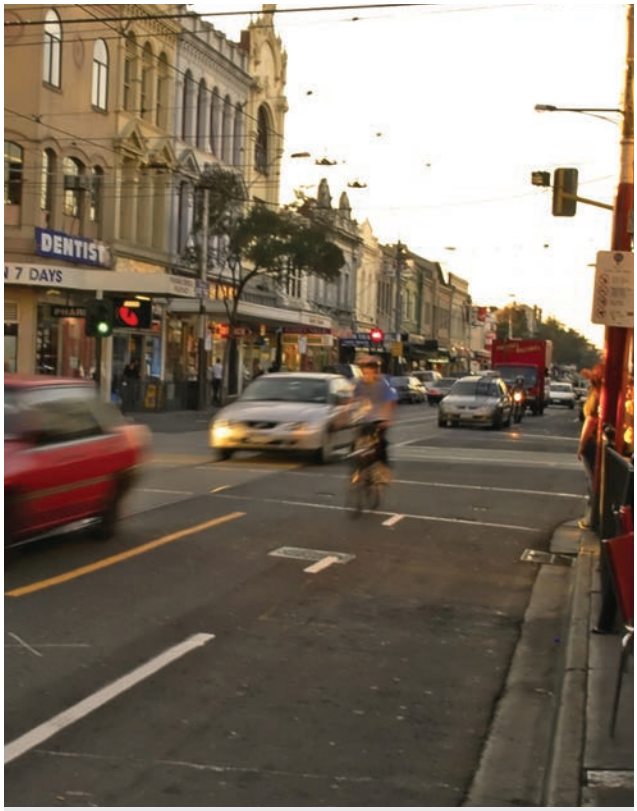
This **predict and provide** approach has the potential to destroy the cities it is designed to support, by creating an environment in which roads are repeatedly widened to meet predictions of ever-increasing demand. This approach fails to address the nature of demand, whether it can be managed, what other modes could be used to satisfy that demand and the social and environmental costs of simply expanding the road network. Yet our planning and political environment continues to be founded on it.

Peter argues that a better approach would centre on the opportunities created by the **vision and validate** approach. This would involve leading with a strong vision for how the future should look and then assessing the types of investment that can be justified to support that vision. To make this approach work, the community needs to develop a shared vision for the city, and recognition that we can achieve that vision through a collective leap of faith.

The vision and validate approach is informed by the interesting idea that the important skills in city shaping ('placemaking') need to extend beyond the analytical, and must address broader societal and environmental issues focused on the kind of city we want to live in. The rise of placemaking as a discipline reflects an acknowledgement that managing and developing our public realm demand more attention than simply to moving people and goods around quickly and efficiently.

Peter is a pioneer of the **Movement (Link) and Place approach** to street management. This approach recognises the dual function of streets as both through corridors ('links') and destinations ('places') in their own right. In this schema, the investment and management focus for links is on through movement by all modes, while the focus for places is on people lingering, dwelling, shopping, sightseeing, socialising and interacting.

This is a clear and sensible approach in theory, but the experience of its practicality both in the UK and in Australia is mixed. In Peter's view, problems have stemmed from two application traps. The first is the tendency to concentrate too strongly on data collection with an overly rigid application of the street categorisation framework. In certain cases, this has led to a highly prescriptive approach to street management that is to the detriment of the ultimate outcome. The second trap is to focus on a single street segment in isolation from the broader network.



Geelong Transport Network Operating Plan Review

GTA is looking forward to using the movement and place framework on the Geelong Transport Network Operating Plan review. The project is applying a modal lens to the Movement and Place framework to classify the transport network in Central Geelong.

This approach will enable us to articulate the inherent trade-offs between transport modes and design schemes that allocate road space to support modal priorities and place functions. By applying the framework at a CBD scale, these necessary trade-offs between movement and place functions are able to be shared across the network. This will be the first time 'Place' is explicitly reflected in transport network planning and is an exciting reflection of Geelong's commitment to revitalising its city centre.

Effective implementation of this approach demands a sophisticated response from transport planners who in many cases have come to regard success as optimising traffc capacity across an individual street, intersection or part of the network. Peter noted that the approach demands **giving up control in order to gain respect**. We have all seen this happen, but there are several schemes where transport planners and engineers were willing to surrender control and work with stakeholders to achieve an agreed and shared outcome. While many transport planners are understandably nervous of surrendering control, one of the best outcomes is to achieve what seemed unlikely or even impossible by doing just that.

One aspect of wider consideration in looking differently at allocation of roadspace and modal priorities is the need to consider the broader network, not only a link or corridor basis. Route continuity is an important consideration to ensure aspirations to change our streets will actually deliver the vision.

We spoke with Peter about our approach to **project evaluation** and, in particular, how the issue of **severance** is poorly dealt with, and sometimes ignored altogether. Peter's research has explored the impacts of severance on communities, including matters such as health and wellbeing, mobility and accessibility. Tools which are able to identify and measure the effects of severance caused by roads and motorised traffic are currently conspicuous by their absence. Peter's research found that areas severed by major transport schemes tend to be unpleasant for pedestrians due to "high traffic levels, air and noise pollution and the lack and poor quality of pedestrian crossing facilities"[1]. This had a "negative impact on the mobility and accessibility of residents and to some extent, their health and wellbeing"[2].

> "These conclusions are unsurprising at face value but point to a gap in our approach to transport project evaluation."

How are these impacts overlooked? Melbourne, with its wide, multi-lane arterials has a high degree of severance baked in to its design. Consequently, we tend to be unconscious of its adverse effects, as we have, in effect, grown up with these impacts. For example, Hoddle Street, running through inner Melbourne, is effectively an 8-lane barrier between east and west, splitting suburbs and communities along its length.

[1] Jennifer S. Mindell, Paulo R. Anciaes, Ashley Dhanani, Jemima Stockton, Peter Jones, Muki Haklay, Nora Groce, Shaun Scholes, Laura Vaughan, Using Triangulation to Assess a Suite of Tools to Measure Community Severance: Journal of Transport Geography: Volume 60 (Elsevier: United Kingdom, 2017), 1.

[2] Mindell, Using Triangulation to Assess a Suite of Tools to Measure Community Severance: Journal of Transport Geography: Volume 60, 1.

After discussing approaches to transport planning, we began to discuss **emerging transport technology** and its potential to affect communities. First was LED signage built into road infrastructure to allow road space to be allocated and controlled dynamically in response to changing demand and traffic conditions. This has exciting potential in conjunction with a movement and place approach, as together they encourage a road management approach that varies by time of day. This emerging technology allows for added flexibility and may reduce the compromises inherent in scheme design.

Autonomous vehicle technology and its impacts on car ownership will also have significant impacts on our transport environment. The future of car ownership is highly contested, and Peter is also unsure how this might evolve. Existing car share companies do not yet appear to have had a noticeable impact on car ownership and he is unsure how the availability of shared autonomous vehicles would change this. There are of course others who hold contrary opinions.[3]

Peter observed that the discussion around designing the road environment to meet the needs of autonomous vehicles is reminiscent of **attitudes to transport pervasive in the 1960s**, when car was king and all urban design was oriented to the design needs of cars and their drivers. In Peter's view, designing our transport system on the assumption that shared use autonomous vehicles will predominate is no better than the discredited approach of the mid-20th century.

This is critical. We must think about who our public realm is for and be alive to the need to design it to meet our needs, not the needs of the machines we use. If we spend all our energy thinking about designing for autonomous vehicles, what design outcomes are we foregoing? How might active travel modes, which only now are starting to get a fair hearing after decades of neglect, be adversely affected?

For further information on GTA's Transport Planning services, please contact: **Christian Bodé**

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GTA would like to thank Peter for meeting with our team and sharing his thoughts on transport planning.

Members of GTA who attended this lunch include:

Christian Bodé
Will Fooks
Andrew Wisdom
Phoebe Hollins
Tom Kennedy
Saskia Noakes

[3] Tony Seba, co-author of Stanford University's RethinkX paper on the future of autonomous vehicles, argues that the extreme cost differential he expects to widen between personally owning a car and using a shared-use vehicle will encourage the majority of people to favour a shared-use model. In Seba's view, cost will be the driver.