

Submission to Perth -Peel @ 3.5 million Draft Paper

v5

Comments for the submission per section of the draft.

Message Chairman

“Sufficient suitable land for future housing”. No specifics can be found in the draft, of what suitable land means.

3.

I agree with the statement *“New urban areas must be planned to reduce dependency on private vehicle use..”*. However with the increase in use of electric or hydrogen-fuel cell vehicles, reduction of GHGs (Green House Gasses) is not the issue in the future.ⁱ

3.1

The notion that the growth of work opportunities will continue is too optimistic, it a bit like treasury modelling that the iron ore price will always be well above \$100, but now it is \$50 and as a result the state is short of money. With renewable energy on the march there will be also a decline in oil and gas industry. Therefore work opportunities in WA for international and interstate people are drying up.

Reduce greenfield development. Problem is that many “outer suburbs” are *too* new for demolition! Maybe promote more lenient R-codes around certain nodes in low density suburbs for option of infill redevelopment.

What does the modelling say about the real cost of living in outersuburbs, even though the cost to buy a dwelling is less than more towards the CBD. These “auto-suburbs” are car dependent. Time spent by people driving is time they cannot be involved in their community ⁱⁱ.

Promote more desalination plants to solve the groundwater problem. It is beyond doubt that we should reduce the use of water, but groundwater should also be kept in the ground. Watercorp's water recycling, including stormwater, should be increased. Part of Urban Planning should be a ban on sprinkler ban on grassed verges.

4.

A dispersed city should be 70% grey-fields infill and 30% green-fields developments and not the proposed 30% and 70% respectively. Then it will have an impact, otherwise it becomes “business as usual with a feel-good factor”. Maybe start thinking about increasing size of Northam? We cannot afford an expansion as in current urban sprawl policy. Which gobbles up a part of WA’s Biodiverse bush. Where are the plans showing clearly all areas that will be effected and by when?

6.

All new developed suburbs to have NBN and for that matter any new development (brown or grey field) should be NBN ready.

The economic outlook is till too much focussed on oil & gas revenues coming in. Look at issues raised in the **Third Industrial Revolution** (TiR)^{iii,iv}, which shows fossil fuels will be fossil forms of energy.

6.4

All heavy industry is concentrated in Kwinana-Rockingham area, no such industrial areas in the far northwest. Even though the largest increase of population is in the NW area. Where are the employment opportunities for the people living here?

6.7

The Swan Valley is a premium tourist destination that should be preserved. So, all development etc. should be according the guidelines or rules of the Swan Valley Planning Act. The State Appeals Tribunal appears to treat the Swan Valley as just any other suburb. The Swan Valley is as unique as Kings Park and should be part of this urban planning document.

Maybe plan for another 'Kings Park' areas in other parts of the Perth metro area.

Promote developments like the markets in Adelaide and Melbourne. I realize that is detailed planning and not on the scale of the Perth Metro area, but it would set the tone for more resident friendly development.

7.5

There is a need for a more selective high schools like Perth Modern in Subiaco, a second one south of the river and a third one in Joondalup or so. Especially in light of the largest increase in population is in the NW metro area. Travel times for students living in outer suburbs to Subiaco will be too long. So some academically gifted students miss out.

Transport

In the draft public transport is not really dealt with, just brushed over. I expected plans as they have done in Bogota, Columbia^v or similar bold ones elsewhere. In order to get higher housing densities around railway stations, new stations to be located away from freeways. Around existing stations squeezed in between freeways have plans to allow buildings over the railway and freeway. Developments should be mixed use, offices and residential. Workers have easy rail access to work and residents have easy way to get to work. Or would sinking of railway and freeway cheaper? Higher density development around future stations, e.g. on Mandurah line.

Major new and existing roads to have rapid bus transport (RBT) lanes for future change over in to light rail transport (LRT) when population has grown.

Overwrite Main Roads designs that a white line is enough separation for cyclists. Separate cycleways physically from the road. If Main Roads does not agree let their engineers and executives cycle along Great Northern Hwy in the Swan Valley where road-trains drive past at 80 km/h?

As part of urban planning sink the railway in Midland for both passenger and freight. What do they do overseas where there is freight and passenger trains passing the same station? Do the same at Mandurah station. Then have the opportunity to redevelop above it. A famous precedent is New

York's Grand Central Terminal built in 1913.

The Mitchell freeway to be extended towards Brand highway for proper connection to the north of the state. This will also benefit people living in Alkimos even further north. This would also form an alternative to the Perth-Darwin hwy.

Create multi-functional corridors in other areas of the metro area not just like in the Central area

In new outer suburbs especially at nodes lay the foundation / implement a bicycle / pedestrian / public transport friendly environment. Even though many still need the car for transport

Recent research highlights that Perth-Peel is totally car dependent ^{vi}. Currently the good public transport is radiated out of Perth CBD. Need to get "ring" public transport. Especially when becoming a more Connected city. Connected city nodes good because people hopefully can work there, but at least they can get entertainment without having to go to the CBD.

Utilities

Water mismanagement leads to demise of civilisations. This is well documented by Diamond in his book "*Collapse: How Societies Choose to Fail or Succeed*"^{vii} listing many lost civilisations. Groundwater extraction close to the coast may lead to saltwater intrusion and that will have a devastating impact on the vegetation^{viii}. Groundwater also a finite resource Ban all non-Watercorp water extraction bores in the shallow aquifers, and have all existing bores metered. Use scheme water from renewable energy powered desalination plants.

Pressure Watercorp/Department of Water to change water licensing schemes which are based on archaic regulations.

Any precipitation should go back into the shallow aquifers to ensure the vegetation is able to survive.

8.

The extensive use of groundwater in Ellenbrook has lowered the water table. The idea of about 20 years ago that groundwater extraction in the Ellenbrook area was OK was a mistake. At the time concerns about this were raised but ignored. And still one can see vast expanses of grass in public areas. It now affects the water table in the Swan Valley where it starts to be a problem for agriculture.

Look where still horticultural land left for agricultural use only. Too many areas with good soil, e.g. Gwellup, have been turned into housing development. There may be an issue with pesticide spraying. Have a buffer zone to counteract that or keep good soil areas for organic farming. Water management : NO water to be dumped in the sea. ALL to be recycled

Retain or establish a percentage urban green space in form of parks and have trees along all roads. This will help reduce air and noise pollution. The 2020 Vision project can help with some ideas. Maintain or increase Green space in the Perth metro area. Keep all existing open space and parks

For a sustainable future in Perth a combination of urban development and landscapes a multi-disciplinary Complex Systems approach is needed^{ix}.

8.2

Make sure Perth maintains a larger greenspace ratio per person than the national average. The 2020 Vision ^x reports spell out the need for green space. Other reports point to the health benefits of green areas in cities^{xi}. This should be implemented.

No new marinas near areas like planned at Point Peron.

8.5

Need more resources in back burning management. The “rainy season” in winter is now shorter than it was say 40 years ago. So to back-burn the same amount of land more has to be burned in a shorter time. In addition the back burning has become more difficult due to increased numbers of scattered dwellings in rural areas.

8.6

For fill next to roadworks use “recycled” sand/soil, not “clean” sand. Over time on the “clean” sand grass and weeds grow. Then why not use cheaper “recycled “ sand which likely has seeds in it so the ground cover will establish quicker and the clean sand can be used for something else. It may seem strange since Perth soils are mainly sand that we are running out of “clean sand”.

8.7

Natural bushes and wetlands are dependent on natural groundwater. Stop usage of ground water bores that drop the water table some of the water may even run into rivers all the way to the ocean and be lost. Look at Lake Jualbup (Shenton Park) or Perry Lakes (Floreat) their water level affected by the water extraction by shallow bores. Ideally the over extraction at e.g. Ellenbrook should be stopped because it affects surrounding areas. If the Department of Water and / or Water Corporation can not work it out then Planning should step in.

General Comments

Have more government services and departments to be replicated at Nodes.

Affordable housing Collaboration with engineers and architect department at unis to come up with new solutions. For example on how to build second, third or more storeys on existing buildings with novel ways to strengthen the existing foundations and loadbearing walls. The first reaction to this is that demolishing the existing building is cheaper, but I will definitely be more waste full.

Any planning building codes need to include options for future infill and redevelopment. In Greenfield areas change r-codes and designsto promote infill at later stage.



Standard layout of allowed development, black lines block boundary



Proposed layout of developments



Yellow dwelling later infill option for owners.

References :

- i **Bouton, Shannon et.al.** (2015) : “*Building the Cities of the Future with Green Districts*”; McKinsey & Co
- ii **Weller, Richard & Bolleter, Julian** (2013) : “*Made in Australia : The Future of Australian Cities*”.
- iii **Rifkin, Jeremy** (2011 & 2014) : “*Third Industrial Revolution, How Lateral Power Is Transforming Energy, the Economy, and the World*” & “*The Zero Marginal Cost Society*”.
- iv **Boogaerdt, Humphrey** (2015): “*The Third Industrial Revolution Expanded*” (enclosed, unpublished).
- v **Penolosa, Enrique** (2015-06-09): “*This is what cities in future will look like*” Huffington Post ; http://www.ted.com/talks/enrique_penalosa_why_buses_represent_democracy_in_action?language=en
- vi **Gordon, David** (2015) : “*Is Australia a Suburban Nation?*” seminar PIA or its Canadian predecessor (2013) “*Sustainable Suburbs : Best Practices from Canada*”.
- vii **Diamond, Jared** (2011) “*Collapse: How Societies Choose to Fail or Succeed*”.
- viii **Price, Michael** (1996) : “*Introduction in Hydrogeology*”.
- ix **Parrott, Lael & Wayne Meyer** (2012) “*Future Landscapes : Managing within Complexity*”.
- x **2020 Vision** (2014) : <http://2020vision.com.au/news/2014/08/growing-the-seeds-tour-in-perth/>
- xi **Brown, Helen et al.** (2013) : “*Cool Communities : Urban Trees, Climate and Health*”.