

# Australia, The Place to Be: Part 3b

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### Introduction

In part 1 and part 2 I looked at the situation we find ourselves in, and then in part 3a I talked a lot about preparing for a Worst-Case. In Part 3b I would like to wrap it up by discussing a strategy for living in the suburbs and leading a relatively normal life, while staying flexible and preparing for a range of possible futures.

As I discussed earlier, I have not chosen the suburbs because I think it is the "Best Place". It is simply the best option open to me - the one that will leave me with fewest regrets.

#### Building a Strategy around a Little House in the Suburbs

After a bit of thought, I came to a staggering conclusion. If your house is close to a train line, and walking distance from both shops and small farms, then you can continue your normal work when the situation is "Business As Usual", hope to continue when it is "Business Not Quite As Usual", and even manage fairly well in the early stages of a major dislocation. Assuming you have viable goods for trade, and a reasonable security strategy, then a house in the outer suburbs is not an impossible choice even if things go a long way down the "collapse" path.

This is a surprise. Much has been written about how non-viable life in the suburbs will be if oil becomes scarce. This may be true in countries with no mass transport systems. Here in Australia I certainly expect my train to be a lot more crowded than it currently is! But as long as you are close to a train line, and trains are still running, then suburban life is possible. If trains aren't running, then it is likely that utilities are down and most forms of urban life become much less viable.

I am still considering a nice place out in the countryside, on the outskirts of a rural township (it passes the "No Regrets" test if it doubles as a nice holiday house), but I want to ensure that my residence in the meantime is comfortable, even if things get bad.

My wife and I lucked out in this area, finding a good location more through serendipity than good planning. About two years ago we found a piece of land that had the following advantages

- It is 3 km from a train station (close enough to walk, far enough away that the trains cannot be heard)

- It is in an established neighbourhood, at the end of a quiet court, beside a park, 10 minutes walk from a shopping centre and a good primary school

- There is a freshwater creek (with dozens of ducks) 10 minutes walk away. Probably not pristine, but in a pinch the water could be boiled and filtered to make it drinkable. Beside the creek is a field full of rabbits.

- There are farmlets only 3 km down the road, growing vegetables for local markets

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- A kilometre past the tiny vegetable farms there is a small farm that breeds and sells lambs and baby goats, and across the road is a small chicken farm that sells eggs and poultry.

- Another few kilometres down the road is open farmland with sheep, horses and cattle.

- It is 45-50 minutes by train from the city (so I spend 45 minutes each way each day working in the train - thus shortening my working day by at least an hour.... not a terrible price to pay for the other advantages).

We bought the land and built a house. We weren't looking for land that had these specific features, we were looking for a location that had options and opportunities. The area has vegetables and meat but lacks fruit. I can also offer home-brewed alcohol and jam, not to mention the small machine-shop that lives in my garage.

The question to ask when looking at a location is this: What will your region offer you, and what will you offer in return?

## **Testing Your Worst-Case Preparation against Identified Risks**

The three highest-risk scenarios were:

- Climate Change
- Massive Economic Downturn
- Pandemic

So, as a worst-case, why not combine them? Here is a scenario:

There has been a massive economic downturn. Drought has ravaged Australia, leaving us with virtually no excess food production, thus greatly reducing our export income. A deadly form of flu emerges in the Northern Hemisphere's winter, and travels across the world. Mortality levels are high. Australia forbids flights into the country and erects quarantine barriers. When winter hits the Southern Hemisphere our vulnerability is greatest and the quarantine effort fails.

The failure is eventually traced to an illegal fishing trawler, which was fishing Australia's northern waters when the crew become ill. Unable to work, and worried that they might be dangerously ill, the crew immediately sail into the nearest harbour and surrender to Australian authorities.

Australia grinds to a complete halt as most individuals are reluctant to travel except when completely necessary. Infected areas are "quarantined" by their neighbours - with shotguns if necessary.



For 4 months you rarely leave your house. The pandemic sweeps through Australia in the late winter months but burns itself out by late autumn.

When life in Australia eventually restarts, things are very different. Infection rates were 60% and 20% of those infected died. So 12% of the Australian population has died. Australia's food production is now barely adequate to supply the reduced population, and the infrastructure to distribute this food is surrounded by confusion. Truck drivers return to work, only to discover that the fuel companies have not supplied the trucks with fuel. Utilities and communications are mostly down, as utility workers return to work, only to discover that the services that they

Nothing works. It takes another 4 months for new systems to evolve as people use individual contacts in a desperate effort to put together the interdependent chains that are necessary to supply their needs.

Were your preparations enough to get you through the 8-month crisis? I will leave you to answer that question as a thought-experiment, but here are some starter thoughts:

- You don't need 8 months of food. You had 3 weeks of food in the pantry, and around 2 months of stockpiled calories, plus whatever the garden can produce (winter is not a productive time). If Australia's food distribution or supply completely failed, then everybody was dead or gone by the three-month mark. At that point the pandemic died out too. If that happened, then your 3-month supply of food pulled you through (though towards the end you would have been living on dandelions and sugar). You can come out of your hidey-hole and you have a whole city to work with. It is more likely that food supplies were patchy – difficult and risky to obtain. Your food supply should have been a good supplement that got you through any desperate patches.

- The same argument applies to water. Your water tanks and water filters should have supplied you during any desperate shortages. If there was no water supply at all, then everybody died or left the city within days, and you have a whole city to work with.

- At the end of the crisis nothing works. Everything has shut down. People are now trying to connect with each other and create chains that will be mutually beneficial. What skills or materials do you have to offer? Who do you know that you want to contact, in order to add to this network? Joe, your old mate who can fix anything? Jim, your school buddy who works as a bee-keeper now? You have been keeping those valuable contacts current haven't you? Could you contact them if the phones were out?

But enough talk of a worst case. Thought experiments are a great way to check your preparations - but I'm hoping for a more benign scenario.

### **Preparing For a Best Case**

Let us assume that Peak Oil either has occurred, or will occur soon. Let us further assume that a decline in oil supplies of 2-3% sets in immediately. These are somewhat negative assumptions (particularly for a best case), but possibly just a recognition of the reality of the situation. Surprisingly, a best case still looks pretty good – if we get off our asses and act now!

So Peak Oil has occurred and oil exports are dropping. Eventually the message hits home – we're in trouble. What is Australia going to do about it? The answer is that we have a lot of work to do: - I have already mentioned LNG production and distribution projects.

- Australian shale oil projects have been put on hold due to the fact that they create environmental disasters. New, experimental in-situ processing techniques would address these environmental issues. This process shows great promise, but will need at least a decade to mature.

- CO<sub>2</sub> sequestering projects are needed. One candidate is using algae to soak up CO<sub>2</sub>, then running an algae to bio-diesel process. The CO<sub>2</sub> gets captured by algae, which is processed into bio-diesel, with the remaining algae pulp put into the soil (possibly sequestered as an ash). The infrastructure needed for this is massive.

- Massive mass transport infrastructure projects are needed

- Public transport will not be enough. Plug-in-hybrids and electric vehicles will be necessary. These will increase our need for off-peak electricity.

- Solar energy plants are needed.

- If the algae bio-diesel projects succeed as a method for sequestering CO<sub>2</sub>, then we can look at coal-to-oil projects without as much concern for the environmentally catastrophic consequences of this approach (though sequestering is only part of the solution).

- IT infrastructure to support new ways of doing business is needed (video-conferencing, tele-

I have already stipulated that the necessary energy projects will take years or decades to complete. In the interim our fuel supply is drying up. In 5 years we might have 20% less fuel. What do we do? We need to get by with less. A lot of that oil is used in essential services. But a lot isn't. Given our current orientation towards consumption and waste, this turns out to be less painful than you might expect:

- Nearly 40% of our oil is used in private vehicles. In the future some of these trips will not occur. Others will be done by public transport, bike or walking.

- Commercial transport also uses nearly 40% of our oil. Some of this transport is simply moving junk that we don't need. My son does not need another cheap plastic toy, but he will get at least 20 for his next birthday. Transporting junk will stop.

- New transport options will be needed.



New Transport may look a bit like old transport.

So it doesn't look like a cut in our oil supply is going to kill us. But we will have to change. The deeper the cuts go, the more we will have to change.

Some changes spring to mind immediately:

1. Trains in capital cities are currently crowded at peak hours, but under-utilized at other times. Under the current system, a massive increase in the number of people taking the train to work is simply not possible. If trains are going to be called on to carry more people, then people are going to have to work different hours. Employers are going to have to accept "Flex time" that is very flexible. IT infrastructure will be needed to support flexible hours as well as "work from home" and mobile workforce options.

2. The change to working hours, in combination with the move to electric vehicles, is likely to increase electricity demand at non-peak times. Electrical generation is likely to run closer to 100% for longer periods of time. This will have implications in maintenance and cooling power stations, with flow-on effects.

3. We don't just need new infrastructure, we need the infrastructure to make infrastructure. If you don't like the idea of working in construction, there is likely to be plenty of work in designing and building tools, equipment and plant.

Our current way of life is not sacred in any way - it is not the same as our grandparents' and it won't be the same as our grandchildren. Everything changes. If you want to keep up, you change as the situation changes. So what other changes do we need to make?

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We need to stop outsourcing all of the hard stuff to other nations. If I was eighteen years old, I would be studying Engineering, or trying to get into the construction industry. We have a lot of work to do.

### Summary

I do not know the future, so I have adopted the following philosophy:

1. There is a natural tendency to only prepare for one future. It isn't going to happen that way. I need to prepare for a range of futures.

2. Actions that have intrinsic benefits will work in most scenarios.

3. In event of a disaster, high-quality people are an important part of the recovery process. Preparations should not cut you off from the high-quality people that you know.

4. I need to prepare myself in ways that offer intrinsic benefits: education, fitness, skills, etc. If I was 18 again, then I would be looking at educating myself in a technical or Engineering field. Of course, this is easy for me; my natural strengths are in technical fields. If your strengths are elsewhere, then educate yourself in those areas, but find a way to tie it back to the technical boom-areas (perhaps learn a bit about management of technical areas, or develop a technical hobby).

There is an old saying in the military: "Never in the annals of military history has there been a case of a Battle Plan surviving contact with the enemy." My plan should be about giving me options and possibilities, not about locking me into a fixed course.

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