



Spontaneous Order – a Solution to Traffic Congestion.

On 6 April 2009, Cabinet agreed in principle “that the functions of the Auckland Council include the development of a single spatial plan” and “that the function of the spatial plan for Auckland is to articulate the long term (20-30 years) vision/strategic direction for the region and its communities, including broad objectives”.

The Spatial Plan will set out:

- how the region will develop in the future.
- where critical infrastructure services will be located, for example water, sewerage and roads.
- the future location and mix of residential, business and industrial activities within specific geographic areas.

As I warned the attendees at the *American Dream Conference* in Seattle last year, the planning theory of *Smart Growth*, in spite of having delivered the global financial crisis, is coming back to haunt us, but under new code names such as *Centres-Based Planning*, *Place-Based Planning*, and *Spatial Planning*.

The idea of long-term planning of land use and infrastructure has superficial appeal.

However, we should be able to dispose of this grand folly by pointing out that if we knew how to write a 20 – 30 year Spatial Plan for the Auckland region, then the Great Soviet Experiment would have been a resounding success.

Long-term planning has never been a more fruitless and wasteful exercise.

Our demographics are undergoing massive and unpredictable changes and long-term population projections are no longer reliable.

Also technology is changing and developing more rapidly than ever. Advances in machine intelligence mean future modes of communication and transport are beyond our imagination. Hence minds with limited imagination are obsessed with 19th century trains.

Spatial Planning assumes we can direct and control the region's land uses, and hence can design a roading network that will serve the needs of the region without costly congestion. The end result of this belief will be more congestion, and the construction of more roads than are necessary.



Congestion is largely a self-solving problem, provided that land uses are lightly regulated, and the whole urban economy is allowed to ‘churn’.

Most travel models used by urban transport planners do not include an effective "feedback loop", which means they take no account of the reactions of road users when confronted with severe congestion.

In real life, road users seek to adjust their use of the road system to keep their commute times under half an hour, provided they are not prevented from doing so by excessive land use regulation.

In other words, as congestion grows, retailers, customers, commuters and employers make adjustments – if they can.

Consequently, we should not attempt to write 20 – 30 year plans, but should focus on enabling adaption to change.

This counter-intuitive understanding is based on the seminal work of Yacov Zahavi, and its later refinement by my colleague and friend, the late Mel Webber.

Yacov Zahavi found that road users adapt their behaviour in several ways to reduce their commute time. For example:

- *Workers* will relocate, adjust their work hours, and even change jobs.
- *Employers* will relocate to locations that are less congested or that put them closer to their workforce.
- *Retailers* will look for under-served pockets of consumers and set up stores in their proximity.

All these factors combine to disperse traffic over the road network. They each play a role in the on-going, unplanned, but never ceasing trends that mitigate congestion.

These spontaneous adjustments have allowed the average home-to-work commute time in lightly regulated cities to sit at just under 30 minutes for the last several decades.

Zahavi's research defined the idea of the "*Travel-Time Budget.*" His research showed that:

- most of the world spends about an hour a day in travel – whether walking to the water in the well or on driving to and from work.
- most commuter trips are under half an hour, and
- Families spend about 12-15% of their disposable income on mobility.



Mobility is important to families because a large accessible territory means greater liberty in choosing the three centres of gravity in their lives: their home, their workplaces, and their schools. Four-fifths of all travel ends in this group of destinations.

Government needs to compare the costs and benefits of these two approaches to traffic planning – one driven by computer models that lack a feedback loop, and one that incorporates the spontaneous adjustments made by real road users.

The term, “Congestion is self-limiting” was coined by Melvin Webber, and his insight is now being incorporated into the knowledge base of the world’s most prestigious universities and think tanks. Their experts generally conclude that the management of urban land use should be based on short term and flexible planning, and in particular, must put no obstacles in the way of:

- employers who want to move closer to where their workers live;
- retailers who want to build stores closer to their markets;
- and workers who want to move closer to their work.

This can only happen if land use is lightly regulated and cities are allowed to “churn”.

Sadly, this will not be case if we allow the Smart Growth planners to take control of Auckland under the guise of a long term Spatial Plan.

We know that such plans become sacrosanct and officials oppose any attempt to adapt to changing markets, demographics, or technology, because such activities “undermine the integrity of the plan”.

Changing such plans to accommodate adaptive responses can take up to fifteen years. First the applicant has to change the plan itself – or its boundaries – and then has to apply for the appropriate specific consent.

The more time and money put into the plan, and the larger the territory, the more such “churning” will be resisted. Our Spatial Planning enthusiasts have already anticipated these adaptations by expanding their horror of residential sprawl to include “job sprawl” and “retail sprawl”.

We can be sure that once the long term Spatial Plan has determined “the future location and mix of residential, business and industrial activities within specific geographic areas” these locations will be fixed and it will take huge amounts of money, time and resources to change any aspect of the long outdated plan.

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Centre for Resource Management Studies

A city that cannot respond to change has no long-term future to worry about.

After all, the one thing we can be sure of is that the cities of the future will be totally different from the cities of today.

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