

Environment and Heritage Committee
House of Representatives
Parliament House
CANBERRA ACT 2600

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SUBMISSION TO INQUIRY INTO SUSTAINABLE CITIES 2025

This submission is made on behalf of Gecko – Gold Coast and Hinterland Environment Council. It represents our experience of living and working in an area rich in biodiversity with World Heritage value, and our concerns for the future with the massive pressure from suburbanisation.

Australia is known as a land of low human population carrying capacity due to its thin, nutrient deficient soils, its low and erratic rainfall, and its extremely high biodiversity. We have an international obligation to protect this biodiversity, yet human settlement requires access to the same areas which are habitat for the unique flora and fauna of Australia.

The Gold Coast and its hinterland comprise an area with unique biophysical constraints. It is an area of very high biodiversity due to the overlap of subtropical and temperate zones (the McLeay McPherson overlap), with species found at their northernmost and southernmost limits. The Border Ranges have recently been declared as one of Australia's biodiversity hotspots. This high level of biodiversity requires maximum protection, but instead is subject to maximum population settlement pressure.

The Springbrook area in the southern Gold Coast (Border Ranges) has the second highest rainfall in Australia, with soils highly prone to erosion and steep catchments. These conditions result in flooding and siltation of the coastal plains below, where the majority of the population lives. Increased runoff and downstream flooding affect the urban areas in the Gold Coast, as slopes are cleared for housing and for protection against bushfire. In addition, a narrow hinterland with floodplains being taken over by housing results in more flooding downstream and upstream from reduced storage capacity.

The Gold Coast coastline is open and therefore vulnerable. It is predicted that the coast will be increasingly affected by storm surges and cyclones, which will occur more often through climate change. This narrow and fragile area is supposed to cope with an expected doubling of population by 2030.

Gecko believes that the Gold Coast will not be able to deal with this expected population growth, and that wide areas of our biodiverse and valuable hinterland will have to be cleared for housing. We therefore make the following suggestions on how to make our and other regions sustainable.

- There should be a national declaration of 'designated sensitive areas' in regions of high biodiversity, which are subject to pressures of settlement. Within these areas, all tiers of government should adopt and enforce an overriding policy of limiting the extent of the urban footprint as well as limiting any further rural subdivision.
- This policy should encompass: urban growth boundaries; a proper user-pays policy for people who wish to live in these attractive areas; acceptance that a high level of housing choice, and housing affordability generally, are no longer realistic policies.
- A strong centres policy needs to be developed, which includes: government intervention in the determination of development patterns; considered decisions on the siting of services; a requirement for economic viability studies for larger shopping centres; growth corridors linked by public transport routes and green areas and corridors.
- A manageable plan for the implementation of specific energy and greenhouse policies is required as well as a policy to reduce the reliance on private cars in company with more radical public transport planning.

Please find attached our full submission.

Yours faithfully

Sheila Davis
Campaign Coordinator

1. The extent of the urban footprint

1.1 National declaration of ‘designated sensitive areas’

We need to ensure that our natural heritage is protected for the current and future generations of Australians and that it remains a major attraction for the tourism industry. This is only possible by adopting, and actively and honestly pursuing, a principal policy of limiting any increases to the urban footprint and suburban sprawl in these areas.

As a starting point, it is our very strong recommendation that, throughout Australia, areas of rich biodiversity which are highly vulnerable to suburbanisation should be identified at the national level. The process which led to the recent declaration of Biodiversity Hotspots by the Minister for the Environment and Heritage, Dr David Kemp, sets a good example to follow.

In these ‘designated sensitive areas’, the principal policy approach for residential development should be focussed on limiting the extent of the urban footprint. This should become the overriding policy of all tiers of government.

If State and local governments, with leadership from the Federal government, do not have the courage to do this now, these areas will become affordable but unattractive. Their natural environment and ecosystems, and hence attractiveness to ecotourism, will be all but lost to future generations.

1.2 Affordability and housing choice in ‘designated sensitive areas’

The implementation of a policy of growth limitation cannot avoid the question of affordability, a difficult issue which now needs to be addressed openly and honestly if ‘designated sensitive areas’ are to have a sustainable future. People living or wanting to live in these highly attractive areas will need to be persuaded to accept that levels of services and facilities demanded by the community come at an increased cost there. Car parking fees are just one of many examples.

There is a general assumption that in catering to future population demand, Australia must retain a high level of housing choice. This is no longer acceptable in ‘designated sensitive areas’. The effect of retaining that choice is to bring pressure to further expand the urban footprint, and is incompatible with an overriding policy to closely limit any increases to that footprint. Australia can no longer afford to maintain a high level of choice in these areas. Living in them, like living in inner cities, now brings with it certain limitations and cost.

Australia must also accept that housing affordability generally can no longer be a major driving force for the coastal belt because of the numbers of people wanting to live there, in the same way

that housing affordability cannot be a driving force in major inner cities. Policies need to be implemented for the socially disadvantaged but this is a separate issue. Again, the principal policy for 'designated sensitive areas' must be to closely limit any extension of the urban or suburban footprint, and accept the limitations and costs that this entails.

1.3 Enforcement of the policy

Here on the Gold Coast there is an obvious institutional problem which has resulted in a lack of adherence to the existing Queensland policy on the development of new urban centres. One only has to drive through the Gold Coast and see the developments currently being undertaken. It is difficult to argue against the strong public perception that developers and planning authorities are in league and that existing policies and guidelines have no capability to withstand the pressure for unfettered development.

For 'designated sensitive areas', not only must we adopt a policy of limiting any increases to the settlement footprint, we must ensure that it is enforced. This policy and the reasons for it must be widely publicised. And any particular decision to extend the footprint in the face of this policy must be totally transparent and again be widely publicised. State government departments must not be exempt.

1.4 Geographic boundaries to growth

Hand-in-glove with an overriding policy of closely limiting any increases to the settlement footprint in 'designated sensitive areas' must come population and dwelling limits and urban growth boundaries. An examination of the planning and limitation of growth patterns in Portland, Oregon in the USA would be a good starting point.

2. Integrated social planning

To ensure that a policy of approving only very limited increases to the settlement footprint in 'designated sensitive areas' is maintainable, a strong centres policy is required to dictate settlement form. Careful consolidation of current urban centres is essential. This has already been recognised in a number of regions such as the Australian Capital Territory.

A policy of linear development is simply not suitable for Australia's coastal belt. Lack of adherence to planning policies, especially in South East Queensland, has already meant that the belt has become a long, and in respect of man-made 'development' a quite unattractive, urban sprawl.

Green corridors are rare to non-existent. Ecosystems have been and continue to be permanently damaged.

All future developments, such as shopping and business centres, should be located in Key Regional Centres or in any new satellite centres, and not elsewhere whether it be on undeveloped land, agricultural land, or existing urban sprawl. Canberra's policy of satellite towns is again a good example to follow.

Government should consider the practice in Germany and set performance standards and incentives to ensure that shopping centres and community facilities match community needs for the region (see for example the attached summary of Central Place Theory). Government can have a direct influence on the siting of companies that provide employment. This has often been done in the planning of regional growth centres in other States of Australia and overseas. If government is really concerned about improving on the high unemployment rate, this approach should at least be trialled.

Government needs to determine development patterns. These patterns should include higher density living and actively create employment within communities, or close to them, to limit travel distances. It has been shown that higher density living is not unpopular if appropriate standards are maintained. Government can have a major input into where they decide to site services, what subdivisions they will approve, and by requiring economic viability studies for larger shopping centres. Any new housing developments must be restricted to growth corridors linked by public transport routes.

3. Agricultural land and green corridors

An assessment of the merit of maintaining agricultural land in urbanized areas must take account of the contribution that agricultural land makes to the maintenance of existing biodiversity. Windbreaks, creekbeds, crop land and pastures can contain or provide, albeit to a limited extent, habitat for certain native plants and wildlife, including particular species of birds, helping to ensure their continued survival.

Green areas and corridors are a more effective way of maintaining biodiversity and also provide a very welcome recreational facility for the community. The coastal belt has already lost much of the prospect of green corridors. The maintenance of existing agricultural land should be seen as making up in a small way for this loss. Where agricultural land becomes available for non-agricultural purposes, the first priority for government should be that it is developed into a green

space. There are clearly costs involved, but these are far outweighed by the environmental and recreational advantages. The Queensland Government has recently recognised this need by waiving land tax and transfer duty for landholders and Local Authorities who set aside land for environmental purposes.

There should be no housing development where there are high quality food producing soils. These areas should be maintained to ensure local production of foods, thereby decreasing the ecological footprint of the population through decreasing the use of fuels to transport food long distances and keeping costs to a minimum. These soils should be managed so as to prevent erosion and degradation. These management strategies could be maintained through State government planning policy.

4. Rural residential development

While it is recognised that rural residential development is a very attractive option for a section of the community, it raises again the question of affordability and further loss of bushland on the outskirts of cities. In accordance with the overriding principle of closely limiting any increase in the urban and suburban footprint in 'designated sensitive areas', the consolidation of existing rural residential developments should be strongly preferred, and any new developments should be located in places with good accessibility to services. Because of the pressures on these areas, it is essential that rural residential development meets all associated infrastructure costs.

Areas that are currently rural should not be suburbanized, as these areas are important both as habitat for native animals and as potential ecotourism sites. Even cleared farmland should be retained as open space and not be subdivided for housing or hobby farms. The cleared areas can be used for ecotourism facilities and the surrounding bushland protected by prohibiting cats and dogs and other domestic and farm animals from the area.

Drinking water catchments should be protected from any further development including tourism accommodation and/or long distance walking tracks or other recreational activities.

5. Energy and greenhouse issues

Strategies to address energy and greenhouse issues have a significant measure of public support. However, many members of the public are unaware how they can help. While building policies are matters for State and local government, there is room for the Commonwealth to provide leadership and encouragement, which can only improve our international standing on these issues.

Gecko has encouraged South East Queensland to identify and set goals for a manageable number of issues. The following are some of the issues that we consider should be given particular priority:

- Local government areas to set goals for a process which will result, within a short timeframe, in mandating sustainability and energy efficiency through the use of the building code in the industrial, commercial and residential sectors, such as a ban on new electric hot water systems (this may be more a matter of catch-up with a number of other local government areas in Australia).
- A major publicity campaign targeted at providing practical information to individuals on what they can do to help on energy and greenhouse issues, including for example what various energy ratings mean for appliances, and where to go for advice when purchasing appliances, or building or renovating a residence.
- Design of a regional cycling strategy that includes goals for its implementation.
- Development of a Council greenfleet purchasing policy with goals for its implementation, and promoting the policy on the vehicles as another way of educating the community.
- Establishment of targets for Councils to introduce energy-efficient street lighting, backed by a regional consortium to enable greater economic purchasing power.
- Provision of assistance and incentives to suppliers to increase the percentage of residences with access to reticulated gas.
- Establishment of targets for in-house efficiencies for local government to increase the energy efficiency of Council assets.
- Public transport systems (see next section).

6. Transport

6.1 Reduction in the reliance on cars

Australia needs to work hard to both influence and direct changes in travel behaviour, particularly in the use of the private vehicle. Consideration should be given to limiting private vehicle access to certain areas at certain times and/or the introduction of access fees as recently introduced in London. This needs to be backed up by offering and heavily publicising viable public transport

alternatives. And we need to move to a fully integrated transport system that includes new technologies and efficient bus services, coupled with walking and cycling paths.

It has been recognised for over twenty years that freeways actually attract cars. We need to develop more creative ways of limiting the number of cars on them. Two ways are dedicated bus lanes, and a strong incentive for car-pooling. Car-pooling can be encouraged by dedicating a freeway lane to cars with at least two occupants, and by turning our tax system around to remove taxation disincentives and to pay people to carpool. Overseas research has shown that the cost is far outweighed by the reduced requirement for extra roads, and a reduction in road accidents.

6.2 Public transport

There appears to be little thought given to the practical engineering, social or environmental effects of major transport decisions. From a social perspective, it is well known that people will value a location based on the availability of transport and proximity to services such as schools, child care centres, employment and shopping centres. In many new estates in the Gold Coast and South East Queensland generally, developers have abused the use of the Australian Model Code of Residential Development (AMCORD) provisions in building housing estates so people cannot park in them, and normal bus services cannot gain access to them. This in effect locks public transport out of these areas and is in direct conflict with State policies and standards. The gradients of roads that are allowed in those estates are also often a problem. There is still no guarantee that good pedestrian and bike paths will be provided or that they will be close to essential services.

Australia, particularly in its cities spread along the coastal belt, needs to look at being more creative and implementing somewhat radical ideas to meet its public transport needs. For a sustainable future we must look outside the box for novel solutions using advanced technologies.

On the Gold Coast it has been impossible for transport planning to keep up with population growth. This problem is reflected in other suburban regions. All indications are that this trend will continue and the situation will further deteriorate. Another exacerbating factor is that land development patterns are based on speculation, not on meeting community and business activity needs, and so our cities are sprawling just like American cities with the same problems.

In addition, the lack of transport funding from all levels of government has meant that despite efforts to the contrary, our transport planning is largely reactionary rather than being based on the setting of targets and standards, with review processes to ascertain if they are being achieved. As a consequence, many of the attempts at longer-term planning quickly become ineffective. Car owners have little incentive to use public transport.

There would appear to be a number of solutions that we can take from transport planning and development patterns in many European countries, in a couple of areas of the United States of America and in cities of South America.

Priority bus lanes and a tiered system of express, rapid and feeder buses in the Brazilian city of Curitiba, means that 70% of weekday journeys in that city are made by bus. Curitiba has one of the highest car ownership rates in Brazil, yet people travel by bus because the system is simply a better alternative.

Relatively low cost investments in priority bus lanes to allow express routes, the purchase of low emission vehicles, and the introduction of subsidised ticketing all substantially improve bus system performance and usage across cities.

ATTACHMENT

The Central Place Theory (Walter Christaller)

Central Place Theory is a Location Theory and attempts to explain the spatial distribution of settlement, i.e. the spatial pattern of urbanization. This pattern of settlement is best understood by a central place and its market area. The central place is specialized in selling various goods and services, and the market area is a sphere of the settlement of consumers travelling to the central place, which is a part of hierarchy with other central places. A central place which has a smaller market area counts as a subdivision of another central place which serves a larger market area. The order of a central place is defined by its function, such as the number, price, and variation of goods and services.

The Central Place Theory was established by Christaller (1933) and Lösch (1941) more than sixty years ago. The theory has played an important role in the explanation of urban system and has been reinforced by various studies afterwards. Although the The Lösch model analyses the market areas of firms under monopolistic competition (Ishikawa, 2000), the Christaller model is based on a hierarchical central place system (Figure 1).

Ishikawa (2000) precisely summarized Christaller's idea as follows. The model is used to explain existing cities and based on following assumptions: "(1) Consumers are evenly distributed across a market plane. (2) Each good sold has its own optimal market-area size, expressed as the radius of a circular market area. (3) A firm selling a given good co-exists with a firm that sells goods with smaller optimal market area. (4) It is possible for a new firm to enter and serve any unsupplied area."

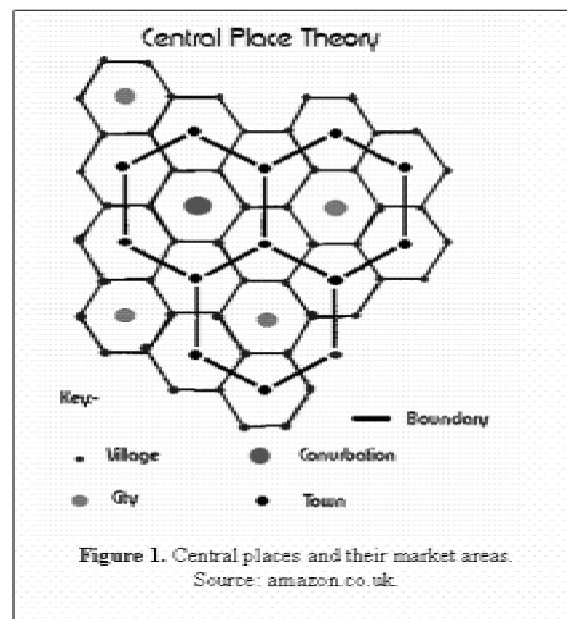


Figure 1

Since delivered price is composed of store price and transport cost, a consumer living further pays more. Therefore, a seller serves consumers who live within a range where cheaper delivered price provides. The range shows average maximum distance from the store to consumers willing to purchase. Although the stores are distributed with maximization of the size of those market areas, an uncovered area exists. To cover all of areas with the maximum size of each market area, the shape of borders between market areas must be hexagonal.

If stores are profitable, the range should be bigger than the threshold; the minimum size of market is to make normal profit. In other words, a bigger threshold needs a much bigger range, i.e. larger population. Therefore, the locations of stores are hierarchical based on those thresholds.

Since a city is a bundle of urban functions, such as retail, service, administration, etc, the location of the city would follow the same system of the distribution of stores. Consequently, the spatial pattern of urbanization would be like Figure 1.

Application to Economic Development

Applying the central place theory, many studies have been done regarding to establishments and retail viability. For instance, in his article, Shonkwiler (1996) summarized important knowledge already established by other researches.

- 1) Average transportation costs per purchase are lowered by multipurpose shopping trips.
- 2) The consumer might find it desirable to shop at multiple locations on a single trip.
- 3) Not only population but demographic characteristics, socioeconomic structure, potential expenditures, and shopping behavior are the most important factors to explain spatial clustering.
- 4) Although a major tenet of central place theory was that producers tend to locate as far as possible from competitors, firms may recognize the advantages of agglomeration and the benefit of centrality that result from adjacent location.
- 5) The development of central places depends on factors such as transport costs, expenditure shares for relevant goods and the cost characteristics of stores.
- 6) Planning commissions continue their efforts on industrial recruitment while the pursuit of other development strategies such as retail-sector expansion may be overlooked.

Moreover, in his statistical analysis of rural retail business, Shonkwiler (1996) concludes, “retail business interdependencies exist and minimum demand threshold values for various retail sectors are sensitive to the presence or absence of other type of retail firms.” Additionally, in his regression analysis to rural communities, Mushinski (2002) concludes “incorporating explicit geographic interdependence between establishments in a place and sources of supply and demand in neighboring areas” exists, and is “particularly significant on the supply side.” Moreover, “outlying establishments tend to reduce the number of establishments in a place, which underlines the importance of spatial competition in retail development.”