#### SUBMISSION NO. 181

Secretary:...

ENVIRONMENT AND HEALT

### Submission to House of Representatives Standing Committee 80004 Environment and Heritage Inquiry into Sustainable Cities 2(25 STAND N 3 COMMITTEE ON

This submission is made in a private capacity

Disclaimer: There may be errors of fact in this submission

I have not read many of the other submissions but I have taken particular note of the following:

Sub48 from the Gold Coast City Council and their summary comments under the first point of the terms of reference.

Sub137 from Nillumbik Shire Council and their comments under Urban Form on pages 5 and 6 on lot density versus infrastructure costs, local employment versus transport costs, and energy savings in houses.

I attended the hearing in Melbourne on 16 March 2004 for the whole day as an observer including the round table discussion with local councils. The discussion was very informative and I appreciated the positive approach by the Committee and its Chairman.

I have also read the Report of the House of Representatives Standing Committee for Long Term Strategies "Patterns of Urban Settlement: Consolidating the Future?" August 1992. It had similar terms of reference to the current inquiry.

Point 1 of the terms of reference does not refer to economic impacts, and point 3 refers to ecological sustainability. My comments under points 1 and 3 cover economic, social and environmental aspects.

Comments against the terms of reference:

1. The environmental and social impacts of sprawling urban development

There are many impacts, but spatial parameters are a primary driver. Personal and public space and the spread of locations one travels to for various purposes have social, economic and environmental impacts. There are numerous studies of many of these issues but there may be gaps in their coverage. As many people have noted, cars and tracks are a dominating part of city life and they are not about to disappear. Many people have a community of interest that covers all of a city or a significant segment of it. In a sprawling congested city like Melbourne, many people rarely go to the CBD or travel right across the city unless it is to go to the airport or exit the urban area on a highway.

The issue of trading off non-monetary social and environmental impacts is difficult but needs to be addressed. Indirect impacts are not obvious or even measurable to many

people. One can say how much resource is used to heat a house or use a car, but it is much more difficult to consider the resources used to build, maintain, or dispose of these items. This also applies to public infrastructure and to many services.

## 2. The major **determinants** of **urban** settlement patterns and desirable patterns of development for the growth of Australian cities

The major determinants of urban settlement patterns can be considered in the context of past, present and future. What is important is learning from the past, using the present as a starting point and determining the desired future, and how to get there. The desirable patterns depend on the criteria for 'desirable' and for whom. It is important that the assessment is made with the appropriate balance between all stakeholders. As noted under point 1, there are numerous studies of many of these issues but there may be gaps in their coverage.

Our population is increasing, and our demographics are changing with significant growth in the aged, little growth in school age children, and significant changes in family composition. The nature of work and industry is also changing with most employment now in services. There is a need to accommodate the population increase and the changing demographics with our dwellings, infrastructure, services and employment. New development or redevelopment can occur within an existing urban area, at the fringe of an existing urban area, or a new city can be developed that stands alone from existing cities. The economic, environmental and social impacts should be considered for all these possibilities.

What is driving recent housing development with substantial increase in the physical size of houses coupled with reduced occupancy? Are investor owned inner-city apartments, large double storey townhouses in multi-unit developments in middle suburbs and large double storey houses on small sites on the fringe meeting the needs of the consumer? Do they represent sustainable development? Are design features like no eaves consistent with our environment?

Cars are a severe problem in the suburbs of major cities, and not all of the traffic goes in or through the CBD. A citywide strategy is needed in addition to a CBD strategy, and it will need to address the fact that many people do not live within or near an activity centre. There are also related issues with trucks and the movement of freight.

The 1992 Report in its key findings said that:

"Urban consolidation is a useful but limited program..." and "Compact cities...do not necessarily represent the optimal scenario."

and a bit further on

"Cars will continue to be the dominant form of personal transport. ...

The priorities are to reduce:

- the need for travel;
- trip length; and
- the pollution associated with high levels of automobile use.

Reduction in the number and length of trips can best be achieved by a combination of higher density development around key transport nodes and in highly accessible areas and continuing development on a limited number of outer suburban sub-centres. Reductions in pollution can best be achieved by reducing the harmful emissions from fuels and encouraging a faster change-over in the vehicle fleet.

Cities have no optimal size. ..."

I agree with the limits to urban consolidation, but I think that a city may have an optimal size where growth in another city or in a new city is preferable. A reduction in trips by concentrating so-called trip generators into fewer locations ignores the other end of the trip which is often the home. Human behaviour also reduces gains. The impact of urban form on trip times was referenced in paras. 5.81 and 5.87.

I also noted the section in the 1992 Report called "The Adequacy of Existing Infrastructure" under paras. 6.51 to 6.59 and the recommendation (11) for an infrastructure audit program. Paras. 5.45 and 5.47 and Appendix 5 are also relevant. I expect much has been done in this area since 1992 and that the current inquiry would report on this issue. Existing infrastructure needs to be maintained, requires replacement at some point, and will have capacity limitations. For example, the capacity of the tubes in the Melbourne Railway Loop during peak hour can be assessed in terms of the minimum time between trains, the occupancy of trains, and the affect of the Loop on punctuality. Road congestion is a serious problem in many parts of Melbourne during peak hours and to some extent also at other times. Drainage and sewerage is also a problem in some areas.

Is there an optimum size for a city in terms of population, density and physical size based on most travel and community of interest being contained within that city? If there is, there will be limits on the relationship with adjoining cities in terms of travel time, cost and convenience. If there are no limits, current trends suggest that most of the East Coast of Australia will have several lengthy sections of urban development. The alternative is to have some broad principles that guide the establishment of residential zones and patterns of development. These will have to be expanded in the long run as population increases, because there are limits to housing density.

What constitutes a city may change in the future. The Gold Coast is clearly a major population centre and differs in form from the traditional Capital City like Melbourne with a CBD and radial development. Are there fundamental reasons supporting radial transport systems and radial green wedges or do they reflect history?

The pattern for development of an existing city could be quite different at the fringe compared with redevelopment of established areas, and totally new cities could be different again. This applies to housing density, provision of infrastructure, services and local business and employment.

# 3, A 'blueprint' for ecologically sustainable patterns of settlement, with **particular reference** to **eco-efficiency** and **equity** in the provision of services and infrastructure

Broad policies on ongoing urban development are required. The policies could be specific to individual cities and they should address development within established areas and new development at the fringes. They should also address the broad expanse of existing residential areas that are not in or near activity centres. These areas generate much of the car travel, and the dwellings will eventually be renovated, extended or replaced. They also provide additional dwellings through various processes. The future of ageing infrastructure and public buildings such as schools in these existing urban areas needs to be addressed. The future of the existing copper cable network will be an important issue. Policies could address a range of issues including the following. Flexibility is important and policies mandating specific technology or design should be avoided.

Housing and population density, city size and relationship to other cities. Provision of infrastructure including issues of scale, technology, pricing, maintenance and replacement. The management of both average and peak demand for most types of centrally provided infrastructure is a significant issue.

Building lifetime and performance.

Local business, employment and services.

Developments for specific demographic groups.

## 4. Measures to reduce the environmental, social and economic costs of continuing urban expansion

These costs always exist and it is important to reduce them. They also exist for population growth within an existing urban area and for population growth in new cities. How are these costs and any reduction measured? Reducing these costs is not necessarily free. Reduced environmental costs may mean increased social and economic costs.

Pricing is important in some areas. Are valuable environmental resources or environmental damage properly priced at the point of use or damage? This includes inputs and intermediate steps of a manufacturing or supply process. Pricing for disposal is also an issue. Examples are brown coal usage and water for agriculture and industry. Brown coal is used for electricity, which feeds into aluminium that then appears in various products. Water intensive agriculture includes sugar, cotton and rice. Greg Roberts reported on p5 of the Weekend Australian of March 20-21 2004 that Cubbie Station is licensed to store 450,000 megalitres of water for its cotton crops. This is equivalent to the annual metered water usage of almost two million houses in Melbourne and nearly half the capacity of the Thomson River Dam in Victoria. Further information including pricing is contained in "Watershed: deciding our water future: juggling the interests of farmers, politicians, big business, ordinary people - and nature", Ticky Fullerton, ABC Books, 2001. Should we use less cotton, increase the cost of the water rights, or reduce the rights.

There are also issues that affect our health and social well being. Examples are environments conducive to cars rather than walking, and consumption of sugar and cigarettes. It is important that the right pricing signals are sent where possible and that proposed changes for environmental reasons are actually sound and take account of all relevant factors.

Some locations have reduced costs in supply of natural resources and reduced demand for natural resources. Infrastructure to deliver water and electricity over long distances is expensive. Some climates generate high demand for heating or cooling. Should development be promoted in these areas? Having the right price signals helps.

### 5. Mechanisms **for** the Commonwealth to **bring about** urban development reform and promote **ecologically** sustainable patterns of settlement

The Commonwealth must take a primary leadership role on these issues. Commonwealth Government policies and legislation, including taxation in particular, have a significant impact on other levels of Government, and other sectors of the community. The Commonwealth also has a significant influence on our demographics through policies and legislation on immigration, family, health and aged care. As an example, other submissions have referred to the taxation of cars.

The Commonwealth can also take a leadership role in research and education and promotion and the development of regional policies through COAG or other mechanisms.

A balance is required between big brother government and market forces. People always have an option to relocate to another city, the country or overseas. A balance is also required between the three levels of government.

Governments should consider the financial, social and environmental costs for all stakeholders. Too often there is a Treasury perspective or cost shifting is the priority.

Government objectives need to be supported by factual rationale such that the community understand and accept them.

Our culture of consumption has an environmental impact. Which is dominant, the overall level of consumption, or the type of consumption? Does the trend to larger houses have

negative environmental impacts that outweigh any benefits that flow from imposition of design rules on those houses? Is a 300 square metre house with good insulation etc better than a 150 square metre house without insulation? Does a litre of wine require more than one litre of water to produce?

There are some specific issues where the Commonwealth could take a lead role. They are not new.

Re-use of both public and private infrastructure is an issue. How do we accommodate changing demographics and the substantial mobility of people? At what geographic level is this addressed? The government sector appears to be much less flexible than the private sector. Changes in demand for facilities such as primary schools, secondary schools, hospitals and aged care are not met by flexible supply of infrastructure including sites, buildings and open space. Flexibility is required in the purchase and disposal of public assets, and some long life assets should be built to meet multiple purposes either in parallel or in series.

Accounting practices in the government and the not for profit sectors need to address depreciation. Significant change has occurred, but more change is probably needed. Decisions are often made with a short-term horizon. Existing infrastructure may be maintained because of short-term financial considerations or rigidity in the process, when replacement or relocation makes more sense taking a long-term view.

There are substantial costs in selling your own home and buying another of similar value, particularly in established areas of Melbourne. The total transaction costs including buying, selling and removal can be around ten per cent of the price. These costs may exceed the benefits and result in economic inefficiencies and social and environmental impacts.